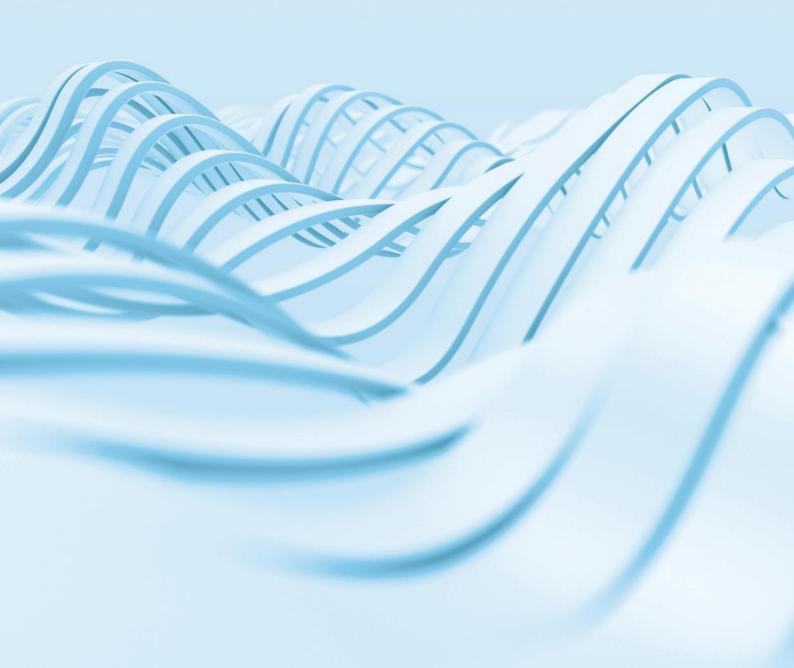


Report no. 100 - 7 February 2023

5-year Productivity Inquiry: A competitive, dynamic and sustainable future

Inquiry report – volume 3



The Productivity Commission acknowledges the Traditional Owners of Country throughout Australia and their continuing connection to land, waters and community. We pay our respects to their Cultures, Country and Elders past and present.

The Productivity Commission

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website (www.pc.gov.au).

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The Commission's report is divided into 9 volumes: an overview document (volume 1) that presents our policy agenda, and inquiry content volumes (volumes 2–9) that explain in greater detail the reforms that make up the policy agenda, including a modelling appendix. The full report is available from <u>www.pc.gov.au</u>.

Preface

Productivity is driven in large part by everyday decisions made by people in businesses: about what to produce and how to produce it; about adopting new ideas, technologies and processes; and about developing new and better-quality goods and services. These decisions are shaped by the commercial realities and incentives that businesses face, including the state of competition in product and service markets. Dynamic and competitive markets allow productive firms to flourish and for resources to shift to higher-value uses.

Well-established policy and regulatory principles can help to create a business environment more amenable to productivity growth. In part, this involves promoting contestability of markets and openness to global competition and investment. It involves ensuring that prices are able to reflect market forces and account for social costs; and that risks are managed efficiently by those best placed to do so.

However, achieving this in the current economic climate will present a unique set of challenges for government.

Both the **aftermath of the global pandemic** and the **ongoing uncertainty and volatility of global trade** have highlighted the importance of economic resilience. While supply-chain issues need to be dealt with, businesses generally have the incentives and capacity to do so efficiently. The need for resilience must not veil revitalised protectionism or selective industry policy, given the inefficiency and rent-seeking they bring. For a small, advanced, open economy like Australia, trade and foreign investment remain vital channels for competition and the diffusion of innovation.

At the same time there is some **concern about the state of competition as indicated by aggregate metrics**. However, aggregate trends in competition and business dynamism belie the complexity of influences, and blunt regulatory responses risk unintended effects. A well-functioning competition regime is vital, but governments can do more to promote contestability and competition than simply guarding against anti-competitive conduct (which often is not at issue). Other key policy levers include broad economic settings (not least our openness to foreign direct investment and trade); industry-specific interventions (particularly in services where governments already have a significant role in the market); and the broader regulatory framework facing businesses.

In addition, **non-mining investment has been stagnant by historical standards**. Efficient investment and productivity go hand in hand — and low investment can be a symptom, as much as it is a cause, of low productivity growth. Low investment likely reflects both structural and cyclical factors — global uncertainty, high risk premia and compositional shifts in the economy. To this end, policy should neither attempt to promote investment for its own sake, nor to 'reverse' long-term structural shifts, such as the growth of the services economy or the increasing role of online retail over brick and mortar businesses. And while a holistic review of the tax and transfer system to enhance productivity growth. But governments do have a critical role to play in the efficient provision — and pricing — of public infrastructure, and minimising the distortionary effects of public expenditure and regulatory impediments to private investments.

1. Competitive and dynamic markets

Key points

- Competitive and dynamic markets drive productivity growth by encouraging and rewarding businesses that develop new and better-quality goods and services and adopt more efficient production methods.
 - Relatively slow investment growth, dampened business dynamism and poor incentives for innovation in the rapidly growing government-dominated services industries are acting as a collective handbrake on Australia's productivity growth.

Competition and business dynamism, when measured at an aggregate level, appears to have declined. But economy-wide metrics give limited insight into the drivers of competition in individual markets, and what action — if any — may be warranted. Examination of particular sectors could help identify where consumers face limited product choice, where contestability is lacking, and where policy changes could improve market outcomes.

- Promoting competition and dynamism will require a suite of policy levers and often a sectoral focus particularly
 where contestability is lacking and where government regulation and funding have significant influence.
- The competitive landscape could be reshaped over time were emerging trends to continue, particularly with
 regard to the use of e-commerce and tele-services, international trade in services, and the proliferation of
 new technology-enabled business models.
- Competition laws must remain fit for purpose in the context of contemporary challenges. Principles of good regulatory design can help ensure any reforms will promote and not hinder productivity.
 - There are risks in designing specific competition rules for particular industries (such as digital platforms).
 - New questions have arisen regarding the nexus between competition law and workplace relations regulation, due to both the emergence of the gig economy and new multi-enterprise bargaining agreements.

Sovernments should focus on sectors where regulations unnecessarily impede new entrants and where various forms of government involvement (such as public funding, provision, and regulation) can inhibit contestable and competitive markets, increasing costs while diminishing outcomes for consumers.

- Prime examples include scope for competition-promoting reforms with regard to planning and zoning, and the regulatory arrangements for private health insurance and pharmacies.
- More broadly, reform of Australia's risk protection and social insurance arrangements could improve productivity and consumer outcomes. Further review should focus on encouraging individual entrepreneurship, removing barriers to innovative service models, and fostering efficient early intervention and mitigation.

This chapter will discuss the importance of competition and dynamism for driving productive outcomes in the Australian economy including:

- the links between competition and productivity (section 1.1)
- the current state of competition in the Australian economy and potential future trends likely to impact competition in the Australian economy (section 1.2)
- the regulation of competition by governments (section 1.3)
- opportunities to harness competition to make government-run services more productive (section 1.4).

1.1 Competition, dynamism and productivity

Well-functioning markets that are competitive and dynamic are a crucial mechanism for promoting productivity growth. Competitive pressures, combined with the commercial imperative to be profitable, lead businesses to:

- innovate and experiment with new ways of doing things that improve their operating efficiency
- invest in improved means of production
- · develop new and better-quality goods and services.

As more productive firms increase their market share by providing better, cheaper goods and services, they crowd out less productive firms. The repetition across time of this competitive cycle drives productivity growth in individual markets and can aggregate up to economy-wide productivity growth.

However, from the perspective of the policymaker, defining the exact characteristics of a market that make it 'productive' is not simple, and they tend to vary from market to market.

For example, healthy competition does not necessarily require a large number of competitors. In markets where there are economies of scale and where firms need to generate profits to internally fund investments, a market with a small number of competitive firms may be more efficient than a market with many small firms. Competition can also push businesses to reach a scale that minimises costs. This may involve only one or a few businesses operating successfully, particularly where there are 'natural monopoly' characteristics or 'star firms' (Andrews and Hansell 2019). There is little concern for productivity if competition, even in a market with a few competitors, is vigorous. But high rates of market concentration (where the share of turnover in a market attributable to one or a few firms is high) raises the risk that competition will be muted — undermining incentives for innovation, and leading to higher prices¹ — a risk that motivates Australia's competition regulations.

Australian markets may be more concentrated than those in larger economies, or may have smaller firms in the competitive fringe than in larger markets. Some argue that small businesses may lack the managerial resources and incentives to innovate — this may particularly be the situation for businesses that are 'falling behind' their rivals (Aghion, Akcigit and Howitt 2013). In such circumstances, it may be business failure or new entry that releases the 'gale of creative destruction' to improve productivity in the relevant market. Such disruption also imposes costs on business owners and employees, such as bankruptcy and temporary or long-term unemployment, and these costs may differ between industries (Cairó 2013).

Even in markets where there are few observed domestic players at a given point in time, contestability of that market — including possible entry from potential domestic competitors or the threat of competition from

¹ As noted by Schumpeter (1911), businesses have an incentive to minimise competition by maximising market share and exploitation. In practice, this can lead to muted price competition. For instance, interest rates on credit cards in Australia did not decrease between 2011 and 2021 despite the cash rate being lowered from 4.75% to 0.10%. That the four largest banks hold 92% of all credit card loans has been cited as an explanation (Jericho 2022).

overseas imports — can weaken any link between market concentration on the one hand, and productivity, costs and consumer welfare on the other.

Governments can shape markets in many ways

There is no 'one size fits all' model for regulating market competition to maximise long-term welfare gains for consumers. Typically, the strength of the competitive *process* (rather than the number or size of businesses in a market per se) drives a wide range of market environments that underpin productivity growth.

Governments have a role in building the foundations for competition and business dynamism to boost productivity. Regulatory settings that favour contestable markets (ones where there are low barriers to entry and exit) and dynamic markets (ones where market participants regularly enter and exit) can facilitate productivity growth because competitive tensions created in such markets promote innovation and the allocation of resources to their most productive use over time.

On the other hand, narrow targeting of competition proxies can lead to poor outcomes. For instance, markets for some online services or technological hardware are often provided by large, integrated companies at the frontier of technology, in heavily concentrated markets. On one hand, the presence of (positive) network externalities and economies of scale can mean that larger firms deliver better products at a lower cost. On the other hand, the absence of genuine contestability can risk poorer outcomes to the end user (through higher mark-ups and poorer incentives to improve quality). In setting policy, governments should always consider the extent to which *consumers* benefit from competition, and how this weighs against countervailing effects.

While Australia has in place a sophisticated system of competition regulation to promote competitiveness and contestability of markets, the influence of many other policy settings (including the broader regulatory environment) can be just as significant.

1.2 The state of competition

Many sectors of the Australian economy are relatively concentrated. The banking, supermarkets, mobile telecommunications, internet service provider, fuel wholesale and retail, and general insurance sectors all have four-firm market shares of 70% or more. While the average level of concentration in these sectors has not changed much since the early 2000s (Minifie, Chisholm and Percival 2017, pp. 14, 27), recent studies indicate that across a number of aggregate measures, proxies for competition and business dynamism have declined in Australia in the past two decades.

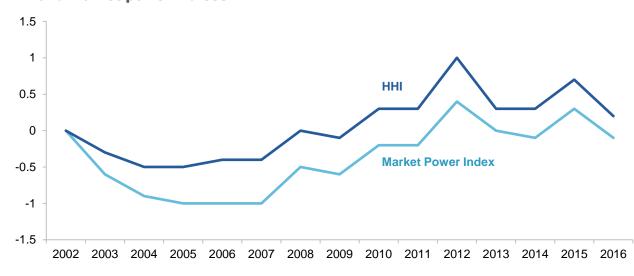
Recent trends in competition and dynamism

Overall concentration in the Australian economy increased between 2002 and 2016 (figure 1.1). The rise in concentration has occurred alongside a decline in entrepreneurship, but there is no evidence that this relationship is causal (Bakhtiari 2020). Market concentration and productivity are negatively correlated, except in export-intensive industries, where the relationship is reversed (likely due to intense competition in international markets) (Bakhtiari 2019).

Industry-specific data shows that market concentration trends have varied by industry, with stark increases in concentration in some industries (such as Warehousing and storage services) while many others became less concentrated (such as Basic non-ferrous metal manufacturing) or remained at similar levels of concentration (such as Coal mining) (figure 1.2). Relatively few industries experienced a sustained, significant increase in concentration over this time period. This variation suggests that factors influencing market concentration have not been consistent across the economy. Moreover, even at the industry-level,

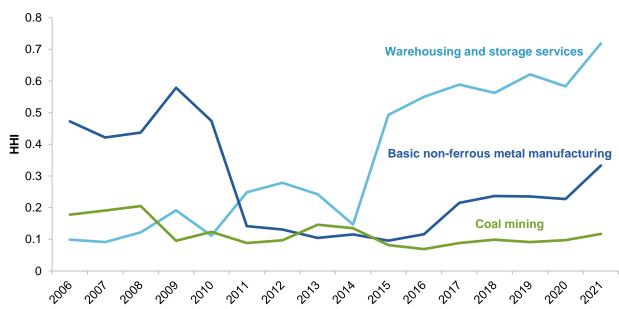
market concentration is only a partial indicator of competition — it may be the case that a small number of firms competes vigorously and/or that more efficient firms have gained market share over time. Indeed, measures of market concentration at the national level are not useful where there are monopolies in different regions (such as the case with some regulated natural monopolies like energy transmission).

Figure 1.1 – Industry concentration has increased since the early 2000s HHI and market power indices^a



a. The Herfindahl-Hirschman Index (HHI) is a measurement of the concentration of economic activity. The market power index is the principal component of the HHI and the log of firm population. Source: Adapted from Bakhtiari (2020).

Figure 1.2 – Market concentration in different sectors



HHI by ANZSIC 3-digit

Source: Productivity Commission estimates based on BLADE.

Rates of firm entry and exit declined between 2005-06 and 2012-13 (figure 1.3). While Bakhtiari (2020) highlights that business churn had been declining in Australia between 2003 and 2015, the rate of firm entry had increased in the years prior to the pandemic, but exits continued to decline. Both entry and exit rates fell at the onset of the pandemic, but increased in 2021. The vast majority of Australian businesses are non-employing — comprising sole traders and independent contractors. Trends in dynamism differ somewhat between employing and non-employing businesses (figure 1.3 panels b and c), potentially influenced by developments such as COVID-related assistance and growth in the gig economy.²

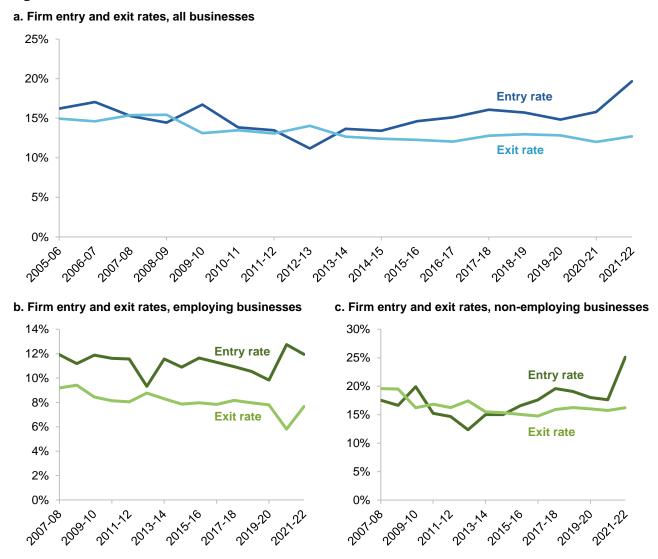


Figure 1.3 – Firm entries and exits in Australia^a

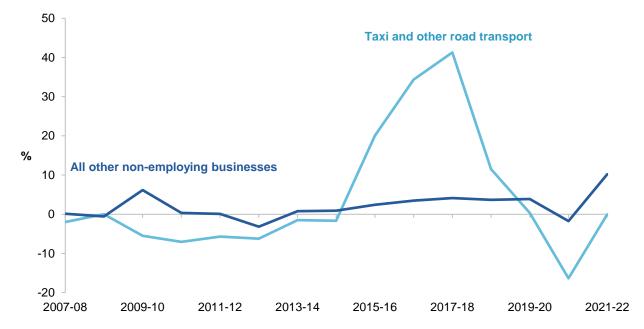
a. Entry and exit rates are expressed as a percentage of the number of businesses operating at the beginning of the period. Source: ABS (*Counts of Businesses, Including Entries and Exits*, various issues, cat. No. 8165.0).

² For example, a substantial amount of COVID-19 related assistance provided in the second half of 2019-20 and during 2020-21, focusing largely on employing businesses. In addition, the gig economy has come to prominence during the past decade, likely affecting the counts of business entries.

The overall increase in firm entries in the past decade is concentrated among sole traders and independent contractors. This may reflect that both rideshare and food delivery have facilitated the entrance of a significant number of independent contractors in urban transport (figure 1.4). However, given that many of these contractors work for the same few platforms (and may not effectively compete with each other) the absolute number of contractors is likely to overstate their contribution to competition and business dynamism.

The decline in firm exit rates, in particular, of both employing and non-employing businesses, could be indicative of reduced competition and limited pressure for resources used in less productive businesses to shift to more productive businesses.

Figure 1.4 – Business entry numbers may reflect the switch between employment and independent contracting^a



Percentage change in the number of non-employing businesses

^a Most transport platform-based workers are engaged on an independent contractor basis and as such require an Australian Business Number. As such, the significant increase in the share of employing businesses that have entered into the transport industry since 2014 is likely to be a reflection in the growth of platform-based work.

Source: ABS (Counts of Australian Businesses, Including Entries and Exits, various issues, Cat. no. 8165.0.

Mark-ups are likely to have increased. Firm mark-ups on their input costs — possible when competitive pressures are weak — are estimated to have increased steadily between 2004 and 2017 (Hambur 2021).³ The observed mark-ups could be the result of declining competition, but could also be due to changes to technology that increase economies of scale; shifts towards products and services that involve more fixed costs; or increasing competition encouraging businesses to provide better products that earn higher margins (Wainscoat and Twort 2022). (Others have noted estimated trends in mark-ups should be treated with

³ The best prevailing estimates of mark-ups are based on proxies without the benefit of firm-level price data, although Hambur (2021) notes that this is more likely to affect levels rather than the estimated changes over time.

caution when firm-level prices are not observed, and that making inferences from common methods of approximation can be problematic.)⁴

Overall, these trends in aggregate concentration, mark-ups, and dynamism appear to align in suggesting that markets may have become less competitive. However, interpreting these results requires deeper analysis. For example, economic activity *might* have skewed towards markets that are traditionally less competitive, such as some non-traded services; alternatively, market shares *might* have skewed further towards larger players within markets.

More importantly, it remains the case that aggregate trends do not necessarily translate to the consumer experience of competition. Even when broken down by industry, the nation-wide level of concentration may say little about the degree of competition experienced by consumers in a given area. Rossi-Hansberg, Sarte and Trachter (2020) studied the United States and found that in most industries, the growth of larger firms at a national level helped to reduce concentration and increase product market competition at a local level, by the larger firms entering uncompetitive local markets. Whether this holds for Australia is unknown as most large national businesses already have a presence in local markets. But the caveat stands that it is difficult to infer how the degree of consumer choice may have changed in particular localities or for particular products and services notwithstanding an apparent decline in industry-level competition.

As discussed above, competition not only depends on existing firms in a market. It also depends on the potential for entry of new businesses into a market when profits are high or consumer choice is low. However, the *contestability* of a market is not immediately observable in market concentration and dynamism statistics.⁵ Even markets with a small number of firms may be highly competitive if there is the credible threat of entry (Baumol 1982). In principle, it is the threat of entry rather than actual entry that drives contestability. It depends on low barriers to both entry and exit by business. That said, if there is little history of actual entry in a market, despite high concentration and high profits, the market is probably not contestable, even if barriers to entry and exit cannot easily be identified.

Trends that could reshape the competitive landscape

While no one can accurately forecast how the economic landscape will change over the coming decades, some emerging trends could potentially have a significant bearing on the extent of competition in Australian markets for both consumers and producers.

Further growth in e-commerce and tele-services would improve contestability

The increasing use of e-commerce, as opposed to local brick and mortar stores, can improve contestability by reducing the importance of geographic location. This has the effect of increasing effective competition from the consumer's perspective. Australian businesses have increasingly adopted digital technology, and barriers to offering e-commerce are relatively low (discussed in volume 4). Barriers to consumers are also low, given practically all Australians are within the coverage of some form of digital and physical network for

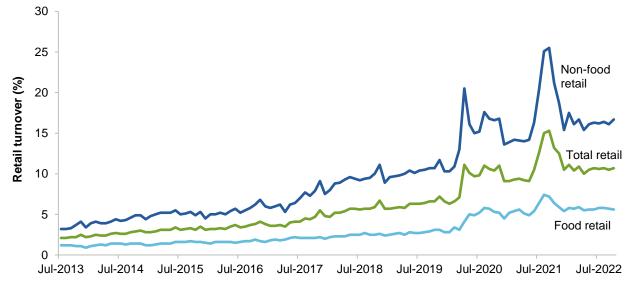
⁴ Bond et al (2021) cautioned against making any inferences from firm-level markup estimates when firm-level prices are not observed. They note that 'the implications of this so-called omitted price bias for identifying markups are much more severe than just generating downward bias in the ratio estimator. Under the standard assumption that the flexible input and the output price are determined from a static profit maximization problem, the ratio estimator that uses the revenue elasticity in place of the output elasticity is identically equal to one, and therefore contains no useful information about markups'. ⁵ Baumol defined a contestable market as one where entry is free and exit is costless (Baumol 1982, p. 3), although a more practical interpretation would be that barriers to entry and exit may are relatively low. both internet access (of services) and parcel delivery (for physical products), albeit the quality and cost of accessing those networks can differ markedly.

Australian consumers have generally embraced e-commerce. For instance, online retail trade has grown substantially as a percentage of retail turnover in the past decade, most markedly during the pandemic (figure 1.5). It has remained well above pre-pandemic levels, particularly for non-food products. Some survey evidence suggests that Australian habits with regard to online shopping remain behind comparable countries such as the United Kingdom and United States.⁶ To the extent that more consumption can be done, and is done online, physical barriers to competition become somewhat irrelevant, and hence will diminish.

These effects are magnified to the extent that *services* are consumed online, given that services delivered face-to-face would be subject to significant physical barriers to competition. Australian consumption of services online increased significantly during the pandemic, although it is unclear to what extent this will persist.⁷ Moreover, given that similar changes in service consumption and delivery occurred around the world, there could be scope for a much greater trade in services online.

Figure 1.5– Online retail has remained above pre-pandemic levels

Online retail as a share of retail turnover, July 2013 to October 2022



Source: ABS (Retail Trade, Australia, October 2022, Cat. no. 8501.0, table 23).

More competition in services will come from overseas

In the 2010s a number of global trends and developments led to strong growth in Australia's services exports, particularly in education and tourism, which came to an abrupt halt due to border closures related to the COVID-19 pandemic. However, as the world reopens Australia's services sector — which accounts for a large (and still increasing) proportion of Australia's domestic production — which has typically not been subject to direct import competition, may face new competitive challenges.

⁶ 25% of Australians shop online on a weekly basis compared with the 38% in the United States and 34% in the United Kingdom (Australia Post 2022).

⁷ In June 2022, 45% of adult internet users worked from home, while 28% studied from home, 52% used online telehealth (an increase compared with the previous two years), and 16% used professional (e.g. legal/financial) consultations (ACMA 2022).

Several global trends suggest that global trade in services will continue to expand, with implications for both Australian service exports and imports. The long-term increase in incomes in developing nations have increased accessibility of international travel and demand for sophisticated services. More recently, the spread of faster internet connectivity has allowed services to be delivered remotely that would not have been possible a decade ago. The COVID-19 pandemic supercharged the utilisation of remote working technology and normalisation of cross-border supply of a greater number of services.

At the same time, the response to COVID-19 had a strongly negative effect on Australia's two main service exports — education (primarily to on-shore international students) and tourism. And while international borders have reopened, travel patterns for study and tourism have not returned to pre-COVID levels. As a result, Australia's service exports have recovered less strongly than its trade in goods — and less strongly overall than other advanced countries (figure 1.6).

This suggests that opportunities for Australia's trade in services are likely to grow post-COVID — to the extent that Australian consumers are willing to purchase service imports (and not constrained by various regulatory factors discussed in chapter 3), there could be a significant increase in import competition. For Australia's major service exports, harnessing these opportunities may require some adaptation. This has already been the experience of Australia's education exports, which underwent a pivot towards 'cross border supply' (i.e. remote learning) to supplement its reliance on consumption abroad (i.e. migration of international students). The onus rests largely on businesses to adapt to these new circumstances, including by investing in new technological solutions — potential roles for government in facilitating trade in services are discussed further in chapter 3.

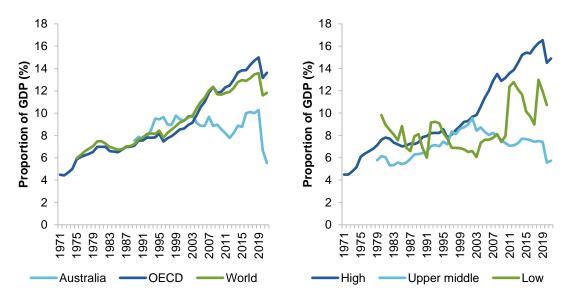


Figure 1.6 - Trade in services as a proportion of GDP

Trade in services by national grouping; trade in services by national income

Source: World Bank (2022b).

Novel business models could improve competition in services

Different kinds of digital platforms⁸ have proliferated in the past decade, each with unique implications for competition. Platforms that match competing businesses with customers have facilitated the entry of independent contractors and microbusinesses in such industries as care services (e.g. Mable) odd jobs (e.g. Airtasker) or freelance professional services (e.g. Fiverr, Upwork). These platforms can serve as incubators for novel service offerings, and help to lower the costs of entry for small businesses.

Other platforms have improved competition in services by acting as service providers (rather than intermediary services for competing businesses). These platforms provide services under their own brand name with a workforce typically comprised of independent contractors. These businesses have established themselves as competitors to longstanding incumbent service providers, most notably in transport services where rideshare services compete with taxis.

A key question for governments relates to how new business models are regulated. It will be important to find a balance between facilitating experimentation and the introduction of new business models, while also moving quickly enough to address unacceptable harms to consumers.

- Innovations with lower risks of harm are likely to benefit from regulatory 'sandboxes'. Such approaches are
 increasingly commonplace in Australia and internationally as a means of facilitating the entrance of new
 products or services (PC 2017c). The Enhanced Regulatory Sandbox (ERS), for instance, was introduced in
 September 2020 to facilitate the testing of innovative financial services or credit activities (ASIC 2020).
- Technologies with greater risks of harm and those that entail significant complexity are likely to benefit from advance preparation of regulatory frameworks. This has been the case with regard to the National Transport Commission's development of a regulatory framework for autonomous vehicles (NTC 2016), and could be of broader use for 'deploying data-driven products and services at scale' (Consumer Policy Research Centre, sub. 19, p. 5).

Ultimately, regulation should aim to achieve neutrality across business models that can meet socially accepted standards (in terms of delivering social benefits or limiting social harms) allowing different means of providing services to end consumers. Ensuring that new and incumbent businesses are expected to deliver the same social outcomes will not always require the enforcement of identical regulations — indeed, novel regulatory approaches will need to be developed. These issues are exemplified with regard to platform-based work (also known as 'gig work') and its implications for workplace relations (volume 7).

Promoting neutrality between business models will be particularly important for Australia's decarbonisation efforts and the policy objective of reaching net zero emissions by 2050 (discussed in volume 6). The overall task of emissions reduction will entail the use of several relatively novel business models, predicated on different technologies (for instance, in carbon capture and storage, energy generation, and energy storage). As technology continues to develop, this will give rise to new and better approaches to mitigation. Encouraging abatement at least cost generally will require a mechanism such that different technologies can compete on effectiveness and efficiency.

The absence of an economy-wide price on carbon emissions brings greater risk that public and private investment fails to adopt the most efficient and effective technologies. Moreover, while governments have a

⁸ The term 'digital platforms' is used to describe a number of different services, including digital marketplaces in which users sell or rent goods to consumers (e.g. AirBnB, Facebook Marketplace and Gumtree); platforms for internet-based services, such as search engines, social media services, or digital content aggregation services; or platforms that facilitates matching between service providers (or workers) and service users (or tasks). Chapter 5 in Volume 7 of this report focuses more specifically on digital platforms that facilitate platform work.

role in driving the development of abatement technologies, preferencing the use of particular technologies over others risks reducing contestability and efficient abatement. A technology-neutral approach would avoid the introduction of new barriers to contestability as climate change policy develops.

Market entry could be subdued if business investment remains stagnant

Non-mining business investment in Australia has stagnated over recent decades, with a number of other advanced economies experiencing similar trends. Although measured investment levels may underestimate investment in intangibles, which is increasingly important to service industries,⁹ this alone does not appear to explain the decline. A number of cyclical and structural factors play a role (chapter 2).

To the extent that investment remains stagnant, this would not only affect innovation and expansion in existing businesses, but also the number of new businesses entering the market. In this context, it would be important to establish to what extent trends in business entries are the result of regulatory and other barriers to entry in specific markets, or whether they reflect broader trends in investment.

Moreover, it is difficult to anticipate the sources of competition in different industries, and thereby what type of investment will be relevant. In some cases, new market entrants will arrive from overseas (via foreign direct investment) or will entail expansions of large existing businesses in other sectors (involving investment in horizontal integration). In other cases, competition might take the form of a large number of small new entrants, or a disruptive business model (both of which might be associated more with venture capital).

Implications for policy

It is not clear from the existing research what is driving the aggregate trends in competition and dynamism, nor what action governments should take (if any). For instance, the aggregate trends in competition, such as increasing overall concentration, are not in themselves evidence of poor outcomes for consumers (or that anti-competitive conduct has gone unchecked).¹⁰ And while there are examples where markets have lacked contestability, it is not clear that there is a crisis regarding the degree of competition across the Australian economy.

Regardless, it remains the case that competition and dynamism will remain driving forces for productivity growth over time, and undue barriers to competition could prevent markets from achieving gains in efficiency and productivity. While in some specific markets, larger or more integrated firms are associated with greater investment or innovation, this does not obviate the role for policy to encourage healthy levels of competition — such as by lowering artificial barriers to market entry, avoiding poor regulatory incentives, and guarding against anti-competitive conduct. It will be important for governments to prioritise the right policy levers to achieve 'bang for buck' in influencing competition and business dynamism in Australian markets (figure 1.7).

 First, as a small open economy, a significant amount of competitive pressure in Australian markets comes from overseas. Contestability from foreign market entrants (either through imports or from having established foreign businesses commencing operations in Australia) is a particularly important avenue for driving competition. Trade in services is also likely to be a key area of new competition for Australian firms. As such, Australia's relative openness to trade and foreign investment will be a key element in driving competitive outcomes (chapter 3).

 ⁹ Volume 5 of this report details capital spending in physical and intangible assets over the past 60 years.
 ¹⁰ Indeed, in some markets, such as online search services, it is likely that concentration has risen because a small number of innovative businesses have been able to serve consumers better. In those situations, concentration potentially reflects consumer gain, not anti-competitive conduct.

- Second, regulatory settings in Australian markets have the potential to influence firm behaviour to both
 promote competition and limit anti-competitive conduct. Policymakers should regularly review competition
 laws and regulations to make sure that they are fit for purpose (section 1.3). Any changes to competition
 laws and regulations should be guided by specific evidence of what is causing poor outcomes, what might
 be failing within the current framework, and whether existing regulations are sufficiently flexible to deal
 with emerging competition concerns. In addition, recent policy developments have raised questions about
 the nexus between workplace relations regulation and competition policy (section 1.3).
- Third, trends in competition and their effects on both productivity and consumer welfare will vary between
 industries and, as such, will require a policymakers to take a micro lens. Governments should focus on
 sectors where existing regulations unnecessarily impede new entrants and where various forms of
 government involvement (in the forms of public funding, provision, and regulation) can create less
 contestable and less competitive markets (section 1.4). Overall, governments should focus on sectors with
 significant and longstanding contestability issues where evidence suggests consumers are
 experiencing poor choice, where firms face poor incentives to improve efficiency, or where there are
 known barriers to contestability. Governments should also be wary of creating new barriers to
 contestability in developing climate change policy, where technology-neutral approaches and broadly
 consistent pricing of mitigation can promote competition (volume 6).
- Finally, while it is important to better understand historical drivers of market dynamics, policy reform must be forward-looking. Emerging trends suggest that a number of policy levers will have a bearing on competition, many of which are discussed in other parts of the Productivity Inquiry, given their importance to productivity in their own right. A policy approach to improving competition would be incomplete without addressing the issues about the access and use of digital technology (discussed in volume 4) incentives to investment and market entry (discussed in chapter 2 of this volume and in volume 5) or the challenges of regulating platform work business models in the context of workplace relations (discussed in volume 7).

Figure 1.7 – A range of policy levers can imp	prove competition
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International contestability	 Staying open to international competition Australia should pursue economic resilience by harnessing open trade. (recommendation 3.7) Import competition promotes efficiency and potentially diffusion – remove tariffs and anti- dumping; improve recognition processes for product standards. (recommendation 3.8) FDI can provide new market entrants in industries with large incumbents – open FDI settings should be maintained; the screening regime should be designed and operated with an understanding of the potential costs of chilling investment. (recommendation 3.9) Trade in services is likely to increase over time – Australia needs appropriate digital skills and infrastructure, appropriate regulatory settings, and facilitatory migration settings. (recommendation 3.10)
Regulatory reform	 Improving contestability and the incentives for business investment Reform to Australia's broader risk protection 'system' could improve incentives to entrepreneurship, innovation, and mitigation. (recommendation 3.1) Better planning and zoning regulation can allow new entrants to compete in industries where physical location is important. (recommendation 3.2) Governments should ensure workplace relations regulation does not have unintended consequences for competition. (finding 3.2) Governments can influence contestability where industry-specific regulation is complex and pervasive (such as private health insurance and pharmacies). (recommendation 3.3) The tax system can be the source of distortions and poor incentives. Reforms to improve the efficiency of the tax system will be necessary in the coming decades.
	 (recommendation 3.4) Addressing digital challenges and harnessing opportunities Through <i>digital dynamism</i> new entrants can more easily connect with customers online, at a notional cooler betractal platforms allow migrabusinesses to toot the market (e.g. Fivorr
Digital progress	 a national scale; horizontal platforms allow microbusinesses to test the market (e.g. Fiverr, Airtasker, Freelancer). <i>Digital disruption</i> means that platforms can provide new approaches to services and disrupt stagnant markets (e.g. rideshare, care services). Regulation should not unduly stymie new business models. (recommendations 7.18 and 7.19) Mergers regulation must be fit for purpose, noting its complicated relationship with innovation and productivity. (finding 3.1)

1.3 The regulation of competition

While competition regulation often appears to centre on specific benefits (or costs) to a particular sector, industry, or firm, it should be noted that the ultimate objective of the *Competition and Consumer Act 2010* (Cth) (CCA) is to 'enhance the welfare of Australians'. The focus of the Act is on competition as a means to achieve enhanced economic (particularly consumer) welfare. In practice, competition is not an action that is discretely achieved once and for all, rather it is an ongoing 'state of play'. As explained in the ACCC's merger guidelines:

Competition is a state of ongoing rivalry between firms — rivalry in terms of price, service, technology and quality. Market participants are mutually constrained in their pricing, output and

related commercial decisions to some extent by the activity of other market participants (or potential market participants). (ACCC merger guidelines at 3.1)

This suggests that both the design and administration of regulations should be guided by more than simple metrics — such as the number of competitors, market shares or the extent of concentration — which often provide only limited insights into the actual impact of competition on consumer welfare.

Australia has a well-functioning, sophisticated system of competition regulation, but as new products are launched and business practices evolve, it is important to ensure competition laws remain appropriate to achieve their welfare objective. Some of the key challenges facing policymakers today include the design of mergers control; regulating market power in data and digital sectors; the nexus between competition policy and workplace relations (given recent reforms to the latter); and the application of regulation to new developments in the finance sector.

Procedural improvements for merger approvals

Issues with the current system of mergers control have been raised by various parties including the regulator. While a systematic bias in the regime could be problematic for mergers control, regardless of the direction of the bias, the ACCC has argued that the current merger control¹¹ regime 'is skewed towards clearance' of anticompetitive acquisitions (Sims 2021).

This 'skew' is ultimately a function of the unique system of processes for clearing mergers. At present in Australia, a potentially anticompetitive merger can be cleared by any of three alternative procedures — an informal¹² review process by the ACCC, a formal authorisation¹³ from the ACCC, and clearance from the Federal Court. The three alternative procedures involve different legal standards and burdens of proof. For example, while an action before the Federal Court is determined on the balance of probabilities, a merger can only be formally authorised if the ACCC is 'satisfied' that it will not breach s.50 of the CCA. In practice, these differences could invite regulatory gaming by merger parties.

In part, this skew is attributed to aspects of the informal merger process that result in inadequate information and time for decision-making (Sims 2021). From a detailed ex post review of recent merger cases, the ACCC (2022c) concluded that merger parties and third parties often exaggerated certain claims (about the likelihood of new entry, expansion, or the exercise of countervailing power) and distorted or omitted critical information.

Other criticisms relate to the interpretation of the wording of s.50 by the courts. The key issues include:

- the legal interpretation of 'likely' in s.50 has been vexed in relation to whether it is taken to mean 'more probable than not' or a 'real chance'
- more broadly, arguments about future (hypothetical) states are challenging, in that they are predictive, must be based on evidence, and must meet the Court's standard of proof.

¹¹ A merger or acquisition is illegal (i.e. anticompetitive) under section 50 of the CCA if it would have the effect, or be likely to have the effect, of substantially lessening competition in a market.

¹² If the ACCC does not oppose a merger through the informal process, this protects the merger parties from legal action by the ACCC (but not from other parties). If the ACCC opposes the merger but the parties wish to proceed, the regulator may seek an injunction before the Federal Court then pursue a s.50 merger case (and prove on balance of probabilities) that merger is anticompetitive.

¹³ Merger parties may seek statutory protection from legal action under section 50 of the Act by lodging an application for merger authorisation, with an appeal avenue to the Competition Tribunal. While the merger authorisation is in force, the authorised parties will be able to acquire the relevant shares or assets without risk of the ACCC or third parties taking legal action for a contravention of section 50 of the Act.

Different responses have been suggested as a means of addressing these issues. The ACCC has previously recommended the introduction of a new formal authorisation regime that mandates notification to and authorisation from the regulator; and legislative changes that would define 'likely' in line with its use in cartel regulation (Sims 2021). With regard to the latter, some have argued that such legislative changes would not resolve confusion about the counterfactual (Cao, King and Samuel 2022) and indeed similar legislation has worked better in New Zealand in the context of clearer directions from the Court (King 2021).

Moreover, the outcomes of merger cases brought before the courts may reflect the regulator's approach to litigation as much as it does the law or process. The ACCC's use of economic theory and modelling has often been found unconvincing in the Federal Court in the context of commercial realities and statements by business representatives about their own commercial decision-making (Cao, King and Samuel 2022; Jagot 2021; King 2021). As Jagot J (2021) noted, likelihoods are evaluated in a 'common-sense commercial context'. As such, it is unclear whether the need for legislative reform would remain if the regulator were to augment its approach to litigation.

The ACCC's proposed alternative merger clearance regime would provide more power to the regulator, and could have a number of different implications for productivity, depending on the design. Mergers can provide a way to efficiently remove underperforming businesses from a market. So long as the market remains competitive, this will enhance productivity by better allocating resources. Shifting the merger regime's focus away from the 'commercial context' would risk placing more emphasis on theoretical constructs or modelling. Removing the role for the Court altogether places a great deal of power with the regulator, necessitating some other avenue of accountability.

The ACCC's most recent interim report for the Digital Platform Services inquiry did not make specific recommendations for merger reform, but noted that:

... any future economy-wide reforms to Australia's merger laws should consider the challenges involved in adequately addressing the competition effects of serial strategic acquisitions, including by digital platforms. (ACCC 2022a, p. 7)

Overall, there does not appear to be a strong case for the implementation of a new formal authorisation regime as proposed. Rather, there is likely more value in the ACCC further considering its internal merger review processes; and for government to consider how best to avoid perverse incentives across the three alternative procedures for mergers clearance. Whichever the direction of reform, the pursuit of a more functional mergers control regime will need to address contemporary and emerging challenges, but should not come at the expense of good principles of regulatory design.

The regulation of dominant firms

In Australia, the misuse of market power is governed by s. 46 of the CCA, where 'misuse' is defined as 'conduct that has the purpose, or has or is likely to have the effect, of substantially lessening competition'. This definition, known as the 'effects test' for misuse of market power, was introduced in 2017 along with other competition policy reforms recommended by the Harper Review. It significantly strengthened the regulator to not only address conduct that was undertaken for the purpose of reducing competition, but also conduct that had or would likely have that effect. However, these new powers have been used sparingly, with the first test of these laws concluding in 2021 (in ACCC v Tasmanian Ports Corporation Pty Ltd [2021]).

The regulation of firms with market power has received renewed attention both in Australia and internationally, in regard to data and advertising of search-related services and social media (box 1.1). The ACCC noted that it has:

... growing concerns that enforcement under existing competition and consumer protection legislation, the Competition and Consumer Act 2010 (CCA) and the Australian Consumer Law (ACL), which by its nature takes a long time and is directed towards very specific issues, is insufficient to address the breadth of concerns arising in relation to rapidly changing digital platform services. (ACCC 2022b, p. 4)

Box 1.1 – Regulation of online platforms is evolving in different jurisdictions

European Union

The proposed Digital Markets Act (DMA) would designate 'gatekeepers' who are providers of 'core platform services', which are defined as online intermediation services (e.g. online marketplaces, booking sites.); search engines; social networking services; video-sharing platforms; number independent interpersonal communication services (e.g. messaging and chat apps); operating systems; cloud computing services; and advertising services provided alongside any of the aforementioned other core platform services. The DMA sets out multiple obligations for 'gatekeepers', requiring the core services operated by all gatekeepers to:

- allow business users to offer their products elsewhere at different prices or conditions, and to choose the promotion and distribution channels used to reach end users
- not prevent end users from acquiring content, subscriptions, features or other items outside the gatekeeper's core platform services
- not require business users to use or offer the gatekeeper's identification services as a condition of using their core platform services, or to bundle any services with the gatekeeper's core platform services.

United States

There are a number of bills under consideration in the US Congress that seek to address different issues and harms arising in digital platform markets.

The proposed Platform Competition and Opportunity Act would prohibit acquisitions by a covered platform if the business activities of the target compete with the covered platform, constitute a nascent or potential competitor, enhance or increase the covered platform's market position, or enhance or increase the covered platform's market position, or enhance or increase the covered platform's market position. The proposal also includes a reversal of the burden of proof, whereby the acquiring covered platform must prove the acquisition is not unlawful.

The proposed Ending Platform Monopolies Act would prohibit ownership or control of a business that creates the incentive and ability for a covered digital platform to self preference their own products and services in a way that disadvantages competitors and undermines free and fair competition. It focuses on 'eliminating conflicts of interest' arising from dominant online platforms concurrent ownership or control of an online platform and certain other businesses.

United Kingdom

Under reforms proposed by the UK Government, a new Digital Markets Unit within the competition regulator would designate firms based on an assessment of whether a firm has:

Box 1.1 – Regulation of online platforms is evolving in different jurisdictions

- substantial, entrenched market power in a specified digital activity (e.g. search or social media), which has particularly widespread or significant effects, and
- a strategic position in a designated activity in the market.

Firms designated with Strategic Market Status would be subject to a binding code of conduct, potential application of pro-competitive interventions (such as mandating third-party access to data or ensuring software compatibility); additional merger control requirements (including a requirement to report all transactions and potentially a merger clearance requirement for acquisitions above a specified threshold).

The Digital Markets Unit would also be empowered to impose fines of up to a maximum 10% of a firm's global turnover for the most serious offences, with further daily penalties of up to 5% of daily worldwide turnover for continued breaches.

Source: ACCC (2022b, pp. 110-116).

In its fifth interim report under the Digital Platforms Services inquiry, the ACCC made two key recommendations about the regulation of dominant platform businesses¹⁴, which also have implications for the regulation of dominant firms (box 1.2). Similar to reforms proposed in Europe and the United States, the recommendations entail legislating criteria for identifying particular businesses as 'designated' digital platforms, and making those platforms subject to mandatory codes of conduct containing 'targeted competition obligations'.

For Australia, the concurrent development of regulatory responses in multiple regions will itself pose challenges. While cooperation and co-learning will allow Australia to remain at the forefront of regulation, the divergence in regulatory approaches between major economies could ultimately cause complications for Australia and the market more broadly — proposed legislation in the United States and the European Union alone show significant differences in their treatment of acquisitions and competition (ACCC 2022b, pp. 110–116).

Regulations established in major global markets can also shape the development of the services that are offered in Australia. For example, the introduction of the General Data Protection Regulation (GDPR) in the EU resulted in many global digital service providers simply altering their service offerings world-wide. The small size of the Australian market can limit our ability to implement bespoke regulations, as service providers may simply decide that it is not worth the effort of developing a bespoke Australian product.

¹⁴ The ACCC inquiry focuses on a subset of digital platforms, which include internet search engine services, social media services, online private messaging services, digital content aggregation platform services, media referral services and electronic marketplace services, digital advertising services supplied by digital platform service providers, and data practices of both digital platform service providers and data brokers. This differs to the focus of volume 7 of this report, which addresses workplace relations issues in platform work.

Box 1.2 – ACCC recommendations for reform of digital platform regulation

In its fifth interim report under the Digital Platforms Services inquiry, the ACCC made four recommendations. The first two relate to enhanced consumer protection measures, both economy-wide (Recommendation 1) and specific to digital platforms (Recommendation 2). The remaining recommendations pertained to the regulation of competition:

Recommendation 3: Additional competition measures for digital platforms The ACCC recommends the introduction of additional competition measures to protect and promote competition in markets for digital platform services. These should be implemented through a new power to make mandatory codes of conduct for 'designated' digital platforms based on principles set out in legislation.

Each code would be for a single type of digital platform service (i.e. service-specific codes) and contain targeted obligations based on the legislated principles. This would allow flexibility to tailor the obligations to the specific competition issues relevant to that service as these change over time.

These codes would only apply to 'designated' digital platforms that meet clear criteria relevant to their incentive and ability to harm competition.

Recommendation 4: Targeted competition obligations The framework for mandatory service-specific codes for Designated Digital Platforms (proposed under Recommendation 3) should support targeted obligations based on legislated principles to address, as required:

- · anti-competitive self-preferencing
- anti-competitive tying
- exclusive pre-installation and default agreements that hinder competition
- · impediments to consumer switching
- · impediments to interoperability
- data-related barriers to entry and expansion, where privacy impacts can be managed
- a lack of transparency
- · unfair dealings with business users
- exclusivity and price parity clauses in contracts with business users.

The codes should be drafted so that compliance with their obligations can be assessed clearly and objectively. Obligations should be developed in consultation with industry and other stakeholders and targeted at the specific competition issues relevant to the type of service to which the code will apply. The drafting of obligations should consider any justifiable reasons for the conduct (such as necessary and proportionate privacy or security justifications).

Source: ACCC (2022a).

Designation of dominant firms and gatekeepers

The ACCC's proposed reforms echo several proposals internationally that use laws that identify firms based on particular characteristics in order to apply particular regulations, prior to any proposed acquisition or other action. For instance laws proposed in the EU would involve designating dominant platforms as 'gatekeepers' (box 1.1). In principle, this is similar to the 'declaration' of access regimes in Australia.¹⁵ If Australia were to adopt an approach similar to that proposed in the EU, attention would be warranted on the institutional and procedural arrangements for designation. For example, there would be a potential conflict of interest if the authority that determined designation was also the authority that regulated the designated businesses.¹⁶

Conceptually, designating a firm as the subject of specific regulations (*ex ante* of any proposed commercial action) assumes an *entrenched* position of market power. With regard to digital platforms, there is good reason to question how entrenched any position would be in the long term, given technological progress. Historically, Facebook has not always been the most dominant social media platform (previously MySpace) and Google has not always been the most dominant search engine (previously Yahoo!). It has been argued that, because of network externalities, vertical and horizontal integration, and merger activity, this time is different and both Meta and Alphabet have entrenched dominance. However, to avoid inappropriate and unnecessary ex ante regulation, any designation of a business should be time-limited, either through an application for review or a specific time limit.

A further question relates to whether the *ex ante* designation proposed internationally will eventually apply to firms outside of digital platforms. If such an approach were to be adopted, either in Australia or in major international markets, it would present a significant departure in the regulatory treatment of dominant firms. It would have significant implications for innovation and competition in Australia, in part due to our reliance on large, established firms to enter already concentrated Australian markets.



Finding 3.1 Competition law reform

The reforms proposed both in Australia and internationally to enable the designation of dominant digital platform businesses raise questions about how to regulate dominant firms more broadly. If adopted, such approaches would present a significant departure in the regulatory treatment of dominant firms and would have significant implications for innovation and competition in Australia.

Similarly, emerging challenges related to digital platform markets have prompted discussion of reform to the mergers control regime. Rather than pursuing specific rules for mergers involving digital platforms, it could be more valuable to pursue improvements to mergers procedures more generally, including within the current framework, so as to address issues both in digital platform markets and the economy more broadly. Such reform should not come at the expense of good principles of regulatory design.

¹⁵ Part IIIA of the *Competition and Consumer Act 2010* (Cth) allows for third parties to share the use of certain infrastructure facilities of national significance under a regulated access regime. While services can be 'declared' to be subject to a regulated access regime by the National Competition Council, there are examples where infrastructure has been 'deemed declared' (such as rail, gas pipelines, electricity transmission networks).

¹⁶ To avoid similar conflicts, the Australian infrastructure access regime under Part IIIA of the CCA has one regulator to recommend declaration (the National Competition Commission) while another is involved in the regulation of declared businesses (the ACCC).

The nexus between competition and workplace relations

In Australia, competition and workplace relations are regulated by two separate frameworks legislated via the *Competition and Consumer Act 2010* (Cth) (the CCA) and the *Fair Work Act 2009* (Cth) (the FW Act) respectively. The separation of the two frameworks is made explicit in several parts of the CCA.¹⁷ While this separation is largely unproblematic, there are areas of potential overlap and inconsistency.

For example, the Harper Review concluded that there was an apparent conflict between sections of the CCA and industrial conduct permitted under the FW Act (Harper et al. 2015). They considered it desirable for the conflict to be resolved in a manner that promoted competition, such that businesses would 'generally be free to supply and acquire goods and services, including contract labour'.

More recently, the emergence of the gig economy has raised new questions about independent contractors, who are often both workers and businesses. In addition, the passing of *Fair Work Legislation Amendment* (Secure Jobs, Better Pay) Act 2022 (Cth) has opened up avenues for multi-enterprise bargaining, some of which will have implications for anti-competitive behaviour.

Independent contractors as workers and small businesses in the gig economy

Contractual arrangements relating to independent contractors and their clients are covered by competition law, not employment law, even where issues relating to individual contractors are similar to other workers.

As such, independent contractors are considered both as workers and as (small) businesses. With regard to collective action, as businesses, contractors are considered competitors to one another.¹⁸ Unless a competition exemption is obtained from the ACCC, independent contractors (including platform workers) who join to collectively bargain with a target business (such as a platform) could violate competition laws. Whether a collective exemption is available turns on the public interest test — that collective bargaining must be likely to result in a 'net public benefit' if there is likely to be a lessening of competition. The ACCC (2014, p. 3) has stated that:

The CCA [*Competition and Consumer Act 2010* (Cth)] requires businesses to act independently of their competitors when making decisions about pricing and other terms and conditions of trade. By engaging in collective bargaining participants are at risk of breaching the CCA. Authorisation of collective bargaining is a transparent process by which the ACCC may grant protection from legal action where it is satisfied in all the circumstances that the proposed collective bargaining arrangement is likely to result in a public benefit that would outweigh the likely detriment to the public arising from any lessening of competition.

¹⁷ In s. 45DD details several circumstances where boycotts would be permitted, including where their dominant purpose relates to employment matters. In s. 51(2)(a)) notes that most of Part IV of the CCA would not apply to actions relating to the remuneration, conditions of employment, hours of work or working conditions of employees. So-called 'secondary boycotts' (which involves at least two people acting in concert to hinder or prevent third parties from acquiring goods from or supplying goods to others) are prohibited under section 45D of the CCA, and this restriction has been applied by the ACCC in regard to some trade union activity.

¹⁸ Although platform workers covered by Chapter 6 of the *Industrial Relations Act 1996* (NSW) may also have collective bargaining rights for the purpose of negotiating contract agreements — relating to contract conditions — under NSW industrial law, without requiring competition exemptions. For instance, the TWU stated that Amazon Flex drivers 'enjoy enforceable rates of pay along with rights to dispute resolution, union representation and collective bargaining' following a revised NSW Industrial Relations Commission determination which expanded coverage to eligible owner-drivers of vans with a carrying capacity between 1.5 and 3 tonnes (TWU 2022).

The framework was not specifically designed for some of the more common platform work situations in rideshare and food delivery, where a large number of independent contractors work for a platform on set prices and conditions, with no formal hiring or rostering processes. A dilemma in this case is that:

- Small groups of contractors would lack bargaining power. Unlike collective bargaining under the FW Act, there is no legal requirement for a target company to engage in a collective bargaining process following an exemption from the CCA (whereas in enterprise bargaining, there are good faith bargaining requirements).
- Large groups of contractors are less likely to receive competition exemptions. In the case of the gig economy, a platform may not have any incentive to engage in collective bargaining with small groups of platform workers, and there is no legal requirement for them to do so. Conversely, a large group of contractors may have the bargaining power needed to bring the platform into negotiations, but may face several legal hurdles in doing so.

These issues are discussed further in chapter 5 of volume 7.

Multi-enterprise bargaining and implications for competing firms

In December 2022, the *Fair Work Legislation Amendment (Secure Jobs, Better Pay) Act 2022* (Cth) ('the 2022 Amendments') introduced a suite of changes to the workplace relations system, including significant changes to remove restrictions on multi-enterprise bargaining. It will likely take several years before the effect of the 2022 Amendments can be assessed, particularly given that agreements already in place would not be able to utilise the changes until their next bargaining round. The *potential* costs and benefits of multi-enterprise bargaining for productivity are discussed in chapter 4 of volume 7.

Some aspects of multi-enterprise bargaining could highlight existing tensions between competition and workplace relations regulation.

For instance, one of the stated intentions of the expansion of multi-enterprise bargaining was to prompt wage growth (Burke 2022). In effect, one of the *purposes* of removing restrictions on multi-enterprise bargaining is to increase wages above the level delivered by labour market competition (albeit subject to award conditions). All else given, higher wages will tend to increase costs and consumer prices and *possibly* reduce employment in affected firms. As such, while multi-enterprise agreements may weaken potential competition based on labour costs (typically, employers can adjust those costs within the bounds of the minimum standards set out in modern awards and National Employment Standards) this is no different from the general tension that exists between competition and workplace relations policy.

Moreover, multi-enterprise agreements would not deter businesses from competing with each other in the labour market for more productive workers, in so far as employers can still offer employees wages and conditions above what is set out in the agreement (FW Act ss.202-203).¹⁹ In addition, any risk of lost competition in the labour market would be immaterial for classes of workers whose wages are relatively low and for whom wage growth had stagnated. As such, recent changes do not introduce concerns about wage suppression.

In other ways, the expansion of multi-enterprise bargaining will present new risks for competition.

A multi-enterprise agreement may act as a de-facto source of collusion, depending on the details of the agreement. For example:

¹⁹ Agreements between firms to avoid competing for staff are prohibited by antitrust law in other countries like the United States, but in Australia are outside the scope of the CCA.

- if an agreement required participating employers to set the same wages and conditions, as well as the same rates of increase, this would preclude price competition over time that might arise were any given firm to offer smaller wage increases. The degree to which this could lessen price competition depends partly on the importance of wages and conditions as a source of costs and on the coverage of the agreement for businesses in the relevant market
- if an agreement limited the ability of employers to adopt innovative employment practices such as
 alternative forms of incentives and remuneration for workers, or changing the deployment of different
 groups of workers then the agreement may limit innovation and competition (to the detriment of
 consumers). Both workers and employers have incentives to create such agreements as the gains from
 reduced competition can be shared across shareholders, managers and incumbent workers.

An additional complication could arise **if employers were forced to join a multi-employer agreement**. If employees within an unwilling firm apply to the Fair Work Commission (FWC) for a variation to be added onto an existing multi-enterprise agreement, then in some limited circumstances, the firm may still be required by the FWC to join an existing enterprise agreement held by a competing firm(s).²⁰ This process could lessen competition if, for example, new entrants to a market were required to adopt wages and conditions that better suit larger incumbent firms.

Some businesses have already suggested that multi-enterprise agreements could help prevent other competitors from undercutting their prices, which they argue would keep out underqualified and unsafe workers (Marin-Guzman 2022). However, this presupposes that safety regulation (including occupational licensing) is deficient — any genuine safety issues would be better addressed within safety regulation.

The remedies for these risks rest with the FWC, and in particular, their interpretation of whether a given multi-enterprise bargaining arrangement meets legislated guidelines, and whether they are in the public interest. The question of public interest would be the main criterion on which decisions on competition would be made. Given the minimal guidance in the legislation on how competition should be weighed against other aspects of public interest, it is unclear how the FWC's approach to competition issues would differ from, say, the competition regulator, or to what extent FWC decisions (which would form the basis of case law) would be consistent with the intentions of the CCA.

²⁰ The FWC can only approve a variation to add an unwilling employer and their employees to an existing single-interest agreement or supported bargaining agreement if all the legislated conditions are met. When approving a variation to a multi-employer agreement to add an unwilling employer and their employees, the FWC must be satisfied that; it is in the public interest to add the employer, the employer is reasonably comparable to other employers on the existing agreement, the employer has 20 or more employees (excluding any irregular casual employees), the employer and their employees are not on a current enterprise agreement, the employer is not currently bargaining for a single-enterprise agreement in good faith, the employer has a history of bargaining effectively with their employees and the employees are not in the general building or construction industry.

Finding 3.2

Q

Multi-enterprise bargaining and competition

The recent liberalisation of multi-enterprise bargaining arrangements will have complex implications for competition to the extent that it involves agreements between competing businesses on a significant area of costs — wages and conditions. Some such arrangements could lessen competition or risk acts of collusion. The extent of these risks are lower where:

- · wages comprise a small proportion of business costs in a given industry
- · the firms involved collectively account for a small market share
- · the employees involved collectively account for a small share of the relevant (potential) workforce
- firms remain able to opt for single-enterprise bargaining, individual agreements or to use awards.

It is the responsibility of the Fair Work Commission to determine when multi-enterprise bargaining will be allowed. However, it is unclear how the Fair Work Commission will weigh competition concerns against other aspects of the public interest.

Regulating financial services

The degree of competition in the financial services sector has been the subject of reform since the deregulation of the sector was completed in the mid-1980s. In its 2018 inquiry into Competition in the Australian Financial System, the Commission concluded that while financial services are dominated by large players, changes to market structure were unnecessary (and unlikely) to improve competition. Rather, policy should focus on reforms that alter *incentives* of financial service providers, bolster consumer power, and improve governance (PC 2018, p. 4).

Consumer choice in general insurance

The complexity of financial products tends to confuse, rather than empower consumers, leading them to purchase too much or too little of a financial product. This weakens the extent to which consumer choice promotes competition because consumers find it difficult to understand and compare the many facets of financial products, limiting their capacity and ability to shop around. In the case of general insurance, market research (conducted in 2014) showed that:

- Consumers frequently had some awareness of price differences and the potential savings that they could gain but their awareness did not align with the full extent of differences in the market.
- In general, '... there was little to no understanding of why these price differences exist, how
 insurance is priced, and what influence various characteristics of the insured policyholder and
 the property have on the final premium.'
- Understanding policy details and level of coverage was a key issue, with few knowing how to separate and interpret the different 'fine prints' offered by each insurer. Most admitted they did not ever read the [product disclosure statement] and of those who did, none were able to understand it given the complexity in wording and length of the document. (Fels and Cousins 2019, p. 12)

Complexity is an impediment to effective user choice and presents inherent challenges in improving competition for services like general insurance. It also creates scope for marketing to masquerade as competition. For example, while the number of retail brands (and insurance products) has grown, there are relatively few insurers underwriting those products.

- The Commission noted that the four largest insurers underwrote 30 brands of insurance (PC 2018).
- The ACCC found that in northern regions of Australia, eight insurers sell the vast majority of home, contents and strata insurance via approximately 150 brands and intermediaries.

The proliferation of insurance products with only slight variations has become a burden for consumers (PC 2018, p. 13) and make comparisons much more difficult (ACCC 2020, p. 117). And while some degree of competition still exists between brands under the same insurer, it is limited, given the insurer has the incentive to maximise profits across the portfolio of brands that it underwrites. As such, this market structure creates the illusion of more competition.

A way to improve transparency, and hence competition, in insurance markets (with relatively little cost and minimal intervention) would be to inform consumers about when they are choosing from products offered by competing insurers and not just a diverse set of products from the same insurer. There could be value, in particular, in providing more information to consumers at the point of their decision-making — both in regard to which brands are underwritten by which insurers, and (for renewals) how their new premium compares with their previous one.

Competition in banking and home loans

While aspects of Australia's banking system remain highly concentrated, improvements in competition for some personal and business banking products have occurred in recent years, including via developments in new forms of finance. The ACCC observed that:

There are some signs of increasing competition in the banking sector, most notably in home loans and international money transfers (IMT). There has also been new entry by a range of neobanks and fintechs, who are playing an increasingly important role in the market, often with innovative technology and business models and a move to a more customer-centric platform-based models. We have also observed innovation in the provision of payments services, through new technologies and use of services such as the New Payments Platform. These innovations continue to enhance productivity of the financial services delivered to Australian consumers. (ACCC, sub. 72, pp. 9–10)

In some cases, regulation has yet to catch up with developments that reduce the benefits of competition for consumers. For example, incentive structures for brokers in the home loan market, which include trail commissions and 'clawback' of commissions, create conflicting incentives (PC 2018, pp. 324–331). Following a Royal Commission into Financial Sector Reform, a range of regulatory changes were implemented, including a best interest obligation for mortgage brokers. However, it remains to be seen whether this will be sufficient, given both trail commissions and clawback structures remain in place, following the abandonment of a slated ACCC review.

1.4 Competition, dynamism and the expansive footprint of government

In a number of industries, regulatory restrictions and other government interventions are themselves the cause for limited contestability or poor incentives for efficiency. In a number of parts of the economy, government interventions — either deliberately or inadvertently — have the effect of lessening exposure to risk, which in turn, can lower incentives for business dynamism and productivity growth, as well as for individual risk taking and entrepreneurship. Positioning these parts of the economy for future productivity growth might then require changes to the underlying incentives that businesses and individuals face to offset the lack of competitive market pressures that would otherwise have motivated service provision, for example, that is responsive to consumer demand, or innovation in processes that is responsive to a threat of market share loss.

Improving risk management and insurance

Though not recognised as such, Australia has a 'risk protection system', consisting of voluntary private insurance (including health insurance, life insurance and general insurance for property damage), mandatory contributory insurance schemes (such as workers compensation and compulsory third party insurance) and the publicly funded social safety net (unemployment benefits and pensions) and in-kind insurance (Medicare, public housing, NDIS and aged care).

There are also a range of regulatory safety nets - most notably Australia's industrial awards system.

All are characterised by significant government involvement, via the regulation of private insurance, the mandating and often public underwriting of universal contributory schemes, or the direct funding or delivery of government programs. These elements have developed by increment and without holistic design.

The scale of these broad forms would be substantial, considering that social insurance not only combines elements with an explicit risk-management focus like private insurance, but also those with a strong focus on redistribution like pensions and income support.

Risk protection has benefits: people value extra income more in bad times than in good. Nonetheless, this ad hoc 'system' of risk protection and insurance lacks coherence and arguably has become a potential barrier to innovation and productivity growth on a range of fronts:

- gaps in risk protection can **reduce risk appetite** (such as diminishing willingness to change career or start a business), which could reduce the dynamism of the economy
- the transfer system can create adverse work incentives, affecting labour supply
- regulatory restrictions on private insurance can prevent new approaches to prevention, and more
 efficient service design, thereby limiting innovation and more productive options
- publicly funded programs do not always embed strong disciplines around insurance principles like maximising long-term outcomes and cost containment.

Unlike the retirement savings system, which has a recognised architecture, the risk protection system in Australia is not well understood. Its complex inter-linkages have not been systematically examined.

Steady and evidence-based reform in this area could yield substantial long-term gains for innovation, productivity growth and better outcomes for individuals and firms.

The best approach is to address known problems and inefficiencies in the near term, combined with a broad ranging, generational review into Australia's social insurance system to achieve better coherence and test its robustness to new forms of risk affecting the modern economy.

Some of the issues that a review would assess, and on which near term reforms could start to make progress are: the impact on entrepreneurship; barriers to innovation; and poor incentives for mitigation.

The impact on individual entrepreneurship

Australia and New Zealand are outliers in following a 'social assistance' approach to income replacement in the event of job loss. This model involves access to uniform, means tested payments funded through general taxation. Most OECD countries operate contributory unemployment insurance schemes with eligibility and benefits influenced by prior income and individual contributions.

One consequence is that many households in Australia and New Zealand can face larger falls in short-term income in the event of job loss than is typical in other OECD economies.

There is no inherent superiority associated with the unemployment insurance arrangements prevalent in other developed economies. They can be costly and — because funded through contributions — involve an increased 'wedge' between the wages employers face and an employee's take-home pay. They are also, by design, less progressive (that is, redistributive) than the Australian and New Zealand models.

It is noteworthy, however, that during the COVID-19 pandemic, policy changes included a temporary increase in Jobseeker (the means tested income support payment) and giving households access to a portion of their accumulated superannuation balance. These features arguably mimic aspects of a contributory scheme, albeit after the economic shock occurred.

These developments add weight to the case for holistic review. An important question is the extent to which greater protection against income loss could better support workers affected by economic transition (e.g. through structural change) and reduce any undue risk aversion created by existing arrangements.

A review could also consider what options Australia has to improve short-term 'replacement rates' via mechanisms that go beyond self-insurance but stop short of radical change like a full-blown unemployment insurance scheme. Any of these possibilities have to be weighed up against the capacity for governments to flexibly fund public insurance through taxes and to spread these costs over generations through debt.

Existing life insurance through superannuation provides some income protection in the event of illness and injury. Other forms of idiosyncratic income loss (e.g. through loss of a job) are hard for private insurers to underwrite. But there may be some scope for incremental expansion of income protection where the pool is large (as with group insurance through superannuation) and 'moral hazard' and adverse selection issues can be contained. Greater use of income contingent loans — a well-established system for recovering up front education costs — could also be part of a broader suite of instruments to provide protection against loss of income with some element of risk pooling.

Of course, in the face of a large-scale shock, such as a pandemic or substantial economic downturn, the government will tend be the lowest cost insurer, with its ability to pool risk across the whole community and across time.

Barriers to innovation and new service models

Private insurers are heavily restricted in the services they can offer to members, which in turn limits potential innovation and more productive approaches.

Private health insurance is a heavily regulated product with a highly restricted domain (box 1.3). Hospital cover pays for aspects of private hospital episodes (accommodation, theatre fees and clinician gap payments), while ancillary cover can pay for out of hospital treatments that are not eligible for Medicare Benefit Schedule rebates.

The burden of disease has shifted towards noncommunicable disease and chronic physical and mental health conditions. Hence the health system as a whole is needing to put greater emphasis on the avoidance of hospital admissions through prevention and supported self-management. This includes, where possible, helping people to remain active in the community and workplaces.

In principle, private health insurers are well positioned to play an active role in facilitating innovative models of care to improve prevention and long-term outcomes. Two barriers stand in the way.

One is the risk equalisation arrangements that underpin community rating. As noted in *Shifting the Dial*, ex post risk equalisation can greatly diminish the dividend to insurers from preventing ill health among their membership, as a significant portion of the savings can be redistributed back to the overall equalisation pool. This has been noted in submissions to this inquiry.

The second is the restriction on out of hospital services. While insurers are permitted to fund services that are deemed a 'hospital substitute', submissions to this and past inquiries have consistently noted the challenges in ensuring the regulatory definitions of hospital substitute treatment keep pace with emerging trends — including the tendency for services once provided exclusively in hospitals to be delivered in a range of other settings. More generally, as one submission contended:

... funding services in a community setting rather than in a hospital will reduce the incentives to medicalise treatment. (Bupa, sub. 69, p. 8)

A broader regulatory remit, along with targeted reforms to risk equalisation, could open up new options for innovation. For example, in the Mental Health inquiry, the PC recommended that health insurers should have the discretion to fund out of hospital services that lower the likelihood of hospitalisation.

Options to reform risk equalisation can be targeted, as noted in *Shifting the Dial*, and need not amount to a move to ex ante equalisation (on the basis of objective attributes of a fund's membership). One modest reform would be the ability to exempt identified prevention programs and their impacts from the equalisation pool.

As the Commission found in its case study on innovation in care for chronic health conditions, one of the barriers to experimentation and new models of care is funding models for primary care that lock in fee for service reimbursement with a pre-determined service model (such as the one-on-one, real-time consultation). In principle, private health insurers could be well positioned to contribute to more innovative reimbursement models that pay on value rather than labour input.

There are also silos between health and life insurance. As with private health insurance, life insurers play a key, but restricted, role in Australia's health care system. Life insurers, via their income protection policies, have a strong incentive to maintain the health and wellbeing of their members, particularly with emphasis on facilitating a return to work.

Life insurers can provide rehabilitation focused on return to work, but cannot provide benefits that might otherwise be insured by a private health insurer (or that would be eligible for Medicare rebates).

It is an open question whether the silo between life insurance and private health insurance, created by regulation, stands in the way of more innovative and efficient options to improve outcomes at low cost. A key concern could be that private health insurance is a community rated product, whereas life insurance is either individually underwritten or community risk rated on the basis of the population served through group insurance via superannuation (which will tend to be younger on average than the private health insurance pool). But there may be scope for incremental expansion of both life and health products to fund evidence based preventative interventions.

Life insurers could have greater scope to fund (as distinct from promote) evidence-based early intervention and self-management options.

Mental illness is one area where the role of health and life insurance, as well as workers compensation, could be expanded and/or clarified. The rising salience of mental illness has challenged the traditional roles and definitions of aspects of our (public and private) social insurance arrangements. In particular, the cost of mental illness in workers compensation schemes has risen, just as the risk of physical injury at work has diminished over time.

Workers compensation schemes are no-fault (i.e. do not rely on establishing negligence on the part of employers) but generally require that injuries or illness occurred at or due to work. This can be complex in relation to mental illness, such that claims can be contested for lengthy periods. The PC's Mental Health inquiry recommended no-liability early intervention in respect of psychological services, even if a claim for income replacement was still pending.

There is an overlap with life insurance. Past submissions to the PC have noted that life insurance pays out benefits to members suffering mental illness and where the workplace has been a contributing factor, among others. It is not uncommon for claims to be pursued via workers compensation first and later with life insurers if unsuccessful.

Whether this division of labour is optimal, and sustainable, for both forms of insurance, is an open and important question. The funding mechanism can look similar — much life insurance funded via superannuation (ultimately from contributions) while workers compensation is funded through levies on firm payrolls. The important question is where risks are most efficiently borne and who can most effectively drive which preventative actions (life insurers with their members and/or work health and safety regulators with employers and workplaces).

Poor incentives for mitigation and early intervention

Aspects of the social insurance system take the form of government funded and delivered programs and services. As noted above, many have an explicit focus on redistribution, but many also reflect risk management motives.

Government programs do not always fully embed an insurance mindset — that is, a strong discipline on reducing long-term costs through targeted early intervention and better outcomes. The PC's work on Veterans' support indicated a system that was complex, unresponsive and too inflexible to achieve optimal long-term outcomes for clients. Similar characteristics were observed in disability services prior to the NDIS.

Australia and other jurisdictions have trialled a range of options to try and embed greater focus on long-term outcomes and costs, including New Zealand investment approach, social impact bonds in Australian states and actuarial assessments of long-term costs associated with cohorts of income support recipients. In areas like primary health care, as noted above, funding models are often a barrier to innovation, as they lock in a particular configuration of service delivery.

Not every government program is necessarily amenable to an insurance approach. But many are, given that risk protection is often the underlying rationale for government involvement. Targeted expansion of the use of an insurance approach could unlock substantial productivity gains in traditionally 'hard' areas of service delivery. This could be an important element of a far-reaching review of the overall social insurance system.

In general insurance, there have long been calls for greater investment in up front mitigation rather than disaster relief after the event.

In its 2015 report on Natural Disaster Funding and 2009 report on Government Drought Support, the PC recommended a shift of relative funding effort towards up front mitigation and resilience building. The Government's recently announced Disaster Ready Fund is a good example of this renewed emphasis on prevention.

Rigorous selection of projects and evaluation of the program could help identify where up front public funding can have the greatest impact in reducing the damage caused by natural disasters. It is possible that such approaches, including options co-funded with the general insurance industry, could help deal with other risks more efficiently.

A broad ranging review could bring into play insurance concepts that tend to be misunderstood or de-emphasised in many policy settings, like moral hazard, adverse selection, risk management and the respective roles of pooled and self-insurance options.

In the near term, some smaller steps could be taken to improve aspects of the system and unlock productivity gains.



Recommendation 3.1

A generational review and reform process for Australia's risk protection 'system'

Government could commence a broad review of Australia's risk protection and social insurance arrangements, focusing on:

- encouraging individual entrepreneurship
- · removing barriers to innovative service models by insurers
- fostering efficient mitigation and early intervention.

In the near term, incremental gains could be made by progressing:

- · abolition of stamp duty on insurance premiums
- · continued incremental expansion of the range of out of hospital services that private insurers can fund
- targeted exemptions from risk equalisation for innovative, evidence-based preventative initiatives by health insurers
- greater flexibility for life insurers to fund (on a discretionary basis) some approved health-like services, particularly in areas like mental health
- increased sharing of government held or funded data, particularly data collected through health providers (recommendation 4.4)
- continued exploration of the 'insurance approach' in government programs through measures such as payment by results, social impact bonds, actuarial evidence and innovation funds.

Box 1.3 – Regulatory arrangements in private health insurance

Private health insurance is subject to significant regulation and public subsidy. The extent of government involvement in the sector reflects the role that private health insurance plays alongside Medicare in the funding and provision of health services.

For private health insurers, prices and profitability are highly dependent on policy settings. Tax incentives influence consumers' choices to purchase health insurance, particularly at younger ages. Premium increases require ministerial approval. And premiums are subject to community rating, in contrast to other types of insurance that are 'risk rated' and influenced by personal circumstances, demographic factors, or past experiences.

While a competitive market exists in name Australia's unique regulatory framework means that some of the efficiency gains that might be expected in a competitive market are not realised in practice. BUPA

Box 1.3 – Regulatory arrangements in private health insurance

noted that despite the existence of a 'substantial number' of large funds in the Australian market, competition is 'stifled':

... by the legislative framework that requires a process of a single, annual premium increase for health funds approved by the Minister for Health. This limits flexibility in adjusting price throughout the year, both in response to consumer demand and competition. Furthermore, the single annual increase requires funds to hold additional capital to account for changes in market conditions that, in other sectors, would be addressed by adjusting price. This additional capital could otherwise flow through to consumers in the form of lower premiums. (BUPA, sub. 69, p. 13)

Moreover, the personal income tax incentives for private health insurance mean that overall, consumption of private health insurance is not linked to the quality of service provided by the industry collectively. Indeed, some consumers may hold onto private health insurance despite reductions in value-for-money or quality of service — effectively rewarding poor service — simply in order to retain the Lifetime Health Cover protections. While some suppliers may provide high quality services, the incentives to improve efficiency, which might otherwise exist in a more competitive market setting, are dampened.

Regression analysis covering the period 2010–2017 found a decline in technological change for several Australian insurers, resulting in declining productivity growth (Nguyen 2021). Nguyen also found that firms varied in terms of efficiency, with a U-shaped relationship with firm size.

In terms of outcomes for consumers, value for money has been questionable. The Grattan Institute noted that the ratio²¹ between claims and revenue tended to vary considerably between providers — as a benchmark, some ratios were similar to or below the minimum ratios legislated in the United States (Duckett and Moran 2021, p. 22).

While a decline in the demand for private health insurance would place more pressure on public finances, so too would many of the solutions suggested by industry, including increased targeted subsidies and tax exemptions (David 2019). Others have called for greater scope for insurers to provide discounts to customers, including to encourage good health choices (BUPA, sub. 69, p. 13), which would potentially test community rating principles. Other settings, such as the governance of prosthetics pricing, is outside the control of private health insurers themselves, but has significant bearing on their provision (Duckett and Moran 2021, p. 18).

Reducing location-related restrictions on competition

As noted above, the growing use of e-commerce and tele-services could significantly reduce geographic barriers to competition over time.²² However, location remains an important factor for businesses that rely on a physical presence: proximity between businesses and their consumers can influence market share, and barriers to viable locations can be a barrier to entry in a number of sectors. Most of these restrictions are contained in state/territory/local government planning, zoning and development assessment arrangements. In what appears to be a minority of industries, there are also industry-specific government regulations that restrict business location, and hence, competition.

²¹ This ratio averaged about 86% prior to COVID-19, rising in 2020 likely due to the effect of COVID-19.

²² ABS, Retail Trade, Australia.

Urban planning and competition

The availability of viable locations and sites for particular types of business activities can influence market entry in some sectors, with direct implications for business dynamism and competition at the local level.

Depending on the type of business, what is a viable site may entail consideration of the site size, accessibility, or proximity to other businesses, consumer populations, infrastructure or logistics networks. Scarcity of sites with particular characteristics is, to some extent, unavoidable in urban areas. In some cases, commercial constructs can also influence the availability of such sites — commercial leases have previously been shown to guard against the introduction of new competitors.²³

More broadly, planning and zoning regulations at the state and territory level have proven to be a significant lever for facilitating (or restricting) market entry. Such regulations usually exist to deliver agreed social outcomes — such as public health and safety, or environmental amenity — but are often very prescriptive rather than outcome oriented in their specification or implementation and thereby may unduly restrict the setup of particular types of business. This can impede new entrants, or limit scope for existing businesses to experiment with different service offerings. For instance, opening a supermarket in a vacant warehouse in a 'B6 Enterprise Corridor' in Sydney would involve a planning proposal to allow an additional type of use for that zone, typically adding 12–18 months to the process (PCNSW 2020, p. 240).

Broader structural trends in some product and service markets — the rapid growth in online retail and the increased feasibility of more people working from their homes, for example — highlight the need for some flexibility in Australia's planning and zoning systems. In many areas, these trends are contributing to the increasing need for delivery and warehousing in urban areas (given growth in both e-commerce and urban density), and a shift away from manufacturing and other industrial occupations, and towards knowledge-based occupations in urban centres.

The competition for viable sites is likely to affect competition in some burgeoning secondary markets, particularly in urban areas. For instance, the transition to low emissions vehicles has already seen significant private investment into electric vehicle charging stations — the need for stations at various locations will depend on factors including uptake, charging times, and proprietary technologies. Indeed, as multiple vehicle technologies enter the market (potentially including battery-swapping and hydrogen charging) the ability to establish convenient refuelling networks will have significant implications for competition in the vehicle market. (Climate change transitions are discussed more fully in volume 6).

Reforming planning and zoning

While some progress has been made to improve planning and zoning across all jurisdictions, further improvements should be prioritised.

Reforms to planning and zoning laws in Victoria in 2013 and 2018 are a useful example, in that there are relatively few commercial and industrial zones; the zones are standardised and have a broad range of allowable uses; and many commercial uses are as-of-right. The reforms were largely found to reduce set-up costs and increase the availability of suitable sites for particular businesses (such as small-scale supermarkets and large format retailers) improving competition (PC 2020d). Broadly these experiences support the idea that business zones should be as broad as possible (as noted by Harper et al. (2015) and the Commission (2021b)).

²³ Across 2009 and 2010, the ACCC reached agreements with all major supermarket chains operating in Australia that they would not enter into any new leasing agreements that include restrictive provisions, nor would they enforce any restrictive provisions in current leases beyond five years after the commencement of trading. Signatories included Coles Group Limited, Woolworths Limited, ALDI Foods Pty Ltd, Franklins Pty Ltd, SPAR Australia Limited, Australian United Retailers Limited, and Metcash Limited. Where planning regimes are more agnostic to uses, and zoning is broader, this also avoids the need for rezoning processes. Current rezoning processes often involve consideration of the effects on incumbent businesses, including from increased competition. To this end, Harper (2015, p. 45) recommended that planning decisions should not be adversely influenced by the potential for competition between individual businesses, nor by the impact on the viability of existing businesses; and that restrictions should not apply to the number of a particular type of retail store in a local area, nor the proximity of particular types of retail stores to each other. Similarly, the NSW Productivity Commission (2020) noted that there is a strong case to consolidate a number of business and industrial zone categories²⁴ into a single zone that allows 'a mix of business, light industrial, creative industrial, and retail activities' (p. 241).

The Commission (2021b) has previously suggested improvements could be made by pursuing administrative efficiency, including by aligning plans at different levels of government; and addressing simpler applications outside of the assessment process. Key reform areas relevant to competition include:

- Move to fewer zones with broadly-stated allowable and as-of-right uses. A small number
 of commercial and industrial zones (2–3 respectively) with a wide range of allowable uses —
 provide flexibility, certainty, and competition, and limit the need for significant spot rezonings.
 Prohibited uses are kept to a minimum and most uses are as-of-right.
- Standardise permissible land uses within zone types. Zone definitions are as common and as consistent as possible across the state, and usually embedded in state government instruments, to provide clarity and certainty as to allowable land uses.
- Create defined and efficient processes for rezoning applications. To the extent that rezoning or planning scheme amendments are required to progress a development proposal, states ensure there is a clear process for applicants to pursue, with expected timeframes, criteria and appeal rights.

These reforms should be considered in the context of the overarching objective of balancing commercial, industrial and residential uses of urban land. The Commission's (2022e) recent inquiry report on *The National Housing and Homelessness Agreement* considered how planning and zoning regulations restricted the supply of residential land and the implications for the supply of housing. Some empirical research suggests that zoning restrictions add significantly to the cost of both apartments and free-standing homes in Sydney (Kendall and Tulip 2018; Jenner and Tulip 2020), although it is difficult to accurately estimate these effects in part because regulations change over time and vary in terms of how binding they are on planning activity(Phibbs and Gurran 2021). On balance of the evidence, the Commission has noted that restrictive planning and zoning regulations can pose significant and unnecessary costs, and recommended revising planning and zoning to achieve greater density (box 1.4).

Further liberalisation of residential planning controls, including greater allowance for mixed land use, stands to support productivity growth through several channels, including an increase in dwelling services for each unit of scarce urban land, an increase in agglomeration benefits, and a reduction in transport times between households and businesses. It may also better position Australia's housing market to respond to increases in demand associated with Australian population growth, which stands to be an important channel for productivity growth over the years ahead (chapter 1 of volume 7). This will likely include ensuring a diversity of housing stock, which could further support potential changes in the composition of Australia's migration program over time, and support increased geographical mobility of labour more generally.

²⁴ B5 (Business Development), B6 (Enterprise Corridor), B7 (Business Park) and IN1 (General Industrial).

Box 1.4 – Planning and zoning in the National Housing and Homelessness Agreement

The Commission's (2022e) recent inquiry report on The National Housing and Homelessness Agreement found that:

There is no one-size-fits-all solution to achieving greater density, because the restrictions that constrain supply will be different in each jurisdiction. Any changes to zoning regulation should balance the benefits of additional supply against costs to the environment, amenity and liveability of cities. The changes should also be supported by existing or proposed infrastructure, public transport, community facilities and access to jobs. But a good starting point to encouraging greater density in residential zones would be to:

- · review zoning rules that allow only single detached houses
- allow more dense development 'as of right' along key transport corridors, with height limits set up front
- · relax regulations limiting the use of secondary dwellings
- relax minimum carpark requirements for developments where there is good access to public transport
- relax minimum floor sizes. (Finding 13.2, p. 514)

The report recommended that:

States, with their local governments, and Territories should revise their planning regulations to promote greater density to meet demand for well-located housing in established suburbs and locations with good access to jobs, services and transport.

States, Territories and local governments should also revise planning regulations to facilitate greater housing diversity, including low-cost or innovative housing types. (Recommendation 13.2, p. 514)

Recommendation 3.2

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More flexible and streamlined planning and zoning

State and Territory Governments should revise their planning regulations to ensure residential, commercial and industrial zoning is not unduly restrictive. This should include:

- · implementing standardised business, and industrial zones across local government areas
- aggregating existing business and industrial zones to reduce the number of zones where possible and to broaden the range of permissible activities
- ensuring that urban planning decision-making processes consider the introduction of competition to incumbent businesses as a positive outcome.

Industry-specific restrictions on location

There are relatively few instances where governments actively restrict the location of businesses in a particular industry. Typically where this occurs, it is to minimise adverse social outcomes expected to be associated with a particular activity, given vulnerable populations or environmental assets to be protected. In

the case of gaming machines, for example, some states (such as Victoria) cap the number of machines in their state or in regions within the state, in order to limit gambling opportunities in vulnerable communities (Victorian Government nd).

The location restrictions that governments apply to retail pharmacy, however, stand in stark contrast to this. Rather than restricting an activity that could be expected to have an adverse social or environmental outcome, the Government restricts the location of a business that contributes to community health and wellbeing, and thereby limits the scope for getting improved outcomes for consumers.

Retail pharmacy is subject to a specific set of regulations regarding market concentration. At the Commonwealth level, the Pharmacy Location Rules regulate where retail pharmacies can operate, ostensibly to 'ensure a well distributed geographical spread of pharmacies across Australia'. At the state and territory level, the ownership of pharmacies is regulated — in most jurisdictions, regulation stipulates that only a registered pharmacist (or a family member) can own a community pharmacy, and restrictions apply to the ownership of multiple pharmacies that are located near each other. Such rules have not been unique to Australia, although several countries such as the United Kingdom and United States now allow pharmacies to be co-located with supermarkets.

Both sets of regulations dampen competition in retail pharmacy and the costs are borne by consumers (AMA 2021; King, Watson and Scott 2017; PC 2015). As noted by the Review of Pharmacy Remuneration and Regulation:

The Pharmacy Location Rules have not established robust competition between independent pharmacies in some locations. Rather, in some locations, either individual pharmacists or small groups of pharmacists have been able to monopolise some or all pharmacies. This is inconsistent with the objective of Australia's competition laws. (p. 19)

At the same time, parts of the regulatory framework are often ineffective in delivering other intended benefits.

- Setting a minimum distance between pharmacies does not supports community access to pharmacies (including in rural and remote communities); and consumer safety would be better protected by regulating conduct, rather than ownership (PC 2015, pp. 53–54).
- The rules may not have effectively safeguarded community ownership as intended. While almost all
 pharmacies are owned by pharmacists²⁵, major pharmacy operators have 'effective franchise agreements
 with differing levels of control over the franchisee'²⁶. And in 2018, the four major operators were estimated
 to have 73% of market share (KordaMentha Restructuring 2018, p. 8). This level of concentration does not
 appear to be harmful to consumers rather, it exemplifies that ownership restrictions contribute little
 benefit if any. Indeed, to the extent that such laws restrict the number of pharmacies, they are more likely
 to lessen competition.
- While the regulations attempt to improve accessibility, there are fewer pharmacies per head of population. When the location and ownership rules were introduced, the population-to-pharmacy ratio was 3000 people per pharmacy — this increased to an estimated 4365 in 2014 and 4426 in 2022 (Chemist Warehouse 2016).

Current regulations that have the stated aim of reducing market concentration are likely to instead reduce competition and establish local monopolies, with little countervailing benefit. These impediments to competition are purely due to the regulatory framework and should be changed by governments immediately.

²⁵ All pharmacies are owned by pharmacists with the exception of a small number owned by friendly societies under grandfathering of previous legislation (Sub. no. 112, Pharmacy Guild of Australia, p. 2).

²⁶ KordaMentha Restructuring (2018, p. 8).

There are broader questions about the role of pharmacists alongside other health professionals, and whether reform is warranted regarding scope of practice (discussed in volume 7).



Recommendation 3.3

Improve competitive pressures in highly regulated sectors

The Australian Government should remove impediments to competitive pressures in sectors where it has a substantial regulatory footprint. In the first instance, this could include:

- as part of a broad review of Australia's risk protection and social insurance arrangements (recommendation 3.1) assessing regulatory arrangements in private health insurance and their implications for competition, health outcomes and productivity
- · removing anti-competitive regulations on the ownership and location of pharmacies.

Other sectors where the Government has a large regulatory footprint should similarly and subsequently be examined to remove any impediments to competitive pressures that are not supporting a broader social or environmental policy objective.

Improving outcomes in publicly-funded and provided services

Governments can play a central role in promoting quality, accessibility, and efficiency in the delivery of non-market services. They have an ongoing role in making sure services work together towards the intended objectives, particularly for consumers of the services. The Commission has previously commented on governance arrangements and service delivery in a range of publicly funded services.

- The potential to promote efficiency in health services is discussed in full in the Commission's (2021a) information paper *Implementing Innovation Across the Health System*.
- The Commission has previously identified that the social housing system in particular is an area requiring reform. A suite of policy recommendations were made in the Commission's Housing and Homelessness Agreement Review (PC 2022e).

Competitive markets in human services

Competition and contestability in markets are a means to an end — improving the effectiveness of service provision for consumers. In the past decade, some competition and user choice have been introduced to improve delivery of publicly-funded human services, with many now delivered by a mix of public, private and non-profit service providers. While competitive pressures in markets can help to improve the efficiency with which services are delivered, they have their limits in achieving social welfare outcomes, particularly in regions with a sparse population and few services available over which consumers can exercise choice. As noted previously by the Commission:

... greater informed user choice, competition or contestability will not always be beneficial, and not all areas of human services are amenable to these mechanisms. The costs and benefits of a reform option depend on the characteristics of the people accessing the service, the characteristics of the service itself and the market conditions where service providers and users interact. (PC 2017b, p. 64)

To the extent that competitive pressures do not create the incentives needed to improve quality and efficiency in the delivery of a particular human service, there is a clear role for governments to use policy and

regulatory frameworks to achieve social and efficiency objectives. To this end, there are a number of potential areas of productivity-enhancing reform in human services.

First, reforms to policy and regulation can aim to improve incentives for service providers.

- Consumer protections often focus on input regulation, dulling service provider scope to alter inputs in order to improve either efficiency or quality of service deliver. While licensing and registration are often indispensable in human services (in particular, with regard to criminal histories and working with vulnerable people), complementary measures that focus on outputs are often underutilised (discussed in volume 7).
- One of the key productivity benefits of competitive markets is that they can provide incentives for businesses to innovate and adopt best practice. In the absence of such incentives, the frameworks through which services are funded and regulated can be used by governments to encourage innovation. A number of potential improvements to the delivery of health and human services are discussed in volume 5.

Second, there is scope to remove complexities between different schemes and programs across human services to more readily enable providers to offer their services in multiple markets. For instance, allied health providers operating under different federal government schemes face duplication in compliance burdens by having to register with each scheme. Providers are also paid different amounts for similar services under the different schemes. There is likely scope for a more coordinated approach to administration and pricing.

Third, there may be a number of practical ways to facilitate more user choice. With regard to aged care, Yong et al. (2020) argue that private sector involvement alone may not improve outcomes in practice, as:

... even with perfect information on prices and quality, consumer choice is often restricted to local areas since most consumers only search for aged care services around where they live. Competition in aged care is localised, meaning that providers enjoy substantial market power if there are few competitors in the local market. (p. 3)

In some cases, digital platforms can give consumers more choice in some aspects of service delivery, for example where they facilitate a more user-centric model of service delivery. However, the presence of digital platforms alone is unlikely to substantially increase the number of available workers in a local area.

Fourth, a key barrier to competition in some areas of human services is labour supply. The lack of suitably qualified workers is a barrier to competition and quality of service in the care sector, particularly in less populated locations. Labour supply in care occupations is influenced by both wage and non-wage factors. A number of policy levers could be used to address labour shortages, and thereby, competition in the care sector.

Pay and conditions are likely to be influential in attracting and retaining workers in human services.²⁷ The certainty and timing of payment may also be important, given that individual care providers can reportedly face delays in receiving their payments, even where the services are fully funded.²⁸

²⁷ In aged care, for example, the Royal Commission into Aged Care Quality recommended increases in award wages and other remuneration, and in 2022, the Fair Work Commission determined a 15% increase to wages in those awards.
²⁸ The Payment Times Reporting Scheme requires large businesses and large government enterprises to report their small business payment terms and times (Treasury nd). Delays can occur in providing payments to service users, who then have the autonomy to arrange payments to providers, as per the user-centric model. This can occur for several reasons, including where clients have exceeded their allocated funds, or due to timesheet processing. There are potentially a number of different ways to improve the timeliness of payment without removing user autonomy — for instance, payments could be subject to a bulk-billing function similar to Medicare. Delays in government-provision of payments could be subject to transparency mechanisms, as is the case with government enterprise payments to small business.

- Governments are responsible for ensuring adequate funding of human services. To the extent that
 services are funded from an efficient tax base, this will reduce the marginal excess burden associated with
 service provision, hence making funding levels more sustainable.
- To some extent, the supply of labour will continue to depend on migration policy settings (discussed in volume 7).

The Commission recently concluded that platforms in aged care can play an important role in filling the work needs of the sector, in part because some workers prefer the flexibility associated with platform work, while users often benefit from greater choice of in-home care (PC 2022c). In order to derive ongoing benefits from platform work in human services delivery, governments will need to ensure that platform work is appropriately regulated (discussed further in volume 7).

Competition with government business enterprises

Governments can contribute directly to more competitive and dynamic markets by ensuring that their own government business enterprises (GBEs) do not enjoy competitive advantages by virtue of public ownership that effectively stymies the activities of private sector competitors. The regulation of competitive neutrality plays a significant role in a relatively narrow set of industries (where GBEs face competition or the prospect of competition). Despite this, competitive neutrality has potentially material implications for productivity.

First, GBEs tend to operate in industries that were historically networks with natural monopoly characteristics, but were increasingly open to competition (often as technology progressed and the economy grew in sophistication). This includes NBN Co, Australia Post, Moorebank and some urban passenger transport (states and territories). These industries provide infrastructure or inputs relatively broadly across the economy.

Second, competitive neutrality deals with aspects of competition that make a material difference, particularly given the size of the GBEs and their competitors. Issues of debt neutrality in particular (where GBEs have access to finance on favourable terms) can amount to material advantages. This not only has implications for competition in those industries, but as is the case with other forms of industry assistance, it would have distortionary effects on investment generally.

In its recent investigation of a complaint against NBN Co, the Australian Government Competitive Neutrality Complaints Office (AGCNCO) made recommendations relevant to competitive neutrality in the broad, including that Treasury develop guidance material on:

- · how to calculate the cost savings associated with an implied guarantee of lease agreements
- how to calculate the difference between the actual and benchmark cost of debt where no direct
 market data are available
- how to avoid excessive compliance and administrative costs in setting and collecting debt neutrality adjustment payments for line-of-credit type debt
- how to calculate the cost savings associated with unpriced loan extensions and the premature payout of fixed-term loans
- how businesses should select a value for the 10-year bond rate under the risk broad-banding approach for setting a benchmark commercial rate of return on assets, as specified in the Australian Government Competitive Neutrality Guidelines for Managers
- the appropriate risk premium level to assign to a low-, medium- or high-risk assessment under that broad-banding approach. (PC 2022a, p. 20)

A broader question for Australian governments is whether the regulation of Competitive Neutrality is still fit for purpose. Typically, competitive neutrality is not enforceable in a court of law — recommendations are

provided to ministers and treated as a matter of public policy. Such recommendations are routinely ignored at the state and commonwealth level.

The Harper review recommended a review of competitive neutrality. One such review was initiated at the Commonwealth level in 2017, but was not completed. Similar reviews were initiated and abandoned in some states. Only New South Wales is continuing to undertake its review of NSW competitive neutrality regulations (undertaken by IPART).



Finding 3.3

Increasing government involvement in some sectors can have implications for competition

Governments can play a central role in promoting quality, accessibility, and efficiency in the delivery of non-market services, particularly where they are able to:

- improve incentives for service providers, while removing complexities between different schemes and programs across human services to more readily enable providers to offer their services in multiple markets
- avoid locking in traditional provision models that inhibit innovative options, particularly in areas where markets are thin or labour is hard to attract
- be vigilant about the unintended consequences for competition in markets where government business enterprises operate.

2. A better environment for productive investment

Key points

- Efficient investment and productivity go hand in hand. High multi-factor productivity growth can stimulate investment. Ideas and innovation are often embedded in new capital.
 - Low investment can be a symptom, as much as it is a cause, of low productivity growth.
- Australia's business investment as a share of GDP has declined relative to its long-run average in Australia, as it has across a number of advanced economies. This likely reflects both structural and cyclical factors.
 - Overall business investment levels do not appear to have been particularly responsive to declining costs of capital. It is unclear whether the apparent rise in risk premia during a period of unconventional monetary policy will be sustained as risk free rates normalise.
- Policy should not attempt to promote investment for its own sake. Nor should it try to 'reverse' long-term structural shifts, such as the growth of the services economy.
 - Specific tax incentives aimed at bringing forward investment are unlikely to boost long term productivity growth. The effects of taxation on the incentive to invest are better dealt with via structural tax reform rather than one-off measures.
- When the economy is close to full employment, there is not a strong policy case for governments to increase public investments as a macro-economic response to fill a perceived gap left by low private investment. This might work as a counter-cyclical measure in times of low aggregate demand, but the same logic does not apply on the supply side, especially in a full employment economy.
 - Governments can nonetheless play an important role in the efficient provision of public infrastructure, and minimising the distortionary effects of policy and regulatory interventions.
 - Public projects should always be rigorously assessed for social benefits, especially when the opportunity costs for scarce labour and other resources are at a premium. Commonwealth and State Governments could review the appropriate application of discount rates in project assessment and cost benefit analysis.
 - More accurate pricing (e.g. of transport infrastructure) can facilitate more efficient investment and in some cases reduce the need for costly new projects.

Policy should mainly focus on removing barriers to private investment.

· Complex planning regimes and major project assessments can be improved.

2.1 The investment challenge

Investment is a bet on an uncertain future. It involves an up-front cost in anticipation of a possible stream of future revenues or benefits. In the real (non-financial) economy, investment almost always involves some form of change — a new production process, a new business, a new product. As a result, investment and productivity growth tend to go hand in hand. Both usually involve a degree of disruption.

Investment decisions depend on the ability of an investor (entrepreneur) to perceive an opportunity, have the appetite to take the associated risk and the access to the necessary resources and finance to implement the change.

Conventional economic theory implies that investment *causes* productivity, through a higher capital to labour ratio (i.e. capital deepening), which tends to mean more output per hour worked (i.e. labour productivity). This is partly true — as noted elsewhere in this report, new technology can replace tasks, improve processes and thereby augment human labour. But in many ways, investment is a *symptom* of productivity growth as much as it is a *cause*. When new (productivity-enhancing) ideas are being generated and adopted; where risk appetite is strong and regulatory uncertainty minimised, investment will tend to occur.

Non-mining business investment in Australia has generally trended lower as a percentage of GDP over recent decades (figure 2.1). Similar patterns have been observed across a number of other advanced economies (Debelle 2017; Hambur and Jenner 2019; Minifie 2017), suggesting that structural factors may be playing a role. Post-global financial crisis, lower than average capacity utilisation rates in key Australian sectors may have also made a contribution. While business investment intentions for 2022-23 have started to increase in levels terms (figure 2.2), following a notable increase in capacity utilisation rates during COVID-19, additional factors may have contributed to subdued investment growth over recent years and a reversal may necessitate changes in a number of policy areas.

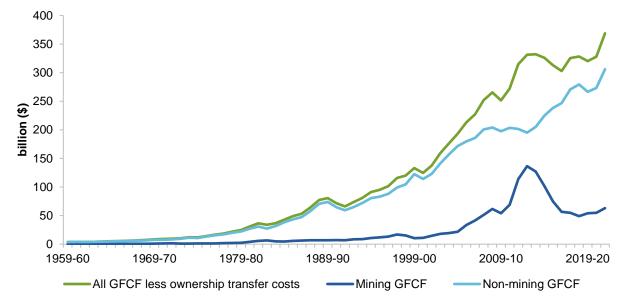
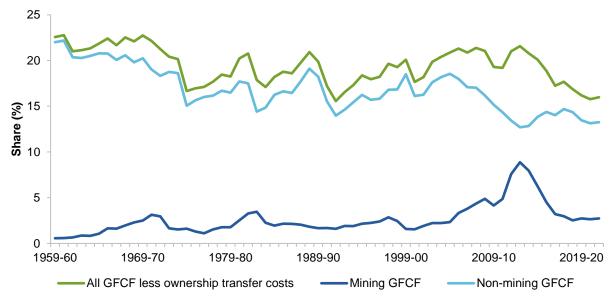


Figure 2.1 – Non-mining investment has stagnated

a. Private capital formation, 1959-60 to 2021-22, current prices

b. Private capital formation as share of GDP, 1959-60 to 2021-22



Source: ABS (Australian System of National Accounts, 2021-22 financial year, Cat. no. 5204.0, tables 1 and 52).

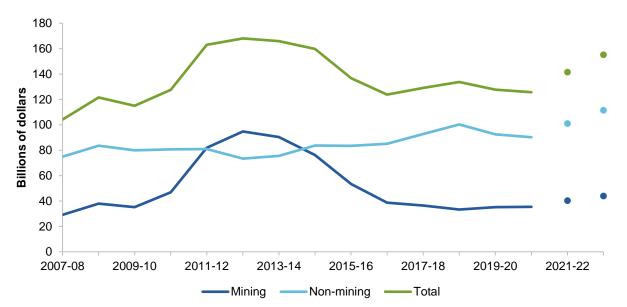


Figure 2.2 – Businesses expect to increase investment in the next two years

Capital expenditure intentions^a

a. Forecasts are firms' expected capital expenditure; adjusted for past average differences between expected and realised spending.

Source: Productivity Commission estimates based on ABS (*Private New Capital Expenditure and Expected Expenditure, Australia,* March 2022, Cat. no. 5625.0).

What explains subdued investment growth?

Two aspects of aggregate investment are useful to keep in mind in unpacking the likely causes of the decline: first, as noted above, aggregate investment is made up of individual investment decisions made within the relevant business environment; second, aggregate investment reflects the composition of the economy, and the heterogenous experiences of different sectors.

Investment decision-making

Businesses make investment decisions based on expected net returns in the context of uncertainty. These expectations are a function of the business's own capabilities as well as a range of external factors — the policy and regulatory environment, the prevailing and expected future economic climate, current and forecast levels of demand, borrowing costs — viewed through a lens of risk and uncertainty. Some international evidence suggests that the global decline in investment is related to slower economic growth (Gutiérrez and Philippon 2016). However, for non-mining investment in Australia, the RBA recently found that:

... [investment] spending ... has been even weaker than predicted by our standard aggregate model. Similarly, we have examined firm-level data and found that corporate investment has been consistently weaker than would be predicted based on past relationships with Tobin's Q (a forward-looking measure of investment opportunities). (Debelle 2017, p. 6)

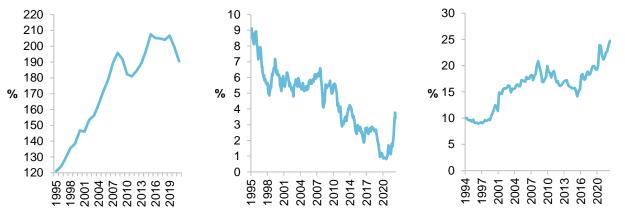
While financing constraints have been found to play a role in explaining weak investment outcomes internationally, Australian business data suggests that the cost and availability of finance is generally not weighing on investment in Australia (Debelle 2017, pp. 9–10). Aside from recent increases, nominal borrowing costs have been at relatively low levels for the past decade (figure 2.3, panel b).

At the same time, profitability rates have been relatively stable (figure 2.3, panel c), which intuitively, would contribute positively to investment growth. Generally speaking, declining borrowing costs should stimulate investment growth, bringing down private returns to capital. But instead, the evidence points to a growing wedge between risk free rates and the private return to capital. This might suggest alternative influences on business decision making.



a. Australian private debt to GDP b. Australian 10-year bond yield

c. Australian company gross operating profits as percentage of GDP



Source: OECD (OECD.stat, Financial indicators – stocks: Private sector debt, 1995 to 2021); RBA (Capital Market Yields – Government Bonds – Monthly, July 2022, July 1995 to July 2022); ABS (Business Indicators, Australia, June 2022, Cat. no. 5676.0).

A range of factors are relevant to individual investment decisions, including the opportunity cost of capital, perceptions of risk, and the degree of market power enjoyed by firms.

The market risk premium (the additional return investors require to be compensated for taking on risk) has increased in Australia, particularly since the global financial crisis (figure 2.4).²⁹ While higher risk premiums are likely to have contributed to subdued investment growth, it is unclear to what extent they reflect perceptions that risks in general have increased (i.e. a greater likelihood of negative events, or that their cost has increased), or changing attitudes to risk (i.e. increased risk aversion) or simply increased responses to a risky environment. The market risk premium is likely to rise when various financial events alter firm perceptions of risk and the likelihood of an adverse outcome.

Economic shocks and events are also likely to influence investment decisions in other ways. The opportunity cost of capital is likely to have changed during the mining boom (from about 2010 to 2012), skewing investment at the time towards the mining sector. Finally, market power enjoyed by firms may increase the rate of return achieved on those investments, relative to what might otherwise be the case.

²⁹ An estimation of the relative contribution of each of these factors to the wedge between the private return on capital and risk-free rates can be obtained by adjusting the standard riskless user cost of capital to reflect changes in market power and changes in risk. The Commission is undertaking separate research analysing risk in business decision making, with publication forthcoming.

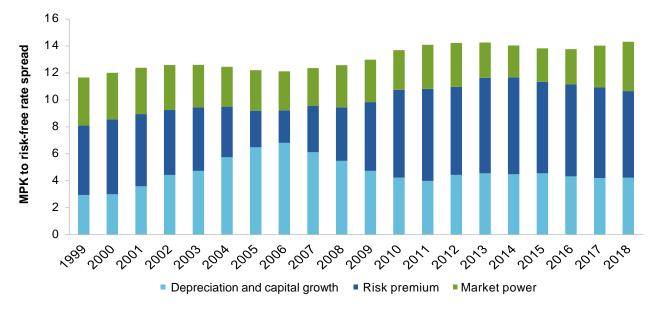


Figure 2.4 – Components of investment to risk-free rate spread

Five year moving average

Source: Productivity Commission estimates.

It is difficult to establish empirically whether risk aversion itself has risen in Australia over the past decade. Qualitative evidence suggests that businesses have tended to require expected returns on capital to exceed the cost of capital by a high margin (i.e. high 'hurdle rates') (Lane and Rosewall 2015). Australian survey evidence suggests that hurdle rates have remained broadly constant even while borrowing costs have fallen over the past decade (Edwards and Lane 2021). Consistent with these observations, data from Australian-listed companies show that the aggregate return on invested capital (ROIC) has been 'high and relatively constant over the past 20 years, notwithstanding a large decline in 2020' (p. 14). To the extent that hurdle rates remain broadly unchanged while borrowing costs fall, business investment will be lower than what we would otherwise expect, weighing on productivity growth over time.

It may be premature to conclude that business risk appetite in Australia has fallen (leading to higher risk premia in investment decisions).

There is some evidence that historically, the risk premium and the risk-free rate have tended to move in opposite directions, leaving the overall hurdle rate quite stable over time. Jordà et al. noted:

Curiously, the bursts of the risk premium in the wartime and interwar years were mostly a phenomenon of collapsing safe rates rather than dramatic spikes in risky rates. In fact, the risky rate has often been smoother and more stable than safe rates, averaging about 6%–8% across all eras. Recently, with safe rates low and falling, the risk premium has widened due to a parallel but smaller decline in risky rates. But these shifts keep the two rates of return close to their normal historical range. Whether due to shifts in risk aversion or other phenomena, the fact that safe rates seem to absorb almost all of these adjustments seems like a puzzle in need of further exploration and explanation. (Jordà et al. 2017, p. 5)

Risk-free rates fell, and risk premia appear to have risen, in the decade following the global financial crisis – a period of highly expansionary monetary policy. It will be important to observe the movement in hurdle rates as monetary policy and risk-free rates normalise. At that point, we will be better able to judge whether business risk appetite has fundamentally shifted over the past two decades or so.

Structural changes are having a limited effect

Aggregate measures of investment can mask the heterogeneity of experiences across the economy. For instance, technological progress has given rise to new opportunities for investment, and this has occurred unevenly across sectors.

Long-term structural changes in the economy are likely to have had an enduring effect on the nature and level of investment. In particular, the shift towards a services-driven economy may mean that a lower rate of investment in physical capital may be necessary, while investment in intangibles (such as trademarks, software and managerial capacity) are likely to play a stronger role (PC 2020b, pp. 10–11). Minifie (2017) pointed to a group of service industries that were 'less than half as capital intense as the average non-mining market sector', noting that they had comprised half of market sector output in the early 1990s, growing to almost two-thirds in 2017.

Other evidence suggests structural change has only had a limited effect on investment levels since the GFC. Hambur and Jenner (2019) use Australian firm-level tax data³⁰ to demonstrate that compositional change in the economy explains only a 'very small share' of the decline in post-GFC investment. They found that investment declined for firms regardless of industry, age, or cohort. Moreover, the overall investment intensity rate (the change in capital stock relative to output) declined by about 5% in the past decade, in part due to a lack of productivity growth and lower depreciation rates.

Private capital expenditure has varied across industries over time (figure 2.5). Investment in manufacturing reduced significantly as a proportion of capital investment — largely coinciding with reductions in government assistance to the sector, general reduction in manufacturing output, and a broader structural shift towards resources. The composition of Australia's services sector will have a bearing on the rate of capital investment required to deliver productivity improvements.

Investment levels are, not surprisingly, also related to firm size. The decisions of a relatively few larger firms have often driven trends in observed aggregate investment. The RBA found that small and medium enterprises (SMEs) comprised over 99% of non-mining firms, but accounted for only about 60% of non-mining investment (Dynan 2021, p. 3). Firms with output between \$50 million and \$5 billion represented just 0.3% of all firms, but were responsible for one-third of all investment. The largest 30 firms accounted for almost 10% of investment.

Access to credit for investment can be more complicated for SMEs. While new sources of finance have become increasingly important for SMEs (PC 2021e),³¹ the availability of credit for SMEs more broadly and its uptake will be influenced by further development of the non-bank lending sector, as well as greater awareness among SMEs of new financing options (pp. 41–46). Reforms to the bank capital framework came into effect from January 2023 may also make SME lending more attractive to banks at the margin (Bank and Lewis 2021, p. 45).

³⁰ Using the Business Longitudinal Analysis Data Environment (BLADE) dataset.

³¹ Based on data from September 2021, the Commission found the main remaining gap was in the market for unsecured finance between \$250 000 and \$5 million (p. 39).

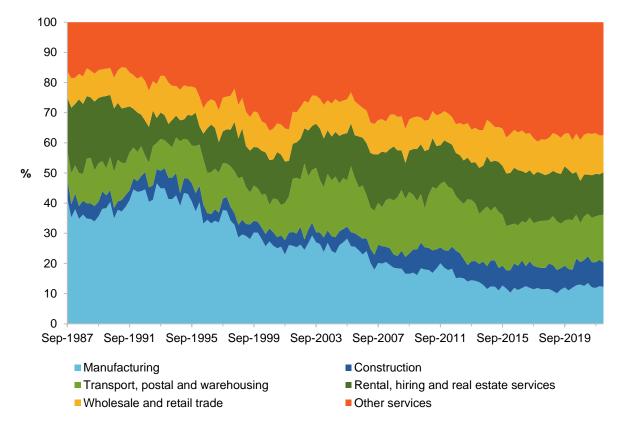


Figure 2.5 – Private capital expenditure has varied by sector

Quarterly private capital expenditure by industry, share of total

Source: ABS (Private New Capital Expenditure and Expected Expenditure, Australia, March 2022, Cat. no. 5625.0, table 7).

Emerging trends that will influence investment

The evidence suggests that a number of factors have an influence on investment decisions, and it is difficult to pinpoint which factors have most shaped investment trends in Australia and internationally. It is also clear that many drivers of investment are subject to change. Policymakers will need to consider how emerging trends (as well as uncertainty) could affect the investment landscape in the medium term.

Trends in global foreign investment

While foreign direct investment (FDI) makes up a relatively small proportion of total investment in Australia, it plays an important role given Australia's position as a net importer of debt-based financing and a net exporter of equity-based financing. FDI plays a larger role in some industries than others — the value of FDI applications in the past 5 years has favoured services, commercial real estate, and heavy industry (PC 2022f). It is also associated with innovation at the firm level (Majeed and Breunig 2021).

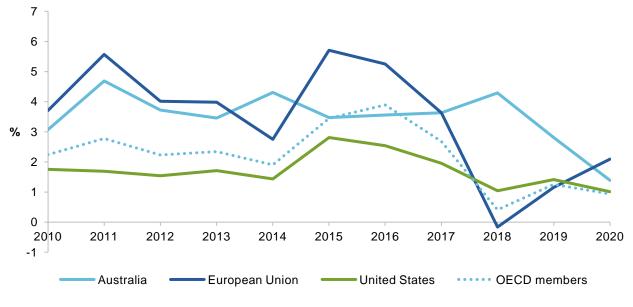
Inbound FDI flows have fallen as a percentage of GDP in recent years for Australia and several advanced economies (figure 2.6). As a percentage of GDP, Australia's inbound FDI began to decline prior to the pandemic and, as at 2021, had not rebounded to pre-pandemic levels. Other advanced economies have also experienced declining FDI in proportion to GDP.

FDI trends cannot be wholly attributed to Australian policy, as they also depend on conditions in other countries competing for investment, as well as conditions in source countries. While it is impossible to predict

how global investment patterns will evolve, it would be valuable for Australia to remain open to harnessing opportunities — a number of regulatory frameworks can affect FDI decisions at the margin (chapter 3).



Inbound FDI flows as a share of GDP, 2010 to 2020



Source: World Bank (2022a).

The investment needs of the climate transition

The transition to a net-zero emissions economy by 2050 will require a significant scale of new investment in the Australian economy. The Australian Energy Market Operator estimated that the National Electricity Market would require about \$170 billion of capital investment to 2050.³² These investments would be required to address a forecasted doubling of electricity consumption from the grid by 2050, due to new demand sources (e.g. transport, heating, cooking and industrial processes) and the removal of a large proportion of coal generation. Deloitte estimated that the transition to net zero by 2050 would require \$70 billion of capital reallocated away from emissions intensive assets, and \$420 billion of additional investment compared with an economy not transitioning (DAE 2022, p. 2).

While public investment can play a role in addressing market failure, the risks associated with industry assistance will likely be prominent in Australia's decarbonisation efforts. Significant ongoing public expenditures have already been put towards supporting emerging technologies. While new technologies will be crucial for decarbonising, there are risks that selected technologies fail to commercialise, or prove ineffective in the mitigation task, or provide poor additionality (PC 2022f). And while some degree of risk is inherent in such investments, governments can often be reluctant to (or persuaded not to) abandon investments when technologies fail to develop (Banks 2008, p. 15; Emmery 1999; Neely 1993; *The Economist* 2010; 2022). Regular and transparent review of public expenditures will remain crucial to minimising the potential for such market distortions.

³² This includes investment to achieve a nine-fold increase in grid-scale wind and solar capacity, a three-fold increase in the firming capacity (dispatchable storage, hydro and gas-fired generation) and a five-fold increase in distributed solar (AEMO 2022).

As such, private investment will be needed in a relatively large scale. In addition to the general landscape that affects investment broadly, the incentives for investment in decarbonisation will be key — including how mitigation is priced, and the transparency and rigour of offset markets. In the absence of an economy-wide price on carbon emissions, there is a greater risk that public and private investment fails to reach the most efficient and effective technologies. A technology neutral approach will be important to guide investment to technologies that will promote least-cost abatement (for instance, in carbon capture and storage, energy generation, and energy storage) (volume 6).

Implications for policy

The observed **subdued investment growth warrants some attention** from policymakers. While measured investment levels may underestimate investment in intangibles, which is increasingly important to service industries,³³ subdued investment growth could reflect some weakening of key drivers of productivity growth, with potentially significant implications for Australian living standards.

It is also important for policy to reflect the fact that **productivity and investment are interrelated.** Productivity-enhancing reforms can promote economic growth and improve returns to investment. In turn, investment can be the proximate cause of productivity growth. But interventions to simply boost investment levels directly cannot be guaranteed to boost productivity.

Policy should not attempt to promote investment for its own sake. All investment carries opportunity costs — it uses up scarce resources that could otherwise be used for current consumption. An important role for government is ensuring that investors face prices (output prices, input prices and interest rates) that are not distorted and broadly reflect social costs so that investments increase national income. In practice, this means that policy settings would neither discriminate in favour of particular kinds of investment nor consumption over investment.

The objective should not be to 'undo' or 'reverse' structural causes, to the extent that structural shifts reflect Australia's comparative advantage (and relative prices). The relative decline in investment has not been due to any singular consistent cause or trend, despite relative consistency across time and indeed in other advanced economies. In part, lower investment intensity may be the result of developments that are not wholly undesirable, such as structural shifts in the economy and the reliance on longer-lived assets. It may also reflect perceptions of and attitudes to risk, or undesirable developments, such as low productivity growth that reduces returns on investment.

A broader view of policy is required. The hurdle rates for investment observed in Australia have been relatively consistently high over the past decade, suggesting higher risk premia offsetting lower capital costs. This suggests that any attempts by governments to influence investment decisions will require consideration of a broader mix of policy settings — not only the cost of funds, but also those policies that influence the broader economic climate and might unduly increase the uncertainty about future benefits.

Broadly, the suite of policy issues discussed across this report will have a bearing on investment: for instance, aspects of foreign investment are discussed in the context of trade policy settings (chapter 3); and Australia's climate change policy settings (volume 6) will help to determine the efficiency of resource allocation across the economy.

³³ Volume 5 of this report — *Innovation for the 98%* — details capital spending in physical and intangible assets over the past 60 years.

2.2 Taxation, investment and productivity

The tax and transfer system has a direct influence on investment decisions. By taxing some activities at higher rates than others, the system can skew incentives and economic activity away from more productive activities. Transitioning Australia's tax system towards less distortive, more efficient approaches is an enduring policy priority. It will become more salient as governments contend with the ageing population, changing consumption patterns and the need for fiscal repair.

While specific tax incentives could aim at bringing forward investment, piecemeal tax incentives alone are unlikely to boost long term productivity growth. The effects of taxation on the incentive to invest are better dealt with via structural tax reform rather than one-off measures.

The role of taxation in driving productivity

At a broad level, several aspects of the tax system warrant particular attention. The tax system can influence productivity growth through five main channels:

Skilled labour supply decisions — particularly via income and payroll taxes, which can affect labour market participation, hours worked, incentives for further human capital investment and incentives to migrate to Australia. These effects can vary with gender, household structure, age and income. They can be compounded by aspects of the transfer system, which can lead to high effective marginal tax rates. Other payments, such as child care subsidies, can alleviate adverse incentives over some income ranges.

Labour participation may or may not have a large impact on productivity. A higher participation rate primarily increases GDP per capita, rather than GDP per hour worked. However, productivity can be affected to the extent that highly qualified workers reduce their hours worked, or work for a period of time in lower skilled occupations. Decisions about human capital investment, entrepreneurialism or decisions to switch jobs are another channel through which labour taxation can influence productivity.

Saving and investment decisions can be distorted due to the varying tax treatment of different savings and investment options. If investment and asset allocation decisions are based more on preferential tax treatment than underlying economic return, productivity can be adversely affected.

Gaps between the corporate tax rate and marginal personal income tax rates, differential tax rates for large and small companies, differences in statutory depreciation rates and the non-deductibility of equity all have some potential to distort outcomes.

Differences in tax rates between categories of taxpayers can also create distortions in savings and investment over time. For example, the greater the differential between corporate taxes and personal income taxes, the greater is the incentive for company owners to hold profits as retained earnings and delay their distribution as personal income to later periods of life when they face a lower marginal tax rate.

Ease of asset transfers and efficient capital allocation can be significantly impacted by transaction taxes like stamp duty. These taxes can hamper worker mobility and housing choice, and be a barrier to efficient transactions, which would see assets transferred to a higher value use.

For example, Shiran (2020) finds in a study of Melbourne residents that stamp duty significantly reduces mobility of homeowners, and locks in longer work commute times. Davidoff and Leigh (2013) find that a 10% increase in stamp duty lowers housing turnover by 3% in the first year and by 6% if sustained over a 3-year period.

Efficient allocation of capital is also relevant in achieving efficient user charging for public infrastructure such as roads. The current fuel excise system, while a significant traditional source of revenue for government, is not sustainable for this purpose (given the growing share of electric vehicles).

Tax settings can affect the **ease of entry and competition** through both consolidation rules and the non-neutrality of taxation of corporate debt and equity — both of which could contribute to incumbency bias, particularly if new firms are more likely to initially be financed through equity. For example, some new firms in the services sector might have limited tangible business assets against which to borrow, relying more on equity to finance initial operations. Tax arrangements that become less favourable as businesses grow beyond a threshold size can also impede competitive pressure.

Risk management can be hampered at the margin by state insurance taxes. The asymmetric treatment of profits and losses could also work to diminish firms' risk appetite. Alternatives that have been suggested (though none are necessarily straightforward) include some loss refundability (such as via a business cash flow tax), the carry-back of losses or the indexation of losses carried forward.

Towards greater neutrality and efficiency

In general terms, both tax rates and tax neutrality issues will be highly relevant to productivity. The marginal excess burden (i.e. efficiency loss) from a tax tends to rise exponentially with the tax rate. Working towards greater neutrality of tax — for instance, between firms, between savings vehicles and, where appropriate, between labour and capital income — should have positive impacts for tax efficiency and productivity.

The question of neutrality between equity and debt will become even more salient depending on future approaches to dividend imputation. Imputation has been a central feature of the Australian tax system since the 1980s, addressing the double taxation of dividends that would otherwise occur. One effect of imputation is to heighten the 'home country bias' of domestic investors, including superannuation funds, as noted by the Tax and Transfer Policy Institute (Murphy 2018). The Retirement Income Review (Callaghan Review) noted that between now and 2060, the scale of Australia's superannuation assets under management are projected to rise from about 110% of GDP to just under 250% (Treasury 2020). While the extent to which this home country bias impacts Australia's productivity growth is not known, the question will likely arise as to the desirable (and sustainable) level of home country bias that is appropriate once investible funds are of such a scale relative to the domestic economy.

There is a view that despite Australia's dividend imputation system, there is the potential for investment to be influenced by corporate tax treatment. A number of reforms have been canvassed to create greater neutrality between debt and equity financing, including an allowance for corporate equity (ACE), and allowance for corporate capital (ACC), comprehensive business income tax (CBIT) and business cash flow tax. The Tax and Transfer Policy Institute has favoured the ACE, as it poses fewer implementation challenges (Sobeck et al. 2022). It has the attractive attribute of effectively taxing marginal investments (those making a normal rate of return) at zero, thereby potentially encouraging new investment.

In addition, the tax and transfer system can affect productivity through its complexity. To the extent it absorbs scarce resources for system compliance and administration, this can divert time and resources away from more productive activities. As governments (state and federal) alter the tax system over the next decade, they should look to systematically transition the system to be more supportive of productivity growth across the five domains outlined above.



Recommendation 3.4

Transition the tax system to invigorate productivity growth

In their use of the tax system for fiscal consolidation over the next decade, governments should, including through the Council on Federal Financial Relations, systematically transition the tax system to be supportive of productivity growth through tax arrangements that:

- · promote skilled labour supply
- · improve tax neutrality in respect of savings and investment
- encourage efficient asset transfers and capital allocation
- foster market entry and competition
- · support efficient risk management by firms and individuals.

2.3 Improving the business environment for private investment

While there may not be a strong policy justification for promoting investment for its own sake, or for using public investments to fill a gap in private investment, governments can nonetheless avoid situations where policy and regulatory interventions create undue barriers to investment (for instance, by ensuring that the regulatory environment meets its objectives as efficiently as possible).

Reducing the distortionary effects of public expenditure

Public investment decisions can have varying and sometimes countervailing effects on private investment. For instance, public investment:

- can promote private investment, partly due to private sector delivery of public projects but more broadly through benefits of using infrastructure and potential generation of spillovers throughout the economy (Debelle 2017)
- carries opportunity costs that are heightened in times of relative scarcity of resources (such as a tight labour market).

Under full employment conditions, the opportunity cost associated with any public expenditure and the potential for crowding out will be heightened, not only in relation to other areas of public funding, but also in relation to the resources available to the private sector.

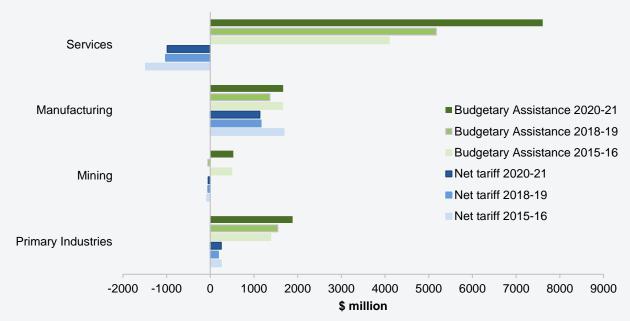
The resource constraints associated with full employment are exacerbated by an environment where Australian Government expenditure has reached peak levels — which are only partly explained by the pandemic, and partly by related trends in industry assistance (box 2.1). The prevailing labour market conditions provide additional reason to carefully assess the opportunity cost of using public funds.

Box 2.1 – Industry assistance creates distortions

Australian Government assistance to industry has reached historic high levels — even after excluding economy-wide COVID-related programs of expenditure (figure below). Aside from once-off emergency expenditures, significant amounts of expenditure have been committed over the next decade.

Some public expenditure programs deliberately or inadvertently discriminate in favour of a particular section of the economy. This includes outlays, concessions, or other favourable conditions for particular sectors, industries, or businesses of a particular type or size. To the extent that supports are material enough to prevent business exits, this reduces business dynamism and impedes more efficient allocation of resources.

Government assistance to industry would ideally be geared towards projects or sectors with significant social spillovers that cannot be fully captured by private investors (that is, private investment alone will not lead to the most productive level of investment). To best utilise scarce public funds, the government should rigorously check that the spillovers reflect a failure of private investment markets. Costs and benefits should be assessed, including the alternative uses of funds and potential to crowd out private investment. With the current full employment conditions, it is important to consider the risk of reallocating resources away from more productive uses to those with lower or less certain payoffs.



Industry assistance has increased in the past five years^a

Net tariff assistance and budgetary assistance 2015-16 to 2020-21

a. Excludes economy-wide expenditure programs such as JobKeeper, Boosting Cashflow for Employers, Backing Business Investment, and the expansion of the Instant Asset Write-Off.
 Source: Productivity Commission estimates.

One of the risks of industry assistance is that it can continue for a prolonged time without scrutiny. There are often strong in-principle rationales for government intervention initially (for instance, with regard to the COVID-19 pandemic and climate change). But without sufficient policy scrutiny, in-principle rationales can provide 'cover' to poor public investment choices, open-ended assistance and rent-seeking behaviour (PC 2022f).

Improving the regulatory environment for private investment

Governments can promote investment by ensuring regulatory settings avoid undue impediments to commercial decisions, without sacrificing the social benefits of regulation. The Commission has provided numerous examples of regulatory areas where this would be advantageous, including regulatory approvals (PC 2013); and more efficient freight transport (PC 2020a). As noted in chapter 1, further simplification of planning and zoning regulations would not only facilitate competition (by reducing barriers to market entry) but would allow better value use of scarce land resources. An additional area of policy with potentially significant implications for investment relates to approval processes for major projects.

Approval processes for major projects

Survey evidence from Infrastructure Australia suggests that both investors and contractors viewed planning and environmental approval processes as a source of delay and uncertainty for project timelines (Infrastructure Australia 2021, p. 44). The costs of delays can vary. In oil and petroleum, the Commission has previously estimated that delaying a major project by one year could reduce the net present value of returns by 10–20% (simply by delaying income streams) (PC 2009, p. xxv).

Reducing the delay times associated with regulatory approval processes is a perennial challenge. From a policy perspective, it should not be mistaken for an assumption that approval processes themselves are redundant or poorly administered. Nor does it signify that the regulation of environmental and social impacts should be reduced or removed, such that more projects are undertaken regardless of negative externalities.

Rather, if approval processes can continue to protect against social costs of major projects, while further reducing uncertainty and delay, this could result in significant productivity benefits. And as noted by Infrastructure Australia, at an economy-wide level, the costs associated with delay to major projects will be magnified by the scale of the upcoming infrastructure pipeline.

While it is beyond the scope of this report to investigate all regulatory approval processes in detail, one recurring theme relates to delays caused by administrative complexity.

Addressing the complexity of approval processes

As noted by CME, businesses are often required to coordinate across multiple layers of government to obtain approvals, and the requirement to meet increasingly onerous conditions attached to many approvals (e.g. in relation environmental approvals) prompted concern over delivery times. CME noted that there is duplication of similar types of information requested by different agencies for similar regulatory outcomes under various legislations (CME, sub. 52, p. 4).

For public infrastructure projects, key planning and environmental approvals are typically obtained by the state, with minor and technical approvals obtained by the contractor. Issues arise where:

- Key decisions around design requirements are not made early in the process and mandatory approval requirements are unable to be clearly defined and articulated. This creates a risk that the final design is likely to have elements requiring rework after contract reward, leading to potentially significant time and cost overruns.
- During delivery some smaller approvals require the contactor to consult or obtain consents from numerous stakeholders, where it can be argued that the State can more easily manage. (Infrastructure Australia 2021, p. 44)

In the resources sector, some approval requirements have been moved from the primary approval process into the so-called 'post-approvals' phase, which lack statutory timeframes and reporting requirements (PC 2020e).

This can result in situations where primary approval processes are completed according to statutory timeframes, only to leave uncertainty and delay in the post-approval processes.

Some have noted that for major *public infrastructure* projects, a key question relates to who should bare the risks of approvals and associated delays. For instance, among respondents to Infrastructure Australia's survey on risk, three quarters of private sector stakeholders felt that governments should bear the risks of planning approvals (along with 43% of government respondents).

For major projects arising from the private sector, one way in which the Australian Government reduces the administrative complexity of approvals for major projects is through the Major Projects Facilitation Agency (MPFA).³⁴ The MPFA is the Australian Government entry point for developers of projects over \$20 million, which assists by providing information on approvals, mapping critical approval pathways and processes, and raising issues with regulators.

A more substantial improvement to approval processes could be achieved through a 'single-touch approvals' system, which has been confirmed as a commitment of the Australian Government. This system will involve the Australian Government accrediting State and Territory approval processes, providing the opportunity for businesses to obtain approval from a single application. Accredited approval processes will be subject to National Environmental Standards, which will be integrated into existing accreditation arrangements. The implementation of single-touch approvals depends in part on how quickly the process of accreditation will proceed. And given the gradual nature of implementation that will result, the effectiveness of the system will also depend on the role and performance of the new Environment Protection Agency (McCredie, Bergman and Smith nd).

The introduction of the single-touch approval system could eventually contribute significantly to improving the business environment for investment. More broadly, policy must continue to ensure that approval processes are both efficiently administered and are proportionate to the risks of the project.

2.4 Ensuring efficient public investment

Public investment can play a significant role as a key determinant of total investment in the economy. The extent of public investment (and the choice of investment projects) should be guided by net social benefit, taking into account the costs of taxation. Moreover, it plays a particular role in addressing market failure, often (but not exclusively) via the provision of public goods such as public infrastructure.

In many respects, there is a well-established literature on best practice for public procurement and investment. The Commission has previously recommended a number of improvements to the provision of public infrastructure, including in the project selection stage (with strong cost-benefit analyses) as well as proficient procurement processes (PC 2014). Rigorous assessment is all the more important when the opportunity costs of scarce labour and other resources are at a premium.

One challenge for governments relates to the application of best practice at the planning and procurement stages.

- The use of cost-benefit analysis is variable across government projects (volume 5). In some cases, such
 analysis is absent, or of poor quality, or is disregarded by decision-makers. Institutional and governance
 arrangements could be better designed to adopt the best practice elements of cost-benefit analysis (CBA) and
 to make the results a more prominent consideration for government officials in the project selection process.
- The choice of discount rates in the CBA process can lead to a wide range of forecast costs and benefits, depending on assessment of risk. There is always scope for discount rates to be chosen 'conveniently' to

³⁴ Prior to 11 May 2017, functions performed by the Major Projects Facilitation Agency (MPFA) were undertaken by the Major Projects Approval Agency (MPAA) and the Major Project Facilitation (MPF) Programme.

emphasise potential benefits or downplay potential costs. A single discount rate is unlikely to be appropriate, as rates should vary with project risk (Harrison 2010). However, given the implications of wide variations in discount rates in public procurement — both for industry and for the efficiency of public investment — Australian governments could review the appropriate application of discount rates with a view to achieving a more nuanced approach.

An additional challenge for governments relates to the use of pricing mechanisms to manage infrastructure usage, maintenance expenditure, and capacity, particularly with regard to road and public transport infrastructure (discussed below).

Public road infrastructure

The provision of road infrastructure is a key area of public investment with a direct bearing on productivity, and where mechanisms for funding and investment could be substantially improved. More efficient funding and charging mechanisms could apply to the general provision and maintenance of roads and the costs of urban congestion.

How public road provision and maintenance could be better funded

The construction and maintenance of public roads is funded from taxes and charges collected by all levels of government (box 2.2) and sometimes from tolls collected by private businesses. Most of the many vehicle-related charges have some effects on the demand for vehicles and road use (net fuel excise, registration costs, parking levies, licence fees, revenue from goods and services taxes and fringe-benefits taxes) but do so indirectly. Since 2004-05, there has been a relatively strong link between total road-related taxes, charges and spending, suggesting that investment is affected by the aggregate revenue, though changes in revenue collected from any given source is not strongly related to spending. Three tax sources are more directly related to the marginal use of roads, though only one (tolls) has an explicit link to investment.

Tolls are charged on some freeways, mainly levied on a per-use basis, but sometimes using distance and time of day as an aspect of the price. Investment decisions for toll roads are based on expected toll revenue, which provides a link between investment for specific projects and demand or usage.

A 'Road User Charge' is levied on heavy vehicles via the fuel tax credit system (as a component of fuel excise). The Road User Charge is 27.2 cents per litre of diesel used by heavy vehicles on public roads. In addition, there are a highly-developed set of registration charges that depend on truck types, axle number and trailer type (NTC 2022; PCC 2022). Charges are not explicitly distance-based at the individual vehicle level, but reflect the average distance travelled and the estimated average road maintenance and capital costs incurred by classes of similar trucks. To the extent that trucks are used at similar capacity levels, this resembles a distance-based charge levied at the truck level. The charges are not directly related to use of particular roads by individual trucks.

Fuel excise applies to all vehicles as a charge of 47.7 cents per litre. Fuel excise is only an indirect form of road user pricing (PC 2022f, p. 56). It does not differentiate between vehicles with different fuel efficiencies and impacts on road surfaces and imposes no charge on road use by Australia's growing fleet of electric vehicles since their fuel is not taxed. Fuel excise revenue has steadily declined as a proportion of road-related revenue in the past decade (figure 2.7). Ultimately, excise will become redundant as Australia's vehicle fleet is switched to non-polluting technologies. As recognised by the Australian Government in the context of its National Electric Vehicle Strategy:

Planning is also required as future fuel excise revenue declines from reduced consumption of petrol and diesel. While this revenue is not currently earmarked for expenditure on roads, it is an

important source of funding. In the long run, Australia will need a more sustainable and fair way to pay for roads. (Australian Government 2022, p. 14)

Box 2.2 – Road funding is a shared responsibility

Generally, responsibility for the project management of capital and maintenance expenditure for road assets lies with the State and Territory and local governments (for arterial and local access roads, respectively).

The Australian Government provides part or whole contributions to projects based on its investment priorities and largely under the framework set out under the National Land Transport Act 2014 (Cth), and the supporting National Partnership Agreement on Land Transport Infrastructure Projects (under the Federal Financial Relations Framework). The National Land Transport Act stipulates the conditions under which the responsible minister(s) may approve funding for individual projects. The National Partnership Agreements set out Commonwealth investment priorities and outline the objectives of investment, roles and responsibilities and further conditions and requirements on the particulars of projects.

The schedules to the National Partnership Agreements constitute a considerable portion of the Commonwealth's infrastructure investment program, but do not reflect the full extent of its infrastructure investment. Further details on Commonwealth funding arrangements are outlined below.

States and Territories fund or finance expenditure with own source revenues and grants from the Commonwealth, and also provide funding to Local Governments. Local Governments fund expenditure through own source revenue (such as rates) and grants. After accounting for grant funding, final road expenditure by the Australian, State and Territory (excluding public non-financial corporations) and local governments in 2014-15 was \$4.8, \$12.5, and \$6.2 billion, respectively. Source: PC (2017a).

Moreover, at the bowser, fuel prices are mainly determined by production costs and fluctuations in global crude oil prices (as demonstrated by price rises in 2022 stemming from the war in Ukraine), rather than the demand for local roads. The fact that fuel excise is a specific (flat) tax that is indexed by consumer prices means that as fuel prices rise (fall) relative to overall prices, the effect of fuel excise on prices at the bowser falls (rises), further disconnecting its impacts on road use. In any case, demand for vehicle fuels are highly inelastic, with a 10% increase in prices reducing demand in the long run by about 2 to 3% (BITRE 2008; Breunig and Gisz 2009; Brons et al. 2008; Galindo et al. 2015). While this makes excise a relatively efficient source of revenue, it limits its impact on road use.

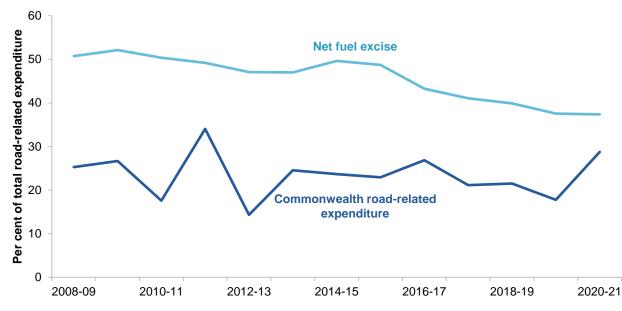


Figure 2.7 – Fuel excise revenue is declining in relation to road-related expenditure

Net fuel excise and Commonwealth road-related expenditure as a share of total road-related expenditure

Source: BITRE (2021).

There are numerous problems with existing road funding and investment models. They do not limit road congestion, nor provide investment signals about where roads should be built and to what capacity. Neither do they set charges that reflect the road damage associated with vehicles with different weights on roads with different levels of resilience to damage, nor do they use a sound framework for pricing that balances efficiency, distributional concerns and meeting (some of) the fixed costs of construction.

Recognising that Australian Government excise revenue will fall with electrification of the vehicle fleet, various jurisdictions have proposed or introduced distance-based charging for electric vehicles:

- In July 2021, Victoria implemented a road user charge for all Victorian-registered zero and low emission vehicles (the ZLEV road-user charge), currently levied at 2.6 cents per km for electric vehicles and 2.1 cents per km for plug-in hybrid electric vehicles. Registered operators of zero and low-emission vehicles also receive a \$100 annual registration discount.
- The South Australian Government had proposed a road user charge for electric vehicles, which was withdrawn in 2022 following a change in government.
- New South Wales will introduce a road user payment for eligible EVs from July 2027 or earlier if electric vehicle (EV) sales reach 30% of new vehicle sales. The payment will be equivalent in real terms to 2.61 cents per km for battery or hydrogen cell EVs, and 2.088 cents per km for plug-in hybrid EVs.

The Australian government and other parties have claimed that the form of these EV road-user prices make them equivalent to excise taxes, which, under the Constitution, only the Australian Government can collect. In October 2022, the Australian Government filed an intervening submission with the High Court case of *Vanderstock & Anor v. The State of Victoria*, arguing that:

The Zero and Low Emission Vehicle Distance-based Charge Act 2021 (Vic) (ZLEV Charge Act) imposes a tax on goods: specifically, on zero and low emission vehicles (ZLEVs). The tax (ZLEV charge) is calculated by reference to the quantity of the consumer's usage of a ZLEV. It imposes an excise, and is therefore invalid. (paragraph 6)

The focus of this section is on the economics of road-user charging and should not be read as a comment on the constitutional legality of current road user charges. Nevertheless, if the High Court decision makes it impossible for states to unilaterally collect set per kilometre charges, then the Australian Government will need to be a party to any trials by state and territory governments of road user charging for any vehicle, regardless of their fuel type. Ultimately, some degree of cooperation across the federation will be needed given the Australian government's primary role in funding the National Highway and interstate travel on ordinary roads.

The next steps toward the implementation of road-user charges will involve challenges in policy design (discussed below), including how charges might limit road congestion and road damage, meet distributional objectives and raise revenue.

Per kilometre charging?

Putting aside congestion charges, the dominant suggested model for road pricing is a fixed charge per kilometre travelled regardless of where that travel occurs in a city. This is a simple system with many practical benefits — it is easy to explain to consumers, is readily accommodated by annual odometer readings and could be implemented relatively rapidly once public acceptance increases. The fairness issues that would arise were EVs to be exempt from making any contribution to their road use and the fact that the only immediate option for recovering costs from them would be distance-based charging suggests that road user charges will become normalised for all road users. There would be a need for some offsetting reduction in existing fuel excise, though some additional charge could potentially be levied relating to environmental impacts of emissions that are not being addressed in other ways (such as a carbon pricing mechanism).

However, there are disadvantages from simple distance-based user charges, particularly their efficiency as a pricing mechanism.

Efficient pricing would set charges as close as possible to the marginal (or incremental) costs of a journey. For non-congested roads, the incremental costs of road use are close to zero for light vehicles, so imposing a charge will inefficiently reduce valuable journeys.³⁵ (Of course, the same problem also occurs for fuel excise since its costs relate to overall use, not to the marginal costs.) In contrast, for congested roads or where vehicles cause road damage, efficient prices will often need to be high (see below).

An issue confronting policymakers is that pricing that only related to marginal costs would recover only a portion of the revenue needed for road construction and maintenance, which would have to come from other sources. Municipal rates would be one option for road funding within Australia's biggest cities as it is a relatively efficient tax and reflects that most households benefit from road access.

However, were that option to be rejected, distance-based charges could provide a second-best revenue source (with additional charges imposed for congested routes and vehicles that damage roads). The degree of inefficiency of distance-based charging as a source of revenue depends on the responsiveness of distance travelled to road user charges. Since excise taxes act as a crude form of distance-based charging, the extensive literature that shows that fuel price increases have small effects on road use suggests that motorists are also likely to be relatively insensitive to at least modest distance-based fees. Accordingly, distance-based charges may be more efficient than general revenue for funding the fixed costs of maintenance and road construction. Experimentation with distance-based pricing, starting at modest prices akin to the Victorian model described above and raising them slowly, would be a way of assessing demand responses and the efficiency of

³⁵ Some other costs are associated with distance travelled — such as noise, tyre particulates, emissions, and accidents. In most instances, road user charging is not the most targeted or efficient policy approach to these problems, though an *incidental* impact of some forms of user charging will be to reduce them (Croci 2016; Gibson and Carnovale 2015; Singichetti et al. 2021).

collecting revenue this way. Emerging evidence from cities that have introduced some form of user charging, like Stockholm, London and Milan, also provides some lessons (Croci 2016).

It is inconceivable that distance-based charges could go far in recovering costs in less busy regional and rural roads. In that context, governments will have to continue their role of providing funding through other means.

A supplementary approach to distance-based prices would be the addition of a fixed charge to contribute to the fixed costs of road construction and use. Existing vehicle registration, insurance costs and licence charges are already in this form and were about 80% of the revenue collected through net excise taxes in 2020-21 (BITRE 2022). That charge may not be at the optimal level, which should take into account the effects on vehicle ownership. Governments could also give consideration as to whether compulsory third party insurance should be folded into distance-based charges as risks relate to distance (Litman 2011). In the interim, maintaining fixed charges roughly in line with existing fixed charges may be a prudent approach, but with longer-run charges taking into account their impacts on vehicle ownership. This may increase or decrease the share of road costs recovered through fixed charges.

One option that could be considered is a menu option for motorists, who could choose a lower fixed cost and a higher distance-based charge. For road users that value car use, but mostly for shorter trips, this would be more efficient than a high fixed charge that discouraged them from vehicle ownership at all. This may be particularly attractive for elderly people for whom vehicle ownership provides considerable autonomy.

How road user charges could help to address congestion

While congestion has long been a concern for governments (figure 2.8), recent trends suggest that congestion costs will be increasingly important.

- The rise of working-from-home arrangements during and after the pandemic has led to changes in urban travel patterns (PC 2021h). To some extent, this has the potential to reduce congestion on routes previously used by commuters. However, more recent data suggests that COVID-19 strengthened preferences for car travel over other modes; and congestion in many cases returned (or exceeded) pre-COVID levels, including in suburban routes.
- Given that Australia's borders have reopened following the lifting of the restrictions associated with the COVID-19 pandemic, net overseas migration has shown signs of rebounding. This will increase city growth, and depending on additional infrastructure spending, will aggravate congestion.

Charges during peak times or on heavily congested routes reduces urban congestion (PC 2017a, 2021c) by limiting trip numbers or diverting travel to other times or other transport modes that have fewer impacts, such as walking and public transport. It could also raise additional funds for the maintenance of roads with high usage and signal the need for more capacity. There are varying forms of congestion charges, including:

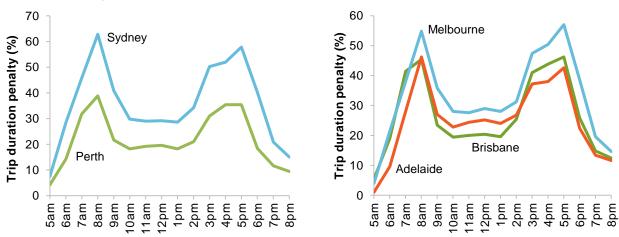
- central business district 'cordon' charges, which suits cities where congestion is mainly caused by predictable commuter traffic into a central area (as used in London and Singapore)
- corridor charges, where drivers are charged based on how far they travel along congested arterial roads and freeways in the peak direction.

Aside from road user pricing, there are several levers that can be used to address congestion, although they vary in their efficiency. For instance, subsidies to public transport can make mass transit more attractive as an alternative to car use. However, without proper calculation of social marginal cost (and the implementation of effective concessions systems) such subsidies tend to be regressive and costly (PC 2021c). Well-designed parking levies, on the other hand, could be more efficient — a 10% increase in parking charges reduces car use by between about 2 and 13 times more than the reduction achieved by a

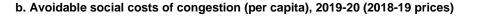
10% decrease in public transport prices. In either case, road-user charging would be more effective in directly targeting roads and routes that experience avoidable congestion.

At this stage, there has been limited use of road user charging to reduce congestion. For instance, motorists using Sydney Harbour Bridge face a peak charge (implemented as an addition to the existing toll). A key step would be expanding the use of congestion charges, taking account of the need to avoid diversion of traffic from trunk roads to other roads — which could merely shift congestion. Since it would be difficult to implement congestion charges any time soon across a whole city, planning and modelling will need to inform the roads subject to it, and the optimal period and level of charges will require some experimentation.





a. Impacts of congestion on travel time, 2019





Source: PC (2021c).

Heavy vehicles

As noted above, existing registration fees excise for heavy vehicles already have explicit links to road use. However, there are sound rationales for also moving to distance-based charging, taking into account damage to roads and any other external impacts that their use entails. A small-scale trial indicated that the systems and technology to achieve heavy vehicle distance-based charging is feasible and demonstrated that some trucks would pay less under that model (DITRDC 2020). Further, large-scale trials are underway (DITRDC 2022).

Other models of pricing

Starting simple is the clear policy imperative. In the shorter-term, a viable road funding model could comprise:

- a flat distance-based charge plus a fixed charge (such as registration), as these are relatively efficient ways of raising revenue to help recover construction and maintenance costs
- supplementary surcharges to cover the marginal costs of road use associated with congestion and heavy vehicle road damage, which would also contribute to road funding
- general revenue to meet the community service obligation to fund roads in regional and remote areas, reflecting that the above mechanisms could only realistically fund a small fraction of total costs.

However, over the longer run, distance-based charges could vary depending on the nature of the road (such as its road surface quality and vulnerability to damage) and its location. In principle, more cost recovery could occur on road segments or at times that demand was very unresponsive to pricing.

Distributional issues

Road user charging has some distributional consequences, though these would not be great were distance-based charges to be close to the charges that are implicit in fuel excise. Indeed, given EVs and hybrid vehicles are largely purchased by those on higher-incomes (Mitchell and Monterosso 2021), the effect of standard distance-based charges may be progressive compared with current road funding models.

The distributional consequences of any congestion charge are unclear and will depend on empirical evidence from overseas and experimentation. In Cardiff in Wales (UK), congestion charges had a regressive impact, though better public transport provision could offset that (Santos and Caranzo 2022). That option aside, it may be possible to have concessional congestion charges or other approaches for given travellers. For example, in London, reimbursements for congestion charges are available to charity workers, aged care workers, and volunteers, while discounts are available to and people with a disability (Transport for London 2023).

Road funds

The Commission has already spelt out how road funds could better connect revenue collected from motorists to investments — a key missing element in current arrangements, which rely on planning and politics (PC 2017d, pp. 132–142). The main element of this approach is hypothecation of road-related revenue into funds dedicated to construction and maintenance of roads, with investment decisions guided by revealed preferences by motorists about the infrastructure they value most. This more market-based approach to investment is less likely to lead to poorly-based investment decisions.

Any such road funds should commence with trials to build consumer and political confidence that they will achieve their intended benefits.



Recommendation 3.5 The next steps toward road user charging

Australian governments should work towards an intergovernmental agreement on road user charging for all vehicle types, focusing on distance-priced charging including any road damage premiums, and subsequently, incorporating congestion charges for crowded roads. The agreement should set out the roles of the different level of governments, how road funds and trials should be implemented, and the appropriate transition pathway away from fuel excise.

In developing a new pricing regime, Governments should consider the inclusion of compulsory third party insurance costs in distance-based charges and menu options for motorists to choose between higher distance-based charges and lower fixed charges.

The appropriate level of distance-based and fixed road charges, and the desirable extent of exemptions and concessions, should be based on trials and the experiences of overseas jurisdictions that have already employed them.

Ultimately, governments should work towards the longer-term objective of more efficient pricing of road use, including through the use of congestion charging in urban centres.

Public transport infrastructure and service provision

Public transport involves public funding of service operation, of capital goods (such as trains and buses), and of public infrastructure (such as additional bus lanes and rail networks). As the Commission (2021c) has outlined previously, it is neither likely nor desirable for fare revenue to recover the full costs of public transport and infrastructure. This reflects that public transport is a human service that aims to provide affordable transport for most Australians. Moreover, the average price required to recover the very high fixed costs of transport network would be well in excess of the incremental cost of a trip, leading to inefficiently low levels of demand. The adverse demand effects of average cost pricing would make it difficult to have a viable public transport system. Moreover, fare settings should also recognise the positive social benefits of public transport — such as reduced road congestion, environmental benefits, and mobility for people who might not be able to access private transport.

Setting fares with reference to social marginal cost (as opposed to average cost) focuses on efficient use and provision at the margin. Managing the usage of public transport can have significant implications for investment in network capacity, as noted by Infrastructure Victoria (2020, p. 8):

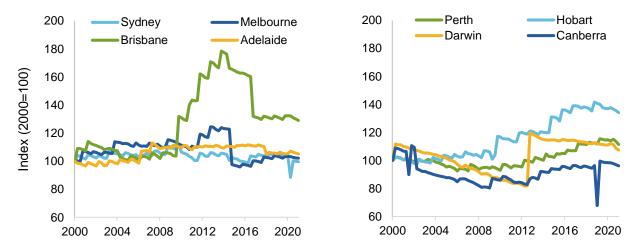
... an overused network with crowded train carriages should be priced higher to reduce over crowding and help fund new infrastructure to be installed to allow for more trips (i.e. the social cost of adding extra trips is high), while an underused network with empty trains should be priced low to encourage greater use of the existing network (i.e. the social cost of adding extra trips is very low).

While cost-benefit analysis serves an important role in assessing whether large investments are likely to be economically justifiable, setting fares according to social marginal cost is an important complementary measure — not only to avoid inefficient expansion (or under-investment) in public transport networks, but to ensure that public transport provides social and economic benefits. Such pricing takes into account the mode of travel (for example, trains, ferries, trams or buses), distance, and time of use, among other factors.

For the most part, public transport fares are not set in accordance with the calculation of social marginal cost. Rather, they are typically based on historical settings, with very low rates of cost recovery (including for those on higher incomes travelling at peak times). Increases are often avoided for political economy reasons, and overall fares have remained stagnant in real terms (figure 2.9). Many jurisdictions have offered some services for no charge, when better outcomes for passengers would be achieved by using these forgone funds to improve the quality of public transport services.

More sophisticated approaches to setting fares and subsidies could more better address both equity or efficiency goals. One such approach to pricing developed by the Independent Pricing and Regulatory Tribunal has been operational in New South Wales for some years (PC 2021c, p. 18), while Infrastructure Victoria has undertaken considerable research on pricing reforms (Infrastructure Victoria, sub. 10, p. 1), though this is not yet reflected in policy.

Figure 2.9 – Fares have remained stagnant in real terms



Public transport price indexes, 2000–2021

Source: PC (2021c).

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No other jurisdictions have moved to more sophisticated approaches, but others could copy the essential elements of pricing that IPART has developed. Moreover, jurisdictions could improve institutional arrangements for public transport fare setting by:

- · publishing a long-term strategy for fare setting with explicit rationales for fare decisions
- retaining real fares by increasing fares annually by at least the Consumer Price Index (if not already customary) and, probably more desirably, growth in public transport costs
- publishing the expected impacts of fare reforms, including any distributional results
- holding open consultations with stakeholders
- periodically instituting holistic reviews. (PC 2021c, p. 18)

Recommendation 3.6 More efficient public transport fare settings

Public transport fares across all states and territories should apply the pricing framework used by the NSW Independent Pricing and Regulatory Tribunal, including consideration of fares that take into account peak-time crowding, reduced road congestion, distance-based charges and fares that reflect the lower costs of buses compared with trains.

States and territory governments without independent bodies to make jurisdiction-specific recommendations should improve fare setting through other channels, such as publishing pricing strategies and rationales for decisions, and increasing fares annually by growth in public transport costs.

3. Openness to trade and foreign investment

Key points

- International trade and investment will be critical for driving future productivity growth and building economic resilience.
 - Trade in goods and services and foreign direct investment (FDI) are key sources of competitive pressure for domestic firms and important mechanisms for facilitating the diffusion of knowledge and innovation. The benefits of openness in shaping Australia's economy have been evident over many decades.
 - Supply chain shocks and global upheaval do not diminish the case for openness. Indeed, as a small
 advanced economy, increased global linkages are likely to be the best way for Australia to build resilience to
 deal with global uncertainties.

* Australia's FDI screening regime should properly account for national security concerns, but care should be taken not to disincentivise investment.

- Application fees for foreign investors are increasingly being used as a tax base. There are limits to which such taxes can be used without affecting the supply of FDI into Australia.
- Removing residual tariffs would reduce costs to importing firms and consumers and assist more advanced production processes that form part of global supply chains.
 - Australia's tariff regime provides little protection to domestic firms. Tariff revenue is likely already outweighed by compliance costs to importing business, and this will increasingly be the case as preferential trade agreements proliferate.

Trade in services is likely to be increasingly significant for the advancement of productivity.

- Growth of trade in services stems from the advancement and proliferation of technology, as well as rising incomes among Australia's trading partners. Barriers exist both 'at the border' and 'behind the border'.
- There are multiple policy and regulatory levers that would help Australia participate in the global growth in trade in services, including improvements to migration and FDI policy settings, and licensing regulations.

3.1 Introduction

Australia's openness to trade and foreign direct investment has increased over several decades and has been a major force in shaping the economy (box 3.1). This process has been associated with sustained contributions to living standards, predominantly through their role in promoting competition and resource efficiency, innovation diffusion and, thereby, productivity growth.

As a small, open, advanced economy, trade and foreign investment will continue to shape Australia's exposure to competition and innovation. Both will influence the structure of Australia's economy. The state of global trade and investment will be an overarching determinant of productivity growth in both the short and long term.

While there are a great number of exogenous, international factors that are beyond the scope of Australia's decision-making, the Australian Government has relatively direct levers to determine the settings for trade and investment. How these levers are deployed in four key policy areas will have direct implications for productivity:

- Australia's overall approach to global trade and investment. Heightened global uncertainty has led to
 pressures for the Australian Government to intervene to bolster self-reliance. But decisions to intervene
 would bring their own risks and must be weighed carefully against the efficiency gains of openness in
 practice, direct interventions would rarely be justified (section 3.2).
- Regarding merchandise trade, more open settings (globally) would improve productivity by allowing Australian exporters to access larger markets while decreasing the costs of imported inputs for domestic industry (section 3.3).
- Foreign direct investment introduces both competition and innovation to Australian markets but can also bring national security risks. Balancing the benefits and risks is challenging (section 3.4).
- As an advanced economy capable of delivering sophisticated services, the ability to trade services globally will help to shape Australia's productivity in the longer term. In the decade prior to the COVID-19 pandemic, Australia had only begun to participate in increasing global trade in services, often facilitated by digital technologies. Policymakers will need to be attuned to the impact of trade and investment settings, and 'behind the border' measures on Australia's services trade prospects (section 3.5).

Box 3.1 – Trade and foreign investment have shaped Australia's economy

Trade and foreign investment have been key drivers of the structural shifts in Australia's economy over several decades, which have allowed production to specialise in areas of comparative advantage, bringing substantial national income gains.

- Trade policy settings underwent significant reforms across the second half of the 20th century, resulting in a dramatically more open economy. While significant tariff reductions were implemented in 1947 (reducing tariffs to a rate of 30%) and 1973 (reducing most tariffs by 25%), the successive reforms between 1986 and 2010 brought tariffs to their current, historically low levels (below 5% on average). The effective rates of assistance to manufacturing and agriculture sectors declined accordingly over the long term (figure below, panel d).
- Similarly, Australia's foreign investment policy settings have been significantly reformed since the 1980s, increasing the role of FDI in Australia. Australia receives more foreign investment than it sends out, and in the past decade in particular, the growth of foreign investment has helped make up for declining levels of domestic investment. In the past 20 years, FDI has favoured mining, agriculture, and property (figure below, panel a).

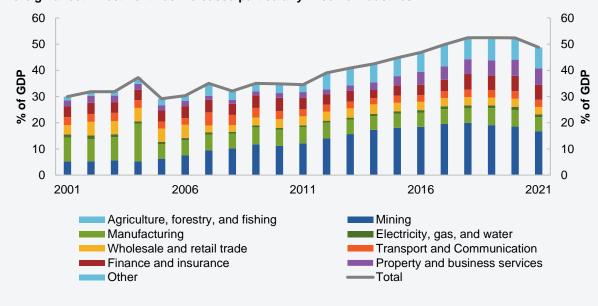
Box 3.1 – Trade and foreign investment have shaped Australia's economy

 As Australia opened up to international competition and investment, this helped drive structural change in the industrial composition of the economy (figure below, panels b and c). Since the early 1980s, Australia's exports have been dominated by mining, as the share of agricultural and manufactured exports declined.

Australia is also party to a number of regional and bilateral trade agreements, which largely proliferated well after the major waves of unilateral tariff reductions. Australia has 17 such agreements in force, 11 of which were implemented in the past decade (DFAT 2022a). Australia has signed bilateral agreements with all of its major trading partners — about 90% of Australia's imports will be covered by preferences once agreements with the United Kingdom, European Union, and India are implemented (PC 2022d).

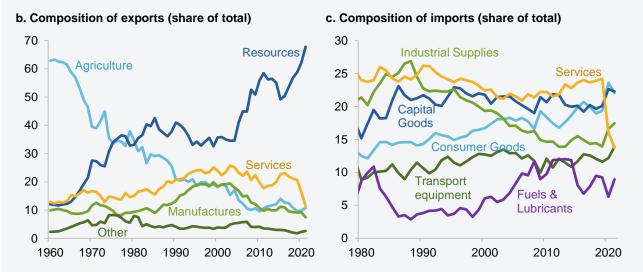
Global trade has also expanded over the long term, as production and supply chains have become more interdependent. Today, international trade is increasingly characterised by global value chains that are geared towards the production of components that are on-sold to other countries for further value-adding or processing. This has resulted in significant efficiency gains to producers both globally and in Australia.

Openness has been an integral part of Australia's development into an advanced service-driven economy, and indeed has become Australia's default setting.³⁶ Some of the benefits of open trade and investment have accrued over many years, as resources have shifted between sectors (i.e. away from manufacturing and towards services) and within sectors (e.g. towards more efficient areas of agriculture and higher-value manufactures).



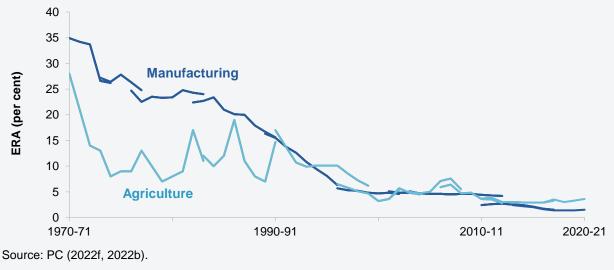
a. Foreign direct investment has increased particularly in some industries

³⁶ For example, there is evidence to suggest that the productivity growth experienced by Australia in the 1990s can be linked with the preceding microeconomic reforms, including significant trade liberalisation (Parham 2004; PC 1999).



Box 3.1 – Trade and foreign investment have shaped Australia's economy

d. Effective rates of assistance have declined over several decades



3.2 Building trade resilience

The integrated nature of the world economy has implications for how risk and uncertainty are spread. Disruption to production in one country affects others in the global supply chain. Breakdowns in trade between two countries can have various implications for trading partners. Trade itself can spread some forms of disruption, particularly where it relates to biohazards or disease.

At the same time, global trade has changed the way risks are managed. For instance, trade is a way of diversifying risk, such as where imported goods can make up for sudden shortfalls in domestic supply. International cooperation and trade can help the development and diffusion of scientific responses to biohazards or disease.

The double-edged nature of more open trade has been highlighted by the emergence of new sources of uncertainty in the past five years, including trade tensions, geopolitical events, and a worldwide pandemic — all of which are continuing to some degree (box 3.2). As a result, questions have arisen about the future of global trade, both for Australia and internationally.

Box 3.2 - Major sources of trade uncertainty in the past five years

The impact of COVID-19 on trade

The first two years of the COVID-19 pandemic led to widespread interruptions to economic activity. Despite recessions occurring in many countries, the negative effect on merchandise trade was relatively muted. Australian imports of consumer goods, for instance, quickly rose beyond pre-COVID levels. Between late 2019 and early 2022, Australian households maintained relatively stable consumption of essential goods, even increasing their consumption of discretionary goods (due to increased time at home and the lack of available services such as travel) (ABS 2022a).

Protectionism and trade disputes

While protectionist sentiment arises from time to time in many countries, one of the more globally significant episodes occurred between 2017 and 2021. Trade policy settings were in flux between the world's two largest economies — the United States and China.

Australia and China have also experienced flux in trade policy settings, with China implementing a series of trade measures in 2020 specific to Australian exports (PC 2021g), including:

- anti-dumping tariff of 73.6% and countervailing duty of 6.9% on barley; and a tariff of up to 212% and countervailing duty of up to 6.4% on Australian wine
- suspension of imports from four Australian abattoirs due to mislabelling of products and health certificate requirements; suspension of relations with Australia's largest grain exporter, CBH, and another grain handler, Emerald Grain due to claims of weed seeds in a consignment
- preventing ships from unloading their cargoes citing quality reasons. Customs delayed quarantine inspection causing live lobsters to die at airports
- progressively suspending timber imports first from Queensland, then from Victoria, South Australia and Tasmania.

The incapacitation of the WTO Appellate Body has made it more difficult for dispute appeals to be heard and resolved (PC 2022f, p. 61). As an interim measure, an alternate body has been established by a subset of WTO members (not including the United States).

Trade bans caused by domestic shortage

Export bans have also been implemented in countries in order to manage price increases caused as domestic demand increases. Such bans are designed to protect domestic consumers from inflation, by forcing domestic producers forego higher prices on the international market.

Recent examples include Malaysia's ban on chicken exports (in response to supply shortages) and China's global ban of urea exports (in response to domestic demands for fertiliser) (Lin and Chu 2022). The latter caused shortages in the diesel exhaust fluid AdBlue.

Box 3.2 – Major sources of trade uncertainty in the past five years

Geopolitical influences on trade

In early 2022, the onset of war in the Ukraine led to disrupted trade, particularly in food and energy (Ruta 2022). And while the energy shortages were felt most sharply in Europe, Australian fuel prices were also affected. The combination of the invasion of Ukraine; a lack of supply boost from OPEC; and the 'post-COVID' recovery in global demand for oil, resulted in retail fuel prices reaching their highest levels since 2014 (ACCC 2022e).

Trade and the climate transition

Other potentially significant developments are still in train, such as the potential for carbon border tariffs to be implemented in Europe and elsewhere. If the EU's Cross Border Adjustment Mechanism (CBAM) is implemented as currently proposed, it is likely to impact a relatively small number of Australian exporters (PC 2022f, p. 82). Greater costs could be levied on Australian exporters if similar carbon tariffs are adopted by Australia's main trading partners.

Global trade has been resilient to disruptions and vulnerabilities

At a high level, evidence suggests that global trade flows have not diminished despite heightened uncertainty. Text-based indices of uncertainty show that the discussion of economic and trade uncertainty spiked during the trade tensions between the United States and China in 2016, and at the onset of the COVID-19 pandemic in 2020 (figure 3.1, panel a). In both cases, the resurgence of trade (both globally and for Australia) is suggestive of its central role in how nations manage major disruptive events. Moreover, in practice, the relationship between uncertainty and trade is not straightforward: the extreme uncertainty brought on by the global pandemic was less damaging to trade than the trade tensions in 2017, particularly for Australia (figure 3.1, panel b). This suggests that trade disputes — effectively, policy and regulatory risks — can provide the most significant shocks to trade itself.

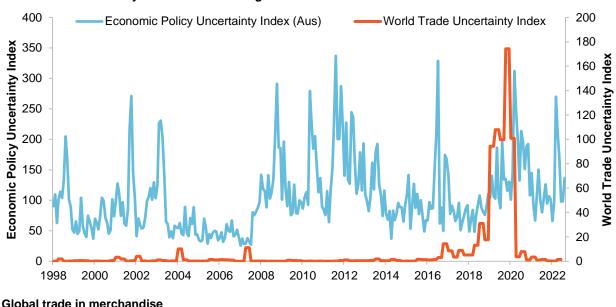
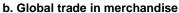
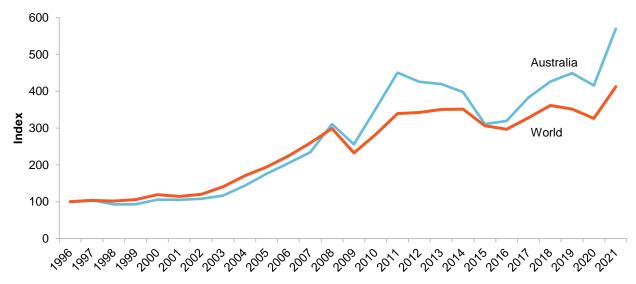


Figure 3.1 – Trade tensions and COVID-19 caused significant trade uncertainty

a. Measures of uncertainty based on text mining





a. The World Uncertainty Index (WUI) and the World Trade Uncertainty Index (WTUI) are quarterly indices based on text searches. They are based on frequency counts of the word 'uncertainty' and its variants (and for the WTUI, uncertainty in related to trade) in the quarterly Economist Intelligence Unit (EIU) country reports of 143 countries from 1996 onwards. b. The Economic Policy Uncertainty Index for Australia is based on text archives for eight major Australian newspapers from January 1998 onwards, and is comprised of the number of articles containing the terms 'uncertain' or 'uncertainty', 'economic' or 'economy', and one or more policy-relevant terms: regulation, 'Reserve Bank of Australia', RBA, deficit, tax, taxation, taxes, parliament, senate, 'cash rate', legislation, tariff, war.

Source: Ahir, H, N Bloom, and D Furceri (2018 Updated to Q2 2022); WTO (2022b).

In addition, recent evidence suggests that the nature of globalisation is changing, with a greater role for services and intangibles. McKinsey (2022) note that:

Flows of services, international students, and intellectual property grew about twice as fast as goods flows in 2010–19. Within services, flows of knowledge-intensive services — including professional services, government services, IT services, and telecommunications — are growing the fastest.

Indeed, IT services and data flows peaked during the pandemic, enabling remote work and operation in lieu of transport, and contributing further resilience to the global economy (McKinsey Global Institute 2022). This would suggest that just as the global economy became more interconnected through more complex supply chains, so too has global integration increased with technological progress and in response to COVID-related disruptions.

At the same time, the experiences of recent years have highlighted potential vulnerabilities in Australia's supply chains and the importance of 'economic resilience'. Several conceptualisations of resilience are relevant to Australia's productivity. The Commission has considered a 'resilient supply chain' as one that continues to function when exposed to shocks and adapts to changes (PC 2021g, p. 36). Others similarly define economic resilience as the capacity to 'resist a particular shock and to recover rapidly to the previous level of growth or better' (Goetz, Fleming-Muñoz and Han 2016) or to 'prevent and prepare for, cope with and recover from shocks' (WTO 2021, p. 7).

In many cases, individual market participants have a comparative advantage in addressing supply shocks and dealing with resilience. Thus, when vulnerabilities in supply chains and markets often arise — and are resolved — without government intervention. For instance, 'just in time' production processes help firms minimise the costs associated with inventory, but can increase vulnerability to supply interruptions (PC 2021g; Stiglitz 2022). If multiple competing firms operate with similar processes, this raises the level of vulnerability at an industry level. As firms manage risks in their own self-interest, including through changes to sourcing, inventory, and production processes, this reduces vulnerability. The policy questions are: whether market failures exist in the provision of resilience; the source and characteristics of such market failures; the extent to which policy can directly address those failures; and whether the benefits of intervention exceed the costs.

Even where such vulnerabilities do not relate to critical or essential goods, they can be relevant to productivity levels — particularly of the market sector. This raises questions regarding the role for government: namely, should government help avoid vulnerabilities altogether through trade policy; and to what extent should governments intervene in how vulnerabilities are managed.

This section considers the economic costs and benefits of different policy approaches. Notwithstanding the vital importance of rigorous analysis and evaluation of strategic concerns relating to geopolitical issues and national security, this section does not include an analysis of those issues.

An era of trade resilience

Calls for 'onshoring' are a common response to global shocks. It is a truism that reliance on domestic production might avoid the risks associated with trade. However, it would involve its own risks, as well as forgoing the significant and ongoing mutual gains from trade. As discussed above, this not only affects the variety and costs of products and inputs, but also has implications for specialisation throughout the economy. Indeed, global trade can help build resilience to domestic events that might otherwise disrupt the economy.

While an absolute retreat from globalisation is unlikely, in recent years countries have increasingly been deliberately shaping their trade flows and implementing new forms of protection. For instance, the United States' 'friend-shoring' approach to strengthening supply chains will involve 'partnering with allies' (New Zealand Foreign Affairs and Trade 2022) — effectively biasing trade in favour of nations sharing geopolitical ties. The US Treasury Secretary noted that:

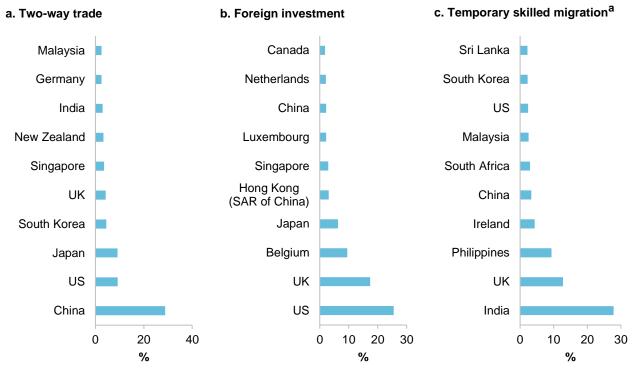
Working with allies and partners through 'friend-shoring' is an important element of strengthening economic resilience while sustaining the dynamism and productivity growth that comes with economic integration. Friend-shoring is about deepening relationships and diversifying our supply chains with a greater number of trusted trading partners to lower risks for our economy and theirs. (Yellen 2022)

Governments could implement a range of restrictions or incentives to influence firms' choices of foreign suppliers, and while this still realises some gains from trade, its distortionary effect is a risk to productivity both in Australia and globally. To the extent that businesses are incentivised (or forced) to purchase goods at higher cost or lower quality than would have otherwise been the case, this would effectively re-shape supply chains to favour less efficient firms. The implications for productivity would increase, the more broadly such actions were applied.

If Australia were to make such shifts in trade patterns, the economic implications would be shaped by Australia's economic relationships (across multiple dimensions) and place in the global economy. For instance, trade patterns are determined, in large part, by geographic proximity. About 65% of Australia's two-way trade was within Asia³⁷ — among relatively large economies with rising incomes (figure 3.2). Influencing markets to shift trade away from the region would likely entail substantial efficiency losses, many of which would ultimately be borne by Australian households in the form of higher prices and lower real wages, lower product quality and reduced product variety.

Australia's trade and foreign investment are also dominated by some of the world's largest economies, with those relationships also extending to migration (often as an export of tourism or education services) (figure 3.2). As such, strategic decisions with regard to the relationship between Australia and one of its trading partners, say in regard to the trade in goods, would likely have broader implications.





a. Primary applicants granted. Source: DFAT (2021c, 2021b); DOHA (2022).

Intervention in critical supply chains may be warranted in isolated circumstances

The Commission's report on *Vulnerable Supply Chains* developed a framework that allowed specific policy focus on 'critical' and 'essential' goods, as well as 'vulnerable' supply chains (PC 2021g). The Commission stressed that managing risks of supply chain disruptions 'inescapably entails costs on businesses, consumers and governments' (p. 1). As a fundamental principle, the Commission concluded that risks are best managed by those with both the incentives and capacity to mitigate them. In most cases, private firms are primarily responsible for managing risks in their supply chain, and governments need to consider the potential for interventions to 'crowd out' efficient private sector risk management.

Government intervention may be justified in isolated cases. This may include instances when private risk management is impeded (including by taxation or regulation) or where the residual risk resulting from market decisions is out of step with public benefit. Some ongoing functions of government are critical to risk management, such as ensuring regulations allow firms adjust to major disruptions, and the promotion of a rules-based international trading system.

The policy response to a disruption will depend on specific circumstances — as exemplified by the recent shortages of urea for diesel fuel additives (box 3.3). Several actions have improved Australia's access to diesel fuel additives, building a more resilient supply chain without moving entirely to domestic supply, nor to cease importing from particular suppliers. Neither was it necessary to adjust regulations relating to the use of diesel additives, which aim to promote environmental policy objectives.

The urea shortages also highlight that it will not be possible for governments to predict every vulnerability ahead of time. While the Commission (2021g) has provided a useful framework for identifying vulnerable

supply chains, its empirical analysis did not identify the potential issues regarding urea (owing in part to inevitable data limitations). Moreover, it will not be possible to predict every global disruption, nor stockpile for every shortage. As such, the 'response phase' will remain critical for policy.

Box 3.3 – A limited and pragmatic approach for diesel fuel additives

The costs associated with managing supply chain vulnerabilities – to businesses, governments, and consumers – depends on the choice of strategy. These include:

... stockpiling, diversification of suppliers or markets, contingent contracting, developing domestic capability, or tolerating the residual risk, among others. They also depend on the state of preparedness of firms and governments. (PC 2021g, p. 1)

In late 2021, China's ban of urea exports led to shortages of the diesel fuel additive AdBlue, required for use of diesel fuels by Australian regulations. While this occurred after the publication of the Commission's report on Vulnerable Supply Chains, the framework of that report is useful in understanding the causes, adjustments, and alternate responses to the disruption.

Preparation, response, and recovery

Different risks are better treated in different stages. While a predictable risk might best be treated in the prevention stage, a highly uncertain risk might be better treated through response and recovery.

There appeared to be relatively little preparedness among businesses or government for a urea shortage, despite the critical nature of AdBlue and the highly concentrated import market for urea.

Diversification of supply

Australia continues to import the vast majority of its urea supply. At the time of the trade ban, China was the source of a significant proportion of the global urea supply and of Australian urea imports. At the height of the shortage, supply was increased from Indonesian exporters. Australia continues to import urea from China among other sources.

Domestic supply and stockpiling

The Australian Government provided a temporary subsidy to domestic firms to restart their production of urea in order to supplement imported supplies. No government stockpiling was undertaken.

Regulatory levers

The ACCC made a ruling to allow domestic producers of AdBlue to share information and collaborate to obtain adequate supply of refined urea, in the context of shortages.

An additional regulatory lever would have involved the relaxation of requirements to use diesel fuel additives in order to reduce particulate pollution. This lever was not used, possibly due to technical complications and warranty issues it could cause for some diesel engines.

A key form of preparedness for governments will be to have processes and principles in place to guide policy responses. To this end, the recent establishment of the Office of Supply Chain Resilience will play a key role in informing government decision-making, as a source of expertise and due to its standing capabilities in monitoring. Ideally, this should involve the provision of information on the cost of measures, the likelihood of the vulnerabilities occurring, the magnitude and duration of the effects and mitigating strategies that do not

involve domestic supply. This process would benefit from ongoing development of rigorous methodologies for estimating the impacts of both vulnerabilities and interventions.

In the rare cases that call for government intervention in the management of supply chains, the policy response can take many forms. It is critical that the costs to public expenditure and to productivity are taken into account as they can be material, particularly where such assistance continues over time. Potential costs include the costs of lobbying for particular supports and their continuation, which could relieve firms from undertaking their own risk management. Any such intervention should be subject to transparent and independent review.

Building resilience through openness

A key part of building economic resilience relates to vulnerabilities in the supply of critical goods. However, even these aspects of resilience are promoted by well-functioning markets, which themselves are bolstered (however indirectly) by open trade policy settings.

First, several Australian industries have proven relatively resilient in the context of recent world events, owing to their sophistication and adaptability. For example, the Port of Melbourne has noted that the freight and logistics sector proved adaptable and agile in the context of 'increased regulatory controls, supply constraints, elevated demand, equipment shortages, changing distribution markets etc.' (The Port of Melbourne 2021, p. 1). Other businesses leveraged existing capital infrastructure to produce new goods or services, including spirits distilleries pivoting to commercial production of hand sanitizer (Allen 2020). To the extent that resilience is the result of businesses' access to capital or advanced management, these are likely to be improved by exposure to foreign trade and investment.

Similarly, protection can reduce economic resilience. If a trade shock leads to shortage, domestic firms and consumers will likely experience price increases — in addition to the costs associated with any tariffs. So firms and consumers suffer the cumulative effect on prices.

Second, Australia experiences significant supply chain disruption from *domestic* events. Major weather events affect agricultural yields in regional areas and other forms of production in urban areas. Goods that are not exposed to trade (including some fresh food products) can quickly fall into shortage. Trade has proven an effective way to reduce supply risks associated with domestic shocks.

Finally, to the extent that policy and regulatory risks are some of the main global risks to trade, it is important that Australia contribute to and promote more open trade. While under certain conditions regional or bilateral trade agreements can (collectively) contribute to more open global trade, greater contributions would materialise from Australia's participation in multi-party trade agreements and promotion of the international rules-based trading system.

Finding 3.4

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Open trade and investment are key to resilience

Relative openness with regard to trade and foreign investment policy are conducive to productivity growth. Despite the presence of severe global economic uncertainty, Australia's productivity growth is best served by more exposure to trade competition, more access to foreign direct investment, and a well-functioning rule-based system of global trade. Protectionism and industry assistance in the cause of 'self-reliance' would pose significant risks to productivity.

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Recommendation 3.7 Pursue trade resilience through openness

The Australian Government should pursue economic resilience by harnessing open trade. Public interventions in vulnerable and critical supply chains should be considered as a last resort, given the incentives for and capacity of private businesses to manage supply chain risks. Calls for assistance in vulnerable and critical supply chains should be subject to assessment of economy-wide net benefits by the Office of Supply Chain Resilience, with some form of transparent, public reporting on the justification and/or costs of any intervention.

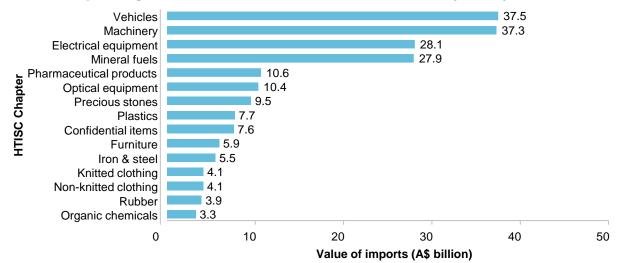
3.3 Addressing barriers to trade in goods

Both tariff and non-tariff barriers to trade result in costs for exporters to Australia and for Australian importers. The relevance to productivity is two-fold:

- Domestic firms may be less-exposed to import competition, removing a source of pressure to innovate, and leading to a misallocation of resources in the economy.
- The costs of imported inputs or capital goods can simply raise the costs of production for domestic producers, which also leads to suboptimal resource allocation (which in turn has economy-wide implications). Australia relies heavily on the import of vehicles, machinery, electrical equipment, and fuels (figure 3.3), both for final consumption and as business inputs.

Figure 3.3 – Many of Australia's imports are productive inputs

Value of imports by Harmonized Tariff Item Statistical Codes (HTISC)



Source: PC (2021g).

The costs of tariffs

Australia's historically low tariff levels are the cause of much less distortion to economic activity than was previously the case. However, the remaining tariffs are now responsible for a negligible amount of revenue and would offer relatively little protection to domestic producers. At face value, there is little difference between the economic costs associated with a tariff set close to zero and one set to zero.

However, Australia's system of tariffs, concessions, and preferences entails compliance costs. Businesses expend resources (time and effort) to avoid paying tariffs. In its report on the Nuisance Cost of Tariffs, the Commission (2022d, p. 45) has estimated total compliance costs were estimated to be \$0.7–2.2 billion in 2019-20 — in other words, for every \$1 in revenue raised by tariffs, the Commission has estimated \$0.60 to \$1.55 is lost in economic activity. These costs arise mainly from businesses accessing preferences under preferential trade agreements.

- In some cases, businesses will avoid the compliance costs of preferences altogether and simply pay the statutory tariff. In such cases, the benefits of preferential trade agreements in reducing trade barriers is forgone.
- This can have uneven effects across industries and types of businesses. Smaller businesses will have fewer
 resources to devote to accessing preferences. Businesses importing more diverse mix of products will have
 a more complex task of understanding multiple tariff lines, or of obtaining certificates of origin from multiple
 suppliers. The combination of these factors are likely to affect, for example, importers of large shipments of
 vehicle parts, which may comprise hundreds of different parts from different manufacturers.

Some compliance costs could also be reduced by making it easier for businesses to interface with the tariff system — a process already underway via the Simplified Trading System (DFAT 2022b). However, this process will not reduce all compliance costs. For instance, importers need to comply with the rules of origin (RoO) contained in trade agreements, which are imposed to prevent transhipment.³⁸ But as Australia has implemented trade agreements with almost all of its trading partners, this reduces the incentive for transhipment and hence the need for strict RoO.

The costs associated with RoO can be pervasive, as they include costs of producers adapting their production process to abide by RoO, while importers or exporters may need to obtain an authorised certificate of origin.³⁹ To the extent that RoO feature heavily in Australia's future preferential trade agreements (PTAs), more businesses would likely be subject to the associated compliance costs. On the other hand, if RoO were to be less stringent in future agreements (so as not to be binding on typical production processes) or if they were omitted altogether, this would significantly reduce compliance costs associated with preferences.

The compliance costs of tariffs would be avoided altogether if preferences were abolished, although this would leave Australian importers paying non-preferential tariffs instead. Ultimately, reducing tariffs to zero would be the most effective way to reduce the costs to Australian importing businesses and consumers.

It is often argued that non-zero tariffs have inherent value in the negotiation of trade agreements. Aside from benefits to Australian importers, trade agreements remove barriers to Australian exporters operating in foreign markets. Australian firms may become more efficient when they can access overseas markets without barriers. In competing on more level terms with foreign producers in larger markets, they can be exposed to more intense competition and receive greater potential returns to innovation.

³⁸ Transhipment refers to goods being shipped via an intermediate country to the destination country in order to benefit from the PTA that the intermediate country has with the destination country.

³⁹ For instance, under ChAFTA, goods meet the rules of origin requirements if they are: 'wholly obtained' or produced from wholly obtained goods in China or Australia; or 'wholly produced' entirely in China or Australia, or both, from materials classified as 'originating' in either country under the ROO; or produced in China or Australia, or both, using inputs from other countries, while meeting the Product Specific Rule (PSR) applicable to that good (DFAT 2020, p. 7). Importers must prepare either a ChAFTA Certificate of Origin or a Declaration of Origin — the former must be issued by an authorised body in the country of origin, while the latter are only accepted for goods covered by an advance ruling and are completed by the exporter. Records must be kept for five years.

In some cases, trade agreements provide a trade advantage to Australian exporters compared with exporters in other countries (figure 3.4). For instance, when the Japan Australia Economic Partnership Agreement (JAEPA) was implemented Australia gained a tariff advantage over its competitors (such as the United States, Canada and New Zealand). However, these advantages were eroded as those competing countries signed agreements with Japan — at which point, JAEPA allowed Australian exporters to compete on equal terms with exporters from those countries (ABARES 2022, pp. 2–3). And while short-term tariff advantages benefit exporting firms, it is the longer-term effect of competition on equal terms that is likely to be conducive to productivity growth.





Source: ABARES (2022).

In any case, the Commission has previously found that most gains from trade liberalisation are likely to arise from domestic liberalisation (PC 2001, p. 5). This would suggest that unilateral tariff reform should be pursued regardless of marginal effects on trade negotiations.

In addition, it is unclear to what extent tariffs are valued in trade negotiations. Indeed, the value of Australia's remaining tariffs is likely to reflect the size of the Australian market as a share of global trade and the low rates of Australian tariffs (PC 2010b, pp. 214–216). Given the size of compliance costs associated with Australia's tariffs, and the range of issues that are the subject of trade negotiations *aside* from tariffs, it is highly likely that the gains from domestic liberalisation of trade policy would outweigh the value of tariffs as leverage. Typically, governments do not attempt to estimate the opportunity cost of 'holding back domestic reform to maintain negotiating coin' (PC 2020c, pp. 11–12).

Tariff reform has only become more relevant given the state of the global economy in 2022.

- In the context of global uncertainty, building resilience in Australian industries (and the economy more broadly) would be bolstered by efforts to reduce the costs of imported inputs to production.
- Removing residual protection would improve the efficiency of resource allocation in the economy, which is
 increasingly important in the context of full employment conditions.
- Unilaterally reducing tariffs would send a strong message internationally in promoting freer trade, which is increasingly important where policy and regulatory risks are the main threats to trade.

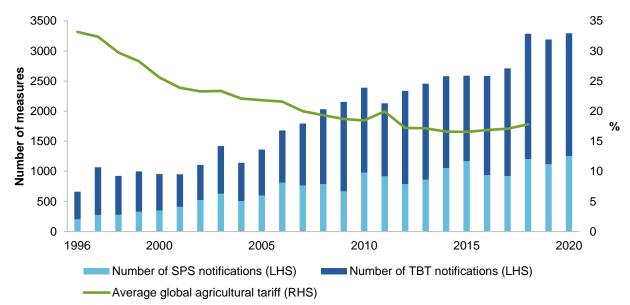
Shifting focus to non-tariff barriers

Non-tariff barriers to trade include administrative procedures or trade rules that 'unjustifiably restrict the flow of goods and services' (DFAT 2018). Non-tariff barriers at the border include certification and biosecurity requirements, pre-inspections, border and customs delays, product labelling, or packaging standards. Barriers 'behind the border' include regulatory rules, price controls, local ownership or foreign work

regulations, rules of origin, or data storage and privacy requirements. The main forms of non-tariff measures (NTMs) faced by Australian exporters are technical barriers to trade (TBT) and sanitary and phytosanitary regulations (SPS), which account for the majority of NTMs faced by agriculture (ABARES 2022).

In the past 30 years, as global tariffs have declined, nations have become more and more likely to implement NTMs (figure 3.5). Globally, about 40% of NTMs come from export certification, inspection and licensing. The economic cost associated with non-tariff measures has been estimated as being more than double that of tariffs (UNESCAP 2019).

Australia imposes a relatively high number of technical barriers to trade compared with others in the Asia-Pacific region (behind China, New Zealand, and South Korea), with the majority of NTMs imposed by Australia being technical barriers to trade. Generally, it is not uncommon for more developed economies to have more non-tariff measures, given their more developed legislative and regulatory frameworks (UNESCAP 2019). At the same time, Australia has been ranked the highest performer globally in its implementation of trade facilitating measures (alongside New Zealand), which partly offset the non-tariff measures (including transparent processes and paperless trade) (UNESCAP 2022, p. 10).





a. Technical barriers to trade (TBTs) relate to technical regulations, standards and conformity assessment procedures. Sanitary and phytosanitary (SPS) measures relate to human, animal and plant health. Source: ABARES (2022).

NTM costs can stem from legitimate processes relating to quarantine and licensing and, as such, are not easily removed unilaterally or avoided through trade agreements. At the same time, some of the protectionist measures imposed in 2020 were in the form of suspensions due to mislabelling, quarantine issues, and customs delays.

With regard to non-tariff barriers implemented within Australia, the Australian Government launched a *Non-Tariff Barrier Action Plan* in 2018. The objectives of the plan were:

- · to make it easier for business to report trade barriers
- · to build the capability of frontline expertise to service Australian exporters
- to increase transparency of the government's actions to address non-tariff barriers (DFAT 2019, pp. 42-43).

While trade agreements help Australian exporters access foreign markets, their effect is limited with regard to NTMs. If governments are to reduce the risk of undue non-tariff barriers, this will require management of policy and regulatory risks through international cooperation on individual standards and general promotion of the rules-based system of trade.

Anti-dumping and countervailing measures

While Australia has reduced its use of tariffs over time, it remains a prolific user of anti-dumping measures (including countervailing measures), with the number of products subject to such measures increasing over the past decade (figure 3.6). In 2021, there were 67 anti-dumping measures in force in Australia and 6 new investigations were initiated — well above the world median (20 in 2021) (PC 2022f).

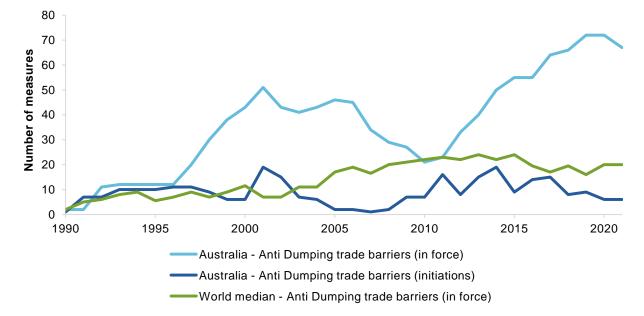
Anti-dumping measures in Australia are triggered by Australian firms applying to the Anti-Dumping Commission (ADC). The ADC can recommend the implementation of anti-dumping measures if:

... material injury has been caused by dumped or subsidised imports. Material injury to Australian industry can include:

- · loss of sales, profits, market share and productivity
- · negative impacts to prices, cash flow, inventories, and employment.

The injury must be greater than what normally occurs in the normal ebb and flow of business. (Anti-Dumping Commission 2022)





Source: PC (2022f).

As such, it is effectively a means for industry to seek to avoid import price competition where it can be deemed to result from the practice of 'dumping'⁴⁰ — typically where low import prices are themselves the result of protection through domestic subsidies, or where imports are priced lower than in their country of

⁴⁰ 'Dumping' refers to a situation where the price of a product when sold in the importing country is less than the price of that product in the market of the exporting country, or below the cost of manufacture (Australian Government 2020; WTO 2022t).

origin. This is a stronger form of regulation than is afforded to price competition between domestic firms (under the *Competition and Consumer Act (2010)* (Cth)) which usually allows goods and services to be sold below the cost price unless other circumstances apply.⁴¹

Purported benefits of anti-dumping

On some level, as countervailing measures are used to counteract export subsidies, they may present a disincentive to governments to implement subsidies. However, as a relatively small consumer in most markets, Australia's measures are likely to have minimal impact on decisions about subsidies — indeed, there has been no evidence of such influence.

As such, the main effect of anti-dumping measures is to benefit relatively small number of domestic firms. However, this too can be muted where measures apply to only one of many source countries, or indeed only some producers within a country. A study of anti-dumping measures in the EU found that producers from third countries (not subject to the measures) gained significantly more market share than domestic producers (National Board of Trade 2014).

Arguments have also been put forward that it is important to retain an anti-dumping framework in order to retaliate against countries applying them on Australian exports. Assuming a tit-for-tat approach to trade protections, this suggests that Australia's *use* of anti-dumping could easily spur retaliation (indeed it has consistently been the basis of trade disputes with major trading partners (box 3.4)) even if a framework for such measures is retained.

Box 3.4 – Australia has faced several challenges to its measures

The WTO regulates how members respond to 'dumping' under the Anti-Dumping Agreement. Anti-dumping measures are permitted when governments demonstrate that:

- · dumping is taking place
- difference between the price of the import in the country of origin and the price of the same product in the destination country
- dumping is causing harm to domestic businesses or risks doing so.

Australia has lodged multiple disputes with the WTO regarding anti-dumping actions taken by trading partners. However, Australia's own measures have also been disputed. For example:

- Australia began imposing anti-dumping measures on Indonesian importers of A4 copy paper in 2017 (among others). These measures were successfully challenged at the WTO's dispute settlement body in 2019. The ruling claimed the Anti-Dumping Commission had not made the required calculations in line with the appropriate methodology used to determine whether dumping had occurred.
- Australia is a respondent to one case that is currently before the WTO. In June 2021, China requested a consultation with Australia regarding Australian anti dumping and countervailing measures on certain products including wind towers, stainless steel sinks and railway wheels. A panel to hear the case was established in February 2022 and composed in September 2022.

Source: PC (2021f, 2022f), WTO (2019, 2022a).

⁴¹ Guidance published by the ACCC states that it is 'usually legal for businesses to sell products below the cost price', noting that it could be illegal if 'done in a way that substantially lessens competition' (ACCC 2022d).

Potential economy-wide gains from exiting

Overall, given the implications for resource allocation, there is likely to be an economy-wide net cost associated with any system of anti-dumping measures (PC 2016a). While the scale of the cost to Australia is unclear, it would be determined by the size and scope of such measures.⁴²

Yet, such costs persist. While WTO rules stipulate that anti-dumping measures are to be implemented for a set duration, the Anti-Dumping Commission has approved extensions in several instances. As such, anti-dumping measures represent an ongoing source of protection to relatively few firms and an ongoing economy-wide net cost. Moreover, there is no exit plan: the protections carries no expectation that firms will implement strategies to improve their competitiveness; nor has there been an indication from government that such measures are part of a broader plan to facilitate structural adjustment.

Rather than phase out its anti-dumping measures, Australia has strengthened its system in the past decade (box 3.5). While the reduction of compliance burdens are typically beneficial for any administrative system, making the anti-dumping system more user-friendly for industry encourages usage — and thereby, increases the net cost to the economy.

Box 3.5 – Australia's anti-dumping measures were tightened in the past decade

While the Australian system has aspects that seek to limit the protection afforded by anti-dumping measures, changes in recent years have eroded these disciplines and made it easier for import-competing industries to access measures, at increased levels of protection. For example:

- · the lesser duty rule is no longer applied in certain circumstances
- a broader set of factors are taken into account in determining whether industry has experienced **material injury**
- · rules allow a greater departure from market values in estimating normal values
- the ADC introduced **zeroing** when calculating dumping margins over a period of time, which involves disregarding any sales where the export price is higher than the normal value (which results in higher average dumping margins)
- anti-circumvention laws were adopted.

Source: PC (2016a)

It should be noted that in order to receive anti-dumping protection, firms need not prove that they would be unprofitable in their absence — although this is generally assumed in arguments in favour of the system. To the extent that protection is being afforded to otherwise profitable firms, at the expense of others in the Australian economy, there would be a strong case to remove those protections immediately.

To the extent that protections are vital for the survival of domestic Australian producers, this raises two issues: first, that such policies are a negative influence on business dynamism, which is important for efficiency and productivity (as discussed in chapter 1); and second, that in transitioning away from protection, governments should consider the timing of reform and the potential need for complementary policies to facilitate structural adjustment.

⁴² The US International Trade Commission estimated that removing US anti-dumping and countervailing measures would have delivered a welfare gain equivalent to 0.03% of GDP.

In addition, new applications for anti-dumping protection should not be considered unless *economy-wide* costs and benefits are taken into account — as is the case in the European Union, Canada, Brazil, China, and New Zealand. While this could take the form of a formal public interest test (as recommended by PC (2010a)), it could also be implemented via the Minister's current discretion over anti-dumping measures.⁴³

Accepting international standards

Australia is a signatory to the WTO Technical Barriers to Trade Agreement (TBT Agreement), which aims to prevent regulations, standards, testing and certification procedures from creating unnecessary obstacles to trade. The agreement 'strongly encourages' members to use international standards as the basis for their regulations and standards (DFAT nd). From a productivity perspective, the challenge for Australia is to balance the need for new and innovative imported products against consumer protections and public safety.

- The Australian Government regulates the first supply of certain goods through the use of standards and registers.
 - Therapeutic goods will generally need to be entered in the Australian Register of Therapeutic Goods before they can be legal imported. The Therapeutic Goods Administration notes that their regulatory approaches are aligned with international counterparts wherever possible.
 - Vehicle standards are regulated through Australian Design Rules, which cover aspects of vehicle safety, anti-theft, and emissions. Current Australian Government policy is to harmonise vehicle safety standards with international regulations where possible, with consideration given to the adoption of the international regulations of the United Nations.
- More broadly, standards set by the non-government national agency, Standards Australia, cover a wide range
 of products. Standards Australia provides input into international standards (as Australia's representative to the
 ISO and other bodies) and has a policy of adopting international standards wherever possible. Approximately
 one-third of current Australian standards are 'fully or substantially aligned' with international standards, while
 one-third have no international equivalent (US Department of Commerce nd).

Despite the mutual benefit for countries that have aligned or agreed standards, this is not always easy to achieve in practice. For instance, in a recent Senate inquiry into trade between Australia and Pacific Island Countries, Standards Australia noted that poor harmonisation of standards was stifling trade in both directions (Joint Standing Committee on Foreign Affairs, Defence and Trade 2020). Generally, all countries bear costs when trade is impeded, but the costs can be particularly significant for countries who risk losing access to larger markets and more advanced technology — the latter will increasingly be relevant to productivity as technologies progress.

Australian industry stakeholders have raised issues where differences between Australian and international standards act as impediments to the use of less costly or more productive technologies. For example, the Commission's (2020a) report into National Transport Regulatory Reform found that Australian Design Rules (ADRs) (among other regulations) had discouraged or delayed the use of new heavy vehicle technology that could potentially improve productivity and safety (such as twin steer prime movers).

In 2021, the Australian Government sought comment on three potential changes to ADRs, relating to monitoring devices to detect other road users; wider vehicles; and vehicles with more efficient axle configurations. They noted that if implemented, some of the immediate benefits relevant to productivity include:

⁴³ As outlined in the Australian Government response to the Productivity Commission's (2010a) report, 'the Minister currently has an unfettered discretion not to impose measures' (Australian Government 2011, p. 26).

... less need for manufacturers to re-design or modify vehicles available in other markets ... Further, the changes proposed in relation to vehicle axle configuration would help manufacturers to supply vehicles that are more efficient and/or productive, including vehicles able to complete the same freight task in fewer trips, which reduces both transport costs and exposure related crash risks. (DITRDC 2021, p. 2)

With regard to the therapeutic goods, a review undertaken into medicines and medical devices regulation in 2016 resulted in several recommendations being implemented by the Therapeutic Goods Administration (TGA), in part to reduce the time delay before imported medications reach the Australian market. These include the new priority review pathway and provisional approval pathway, which are slated to shorten the processes by up to three months and two years respectively (Therapeutic Goods Administration 2020).

As previously recommended by the Commission, there would be value in accepting international standards that apply to goods, wherever practicable. While such standards would continue to play a crucial role in safeguarding public safety and consumer protections, it may be possible to make better use of international standards. In many cases, Australian consumers and businesses would generally be better served to the extent that standards adopted in other leading economies are 'deemed to comply' — a transparent review would still be possible in cases where the Australian Government identified a significant safety risk relating to an international standard.



Recommendation 3.8

More open trade and greater recognition of international standards

The Australian Government should promote open and resilient trade in goods including by:

- · reducing Australia's statutory import tariff levels to zero
- progressively removing Australia's anti-dumping and countervailing measures, and subjecting any new measures to an economy-wide cost-benefit test.
- increasingly accepting product standards adopted in other leading economies as 'deemed to comply', provided that a transparent review could be undertaken in cases where the Australian Government identified a significant safety risk.

3.4 Avoiding undue constraints to foreign direct investment

Foreign investment has long been a feature of Australia's capital markets. Broadly, as a net importer of debt-based financing, and a net exporter of equity-based financing, Australia has an interest in promoting the free flow of capital internationally.

Foreign *direct* investment (FDI) is more directly associated with innovation at the firm level. For instance, Breunig and Majeed analysed the BLADE panel dataset of Australian businesses and found foreign ownership to be an important source of 'technological growth and innovation novelty', particularly for larger firms (Majeed and Breunig 2021). Having foreign ownership was associated with a 1.2% increase in the probability of new-to-Australia innovations, and a 1.1% increase in the probability of new-to-world innovations.

Opportunities to facilitate FDI flows

Governments have a role in regulating various aspects of foreign investment and, in doing so, to ensure the regulatory burden of compliance does not unduly deter investment. The importance of regulatory burden was reflected in recent industry consultations for the Australia's Service Exports Action Plan, where one of the industry recommendations (noted by the Australian Government) was to develop:

... accessible, user-friendly tools that give greater clarity to foreign investors on how they will be taxed in Australia (such as detailed 'scenario-based' taxation guides based around the categories of financial products specified in the APEC Asia Region Funds Passport). (DFAT 2021a, p. 46)

In 2020, the OECD found that Australia's FDI screening framework had been more restrictive than in most advanced economies (figure 3.7). A new foreign investment screening process began operation on 1 January 2021, implementing a more stringent framework largely designed to manage greater national security challenges. The key aspects of the new framework include:

- call-in powers for the Treasurer, allowing the Treasurer to review a foreign investment action that has not been notified
- last resort powers for the Treasurer, allowing the Treasurer to review investment actions that had been
 previously approved by the FIRB
- · enhanced monitoring and information gathering powers for authorised officers within Treasury
- new categories of investments to be subject to screening, as well as a register of foreign ownership of Australian assets
- a new fee structure for investment applications, involving higher fees across different categories of investment.

The new foreign investment screening framework could be expected to capture a larger proportion of FDI investments for review. As such, it is unclear to what extent an increase in FDI applications reflects an increase in overall investment activity, or simply an increase in the number of investments that now require screening. In addition, given that FDI levels in the past two years would have been heavily affected by the uncertainty caused by COVID-19 pandemic, it will be difficult to determine the impact of screening on investment for some time to come.

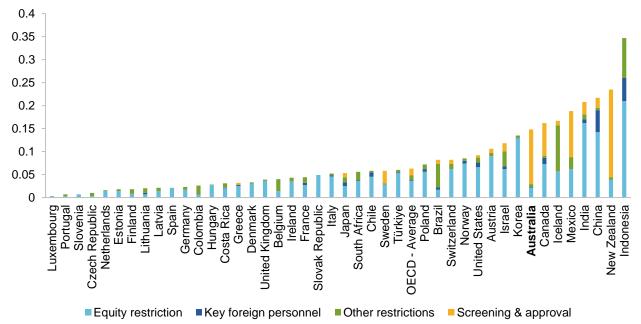
Indeed, the Foreign Investment Review Board (FIRB) reported an overall increase in the number of FDI proposals in 2020-21, although trends differed according to the size and industry of investment (figure 3.8). The decline in lower-value investments could be a reflection of changes to application fees, which are now proportionally higher for the lower scale of investments. Alternatively, it could also reflect dampening demand for residential property and other categories of investment.

Figure 3.7 – Australia's FDI processes were already relatively restrictive in 2020

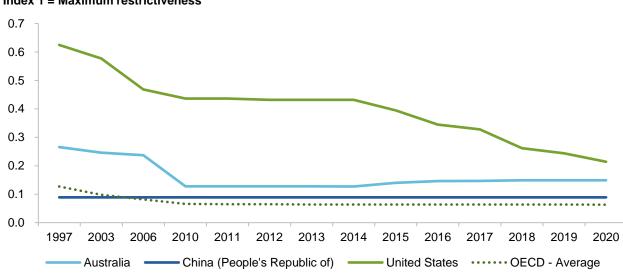
OECD FDI restrictiveness index

a. Screening is the most restrictive aspect of Australia's FDI policy





b. Australia's FDI policy has long been more restrictive than the OECD average



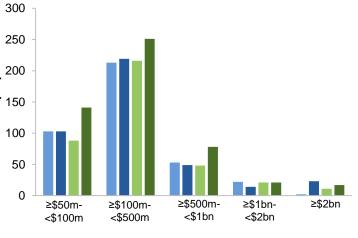
Index 1 = Maximum restrictiveness

a. Australia implemented changes to its screening regime from 1 January 2022. Source: OECD Foreign Direct Investment Regulatory Restrictiveness Index | Market openness Indicators.



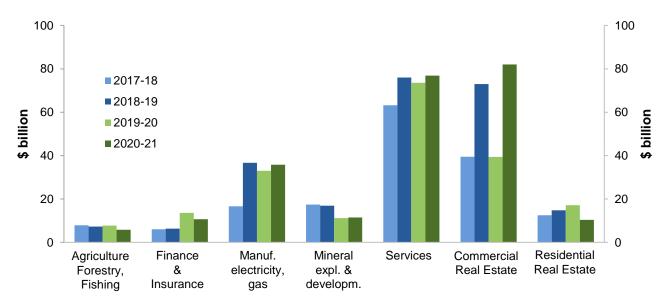
Figure 3.8 - Trends in FDI applications vary by size and sector

a. Number of FDI applications by investment value



Investment size

Investment size



b. Value of FDI applications by sector

Source: FIRB (2021).

Potential chilling effects

What is certain is that the recent changes to the foreign investment screening process have increased the cost of making FDI in Australia. This could be expected to reduce investment at the margin and to alter its composition.

One critical factor of Australia's screening framework is that it effectively places a tax on foreign investment (given that fees are in excess of cost recovery) at the stage of application (regardless of whether the investment is allowed to proceed). It is possible that over time, investors who have had previous applications rejected may reconsider their future investment intentions.

Moreover, despite fees that are already well in excess of cost recovery, they continue to be increased. Indeed, after being increased at 1 January 2021, they were doubled on 29 July 2022 (Chalmers 2022). The most recent increase in fees alone was estimated to raise an additional \$455 million over the forward estimates. Given the risk of affecting investment levels, the Australian Government should consider the efficiency of such a tax and its place in the tax system.

Consideration should also be given to the potential for distortions that may result from the differential treatment of FDI in different sectors. Specifically, FDI in agricultural land and businesses are subject to additional costs and regulations (box 3.6). Some (if not all) of these additional requirements and costs appear to be designed to make agricultural investments more difficult or costly in comparison to other commercial investments — rather than to rule them out altogether, as would be the case where strategic risks were significant. This approach stands in contrast to the National Farmers Federation's calls for a several-fold increase in foreign investment in the sector within the next decade.⁴⁴

A further question relates to how the compliance costs of screening are treated alongside other 'costs at the border'. Namely, that aspects of the screening regime have been treated as potential subjects of negotiation for preferential trade agreements.

Australia has sought to liberalise trade and investment through Free Trade Agreements (FTAs) and will honour its commitments under those agreements. The commitments include negotiated higher foreign investment screening thresholds for certain investors. All proposed investments will, however, continue to be screened consistently, regardless of the country of investor. (Treasury 2021, p. 4)

This raises questions as to how well the framework is geared to protect against potential fraud or national-security issues. As a result of trade negotiations, screening thresholds are more forgiving for countries with which Australia has implemented trade agreements.

FDI flows into Australia bring a range of important benefits for productivity. Screening frameworks thus should be designed to promote both national economic and security objectives. Undue compliance costs for investors may have the effect of chilling investment at the margin, for little gain. The use of application fees as a tax base poses such a risk, in part due to the size of the fee for lower and middle investment levels, and in part because it is rendered at the point of *application* rather than against profits.

Box 3.6 - Additional regulations apply to agricultural land

The additional regulations that apply to FDI in agricultural land do not appear to be linked to administrative or economic costs. Rather, they reflect a more cautious approach to foreign investment relative to other sectors.

For instance, application fees for foreign investment into agricultural land is significantly higher than for commercial land. FIRB (2022, p. 5) guidance on application fees show that:

• For agricultural land, application fees start at \$13 200 for investments of up to \$2 million, increasing in tiers for every additional \$2 million of investment, up to a maximum of fee \$1 045 000 for investments of more than \$80 million.

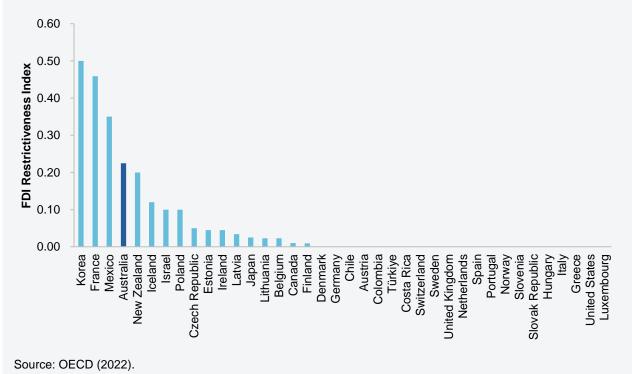
⁴⁴ The NFF note that FDI in the primary production stage of agriculture averaged \$260 million in the five years to 2018 — well short of their objective of \$12.5 billion of annual foreign investment between 2020 and 2030.

Box 3.6 - Additional regulations apply to agricultural land

• For commercial land, application fees start at \$13 200 for investments of \$50 million or less, increasing in tiers for every \$50 million of investment, rising to a maximum fee of \$1 045 000 for investments of more than \$2 billion.

Approved investors in Australian agricultural land are required to register with the ATO on its Agricultural Land Register, which was established to 'provide greater transparency about the level of foreign ownership' of agricultural land (ATO 2022). While this is not costly for investors, the premise for such a register is that community confidence must be maintained regarding FDI in agriculture, in such a way that does not apply to other commercial FDI. Similarly, in its recent review of the Register for Foreign Ownership of Water Entitlements, the Commission noted similarly that its purpose was mainly for providing transparency to help maintain community confidence (PC 2021d).

Compared with OECD countries, Australia is relatively restrictive with regard to FDI in agriculture (figure below), noting that the latest estimates for FDI restrictiveness predate the most recent changes to the FIRB screening framework. While New Zealand is rated as similarly restrictive, other advanced economies such as Canada, the United Kingdom, and the United States have much less restrictive regulations.



OECD FDI Restrictiveness Index for agriculture, 2020

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Recommendation 3.9 Addressing potential chilling effects of the Foreign Investment Review Framework

While the Australian Government should ensure its Foreign Investment Review Framework is fit for its purpose in addressing fraud and strategic risks, its design should be cognisant of the potential chilling effects on investment and subsequent costs to productivity. Application fees for proposed foreign direct investment (FDI) should not be used as a tax base.

More specifically, application fees for proposed FDI into agricultural land assets should be brought closer into line with other forms of investment, including by:

- applying indexation to the threshold investment value, as is done with most commercial investments
- adjusting the fee tiers so as to reduce the marginal rate fee as a proportion of the investment amount.

Migration and foreign investment

Over the past decade, the Australian Government has implemented specific visas for investors under the Business Innovation and Investment program. While migration policy could potentially be a barrier to investment at the margin (and indeed, similar visas have been implemented internationally) these visas are likely to have a negligible effect on the quantum of foreign investment.

For instance, Complying Investments from Significant Investor Visa holders between 2012 and 2020 amounted to \$11.745 billion (Department of Home Affairs 2021), but it is questionable as to what extent this represents new investment that would not have otherwise taken place. The Grattan Institute noted that:

... there is little evidence that Australia faces significant difficulties in attracting foreign investment for profitable activities. Australia is a medium-sized economy with a flexible exchange rate and relatively free capital mobility between Australia and the rest of the world. As such, Australia has little trouble attracting foreign investment. (Coates, Sherrell and Mackey 2021, p. 45)

Under the revised complying investment framework, people who hold Premium Investor Visas and Significant Investor Visas can still allocate much of their funds to listed equities and corporate and government bonds. The markets for these assets are highly liquid and deep, and attract significant offshore investment. As such, the Commission (2016b) has previously noted that, in the context of Australia's openness to foreign investment, it is doubtful whether Significant Investor Visa holders contribute any considerable amount of investment that is genuinely new to Australia.

Moreover, such investments are associated with the visa approval process, and there is no guarantee that granting permanent visas would result in ongoing investment from those migrants. Visa holders are typically required to hold investments for a prescribed duration in order to qualify for permanent residence. This means that, for any given area of investment targeted by the visa system, any new investment could be short-lived. In addition, it may provide poor incentives for efficient investment — anecdotal evidence suggests that some applicants consider their investments as simply a means of qualifying permanent residence, and may be less concerned about choosing investments on the basis of expected returns (Coates, Sherrell and Mackey 2021, pp. 46–47).

As noted previously by the Commission, the absolute quantum of additional investment associated with investor visas could still be material considerable *if* the number of visas were large. However, increasing the allocation of permanent visas to these streams would crowd out other forms of permanent migration, including skilled migration. As such, the use of such visas should be considered in the context of other potential impacts — particularly regarding any skills visa holders bring, and the overall fiscal implications of the program (discussed further in chapter 2 of volume 7).

3.5 Facilitating trade in services

As noted above, some of the gains from trade and investment are directly observable in the short-term — increased competition and innovation can improve market efficiency. Trade competition can also change how resources are allocated across the economy. Indeed, trade liberalisation has contributed to the formation of Australia's service-based and resource-exporting economy.

Trade in services will be increasingly important for Australia's productivity growth for two reasons: the majority of Australia's output (by value) lies in the services sector; and that global trade in services is likely to increase in scale (both in import and exports).

For governments, facilitating trade in services entails different complications than trade in goods. The former can take place remotely or within the consuming or producing country (box 3.7), giving rise to a range of potential roles for policy: one is to ensure open trade policy settings; another involves reform across the regulatory landscape in order to make trade in services more practical, and to make Australia a more attractive market for trade.

Box 3.7 – Types of trade in services

Mode 1: Cross border supply

This occurs when a service is supplied from one country to another, but only the service crosses the border (i.e. neither the supplier nor the consumer moves). Examples of cross border supply include: an Australian company contracting an Indian company to provide call centre services (service debit); an Australian company providing legal advice over the phone to a company overseas (service credit).

Mode 2: Consumption abroad

This mode of supply occurs when the consumer moves across a border to access services (i.e. the supplier does not move). Examples of consumption abroad include: an American tourist consuming travel services (accommodation, food and entertainment) while they are visiting Australia (service credit); an Australian who travels to the United Kingdom to complete a university degree (service debit).

Mode 3: Commercial presence

Commercial presence requires the service supplier to set up operations in another country to provide services there. In this mode only the supplier moves from their resident country, establishing an on-the-ground presence in the consumers' market as a foreign affiliate. Examples of commercial presence include: an Australian university establishing a campus in Asia (service credit); a Chinese hotel chain opening a resort within Australia (service debit). (Mode three is not included in ABS international trade in services statistics.)

Mode 4: Presence of natural persons

In mode four the services supplier moves temporarily from one country to another to deliver services. Examples of presence of natural persons include: an employee of an Australian software company flying to Fiji to deliver training (service credit); an architect from an UK-based firm working in New South Wales to provide consulting services for a new development in Sydney (service debit).

Source: ABS (2021).

How restrictive are current policy settings?

The OECD found that the global regulatory environment became more restrictive in 2020 across all services sectors covered by the Services Trade Restrictiveness Index (STRI), despite governments lowering barriers to digital trade in 2020.⁴⁵ While Australia has not been immune to this trend, Australia's regulatory landscape is less restrictive on trade in services than most comparable countries (box 3.8).

To this end, there has been mixed progress in terms of multilateral agreements on services trade. There has been little to no progress in establishing a Trade in Services Agreement (TiSA) and no new rounds of negotiations have taken place since 2016 (DFAT nd).⁴⁶ However, some progress has been made on digital services trade, mainly by including e-commerce provisions in 14 of Australia's trade agreements, as well as the Digital Economy agreement with Singapore.

Box 3.8 – The OECD Services Trade Restrictiveness Index

The OECD STRI collects information on services trade restrictions across 19 major services sectors. The project has two distinct but complementary instruments: a services trade regulatory database and a services trade restrictiveness index. These instruments provide a rich source of information for trade policy makers, trade negotiators and researchers, and an instrument for impact assessment of trade liberalisation. The STRI further allows individual countries to benchmark their services market regulations against the global best practice, identify outlier restrictions and current bottlenecks.

The regulatory database contains laws and regulations collected from 45 countries: the 36 OECD Member economies, Russia and key partners (Brazil, China, India, Indonesia, Malaysia and South Africa), as well as countries having accession discussions with the OECD. Based on the qualitative information in the database, composite indices quantify the identified restrictions across five standard policy categories, with values between zero and one. Complete openness to trade and investment gives a score of zero, while being completely closed to foreign services providers yields a score of one. Some factors considered in the STRI include:

- foreign equity restrictions (e.g. limits on foreign equity share)
- · statutory monopolies
- · duration of stay for temporary services suppliers
- public procurement practices
- · visa processing times
- · time, cost, and number of procedures required to register a company
- requirements for nationality for a full licence; or requirements to redo their training.

⁴⁵ The OECD's methodology for estimating regulatory restrictiveness to trade in services involves several simplifying assumptions and proxies. The qualitative assessment of each country is based largely on binary (yes/no) questions, with thresholds applied in some cases.

⁴⁶ Twenty-seven WTO members (including Australia, and representing 70% of global trade in services) initiated negotiations for the Trade in Services Agreement in March 2013 (DFAT nd; US Government nd). The Agreement was intended to reduce barriers to international trade in services (DFAT nd) and deal with modern trade concerns such as cross-border data flows (US Government nd).

Box 3.8 – The OECD Services Trade Restrictiveness Index

Index 1 = Maximum restriction 0.6 0.5 0.4 0.3 0.2 0.1 0 Austria Sweden Finland Switzerland Greece Poland Slovenia Mexico Türkiye Norway Canada Malaysia Viet Nam Iceland Belgium Russia **Czech Republic** Korea Singapore South Africe Estonia Hungary Brazi azakhstar Portuge ndonesia Australi Irelan Franc Netherlanc _atvi Lithuan Spai China (People Colomb Thailar United Kingdo New Zealaı Denma Costa Rid Germa -uxembou Slovak Repub United Stat STRI -Average Source: OECD (2023).

Australia is less restrictive than most comparable nations, 2021

A range of policy levers facilitate trade in services

The Australian Government outlined their interest in boosting services exports beyond education and tourism in the 2017 Foreign Policy White Paper. The Australian Government subsequently outlined the Services Exports Action Plan (SEAP), which aims to promote open trade in services, including through 'ease of movement of people, capital, services and data across borders' (DFAT 2021a) (box 3.9). While in some cases, the Australian Government can only address these barriers by representing Australia's interests in international fora (such as via the WTO and trade agreements), several aspects of the Australian regulatory environment are likely to contribute to the facilitation of service imports and the attractiveness of Australian service exports.

Box 3.9 – Australia's Services Exports Action Plan

The Department of Foreign Affairs and Trade (DFAT) were given \$1.5 million to 'develop an industry-led initiative to address barriers to Australia's services exports and boost our services competitiveness' (DFAT 2021a, p. 17). The plan identified five macro-level outcomes that reflect the interests of Australia's services sector:

- · free and open international trade in services
- · best practice systems and rules across Australia
- · world class skills and talent
- cutting edge and internationalised services in Australia
- information-driven policies and business strategies.

The action plan contains 72 recommendations, of which, the Australian Government has agreed to, agreed-in-principle or noted 64 and not agreed to 8.

What was not agreed in the Australian Government's initial response?

- Commission an independent review of Australia's skilled visa regime.
- Lift the restrictions on skilled migration to include people over the age of 50 to improve Australian services firms' access to qualified personnel. (Age limits only apply to permanent migration).
- The Australian Prudential Regulation Authority (APRA) should review prudential, licensing and capital requirements for Australian financial services exporters, with a view to ensuring regulatory arrangements do not unfairly prejudice the ability of these firms to establish an offshore commercial presence.
- The Australian Government should expand the Australian Securities and Investment Commission (ASIC) mandate, requiring it to consider the effect of decisions on the international competitiveness of Australian financial services firms offshore.
- Ensure Australia has ready access to the best tech talent. In addition to recommendation 5A, one option could be to expand the New Colombo Plan to facilitate technology-focused learning exchanges with the United.
- With input from the financial services sector, DFAT should review the extent to which information from Treasury, ASIC and APRA is captured in the FTA Portal, with a view to providing more comprehensive and consolidated information for financial services exporters.
- The Government should extend grant limits and raise the revenue threshold of the Export Markets Development Grant (EMDG) scheme to support established firms entre new and challenging markets overseas.
- Establish a regulatory sandbox that allows health services firms to offer low-risk health services and digital tools to controlled markets, providing an early market test for safety, efficacy, economics and enabling pre-market surveillance for regulators.

Source: DFAT (2021a).

The OECD's STRI provides a useful taxonomy of regulations that affect the relative openness of policy settings to services trade — many of which are discussed elsewhere in this report.

• Tax and compliance costs, including the costs associated with procedures required to register or unwind a company, are among several fundamental aspects of business regulation that have a direct influence on investment (chapter 2).

- Foreign equity restrictions apply in several countries, often involving caps on equity holdings for foreign nationals. As discussed above, the more prescient issues facing FDI inflows to Australia involve compliance and other costs at the border. Application fees in particular should be set with (tax) efficiency in mind.
- Occupational licensing is an important safeguard for quality of service in many occupations, particularly
 where information asymmetries can prevent consumers and clients from choosing appropriate suppliers,
 and particularly where health and safety risks are present. However, a misalignment of licensing regimes
 between Australia and other countries, or rigidities in licence recognition between jurisdictions, can
 prevent qualified suppliers from providing services within the Australian market (chapter 3 of volume 7).
- Temporary migration can make the delivery of services difficult in practice not only in terms of policy settings, but their administration. Services supplied via a commercial presence may require temporary migration. Decisions are likely to be affected by the allowed duration of stay for particular visas, as well as the processing times, compliance costs, and uncertainty associated with visa applications (discussed in chapter 2 of volume 7).

With regard to migration, the skilled worker visa subclasses are likely to be of particular relevance trade in services. However, trade in services may also benefit from the migration of entrepreneurs. This would include highly skilled workers who operate their own businesses — fulfilling supply contracts for Australian clients as opposed to being employed by Australian businesses. The differences between these types of suppliers is merely contractual, and should not result in different arrangements in the migration system.

The Commission has previously pointed out significant issues with the design of Significant and Premium Investor Visas. They do not effectively target forms of investment that are otherwise lacking, and are subject to relatively lax requirements compared with other permanent migration visas (potentially leading to poorer migration outcomes or fraud). There are good arguments for abolishing these visas as they currently stand. However, there would be value in devising new visas to better target entrepreneurs involved trade in services.



Recommendation 3.10

Prepare for increased global trade in services

In order to ensure the Australian economy is well-placed to benefit from the global increase in trade in services, Australian governments should reduce barriers to trade in services both 'at the border' and 'behind the border'. This will require consideration of not only trade policy (recommendations 3.7 and 3.8), but also tax settings (recommendation 3.4), occupational licensing (recommendations 7.9 to 7.12), foreign direct investment (recommendation 3.9), improved recognition of overseas qualifications (recommendations 7.7 and 7.8) and temporary migration settings (recommendation 7.5).

Abbreviations

ABS	Australian Bureau of Statistics
ACC	Allowance for corporate capital
ACCC	Australian Competition and Consumer Commission
ACE	Allowance for corporate equity
AGCNCO	Australian Government Competitive Neutrality Complaints Office
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ANZSIC	Australian and New Zealand Standard Industrial Classification
APRA	Australian Prudential Regulation Authority
ASIC	Australian Securities and Investment Commission
ΑΤΟ	Australian Taxation Office
BLADE	Business Longitudinal Analysis Data Environment
СВА	Cost-benefit analysis
CBIT	Comprehensive business income tax
COVID-19	Coronavirus disease (an infectious disease caused by the SARS-CoV-2 virus)
ERA	Effective rate of assistance
EU	European Union
EV	Electric vehicle
FDI	Foreign direct investment
FTA	Free trade agreement (also referred to as a preferential trade agreement)
GBE	government business enterprise
GDP	Gross Domestic Product
нні	Herfindahl-Hirschman Index
π	Information Technology
ІСТ	Information and Communication Technology
IPART	Independent Pricing and Regulatory Tribunal
MPAA	Major Projects Facilitation Agency
MPF	Major Project Facilitation
MPFA	Major Projects Approval Agency
NBN	National Broadband Network
NDIA	National Disability Insurance Agency
NDIS	National Disability Insurance Scheme

OECD	Organisation for Economic Co-operation and Development
PC	Productivity Commission
ΡΤΑ	Preferential trade agreement
RBA	Reserve Bank of Australia
SME	Small and medium enterprise
STRI	OECD Services Trade Restrictiveness Index
TSS	Temporary Skill Shortage
UK	United Kingdom
UN	United Nations
US	United States
ZLEV	Zero and low emission vehicles

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