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Assessing the risks from Australia's economic exposure to China

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Abstract

As Australia's economic exposure to China has grown, so too has the perception of risk this brings. In turn, this has led to calls for public policy to be used to cut the exposure. This paper begins by clarifying that exposure to China creates three distinct risks for Australia: a Chinese growth shock that comes with a 'hard landing'; a structural shift towards less import and natural resources-intensive Chinese growth, and the Chinese government disrupting trade ties for coercive purposes. With external demand for Australia's goods and services largely exogenous, the scope to mitigate these risks by reducing exposure to China without resorting to costly market intervention is limited. At the same time, a review of the available evidence finds that the probability and scale of each risk should not be overstated. Further undercutting the case for an intrusive public policy approach is that effective mitigation mechanisms exist for the Australian economy as a whole, as well as many businesses.

1. Introduction

In 2011, then-Governor of the Reserve Bank of Australia (RBA), Glenn Stevens quipped, 'The proverbial pet-shop galah can by now recite the facts on Australia's trade with China' (Stevens, 2011). At the time, Australia's exports to China stood at \$78.1 billion and accounted for 24.5 per cent of total exports, or 5.5 per cent of GDP. Since then trade ties have strengthened further with exports reaching \$160.3 billion in 2020, 36.7 per cent of total exports, or 8.1 per cent of GDP (Australian Government Department of Foreign Affairs and Trade (DFAT), 2021a; Australian Bureau of Statistics (ABS), 2021a).

At an industry level, exposure to China can appear even starker. In 2019, 44 per cent of Australia's wine exports by value went to China (Wine Australia, 2020), while in 2019-2020, China bought 82 per cent of Australia's iron ore exports (Australian Government Department of Industry, Innovation and Science (DIIS), 2021). In some sectors exposure to China is expected to grow significantly. In 2017-18, Chinese tourists spent \$12.0 billion in Australia, accounting for 27.1 per cent of total inbound tourist spending (Tourism Research Australia, 2019). By 2026-27 this is forecast to swell to \$34 billion, 35 per cent of the total (Tourism Research Australia, 2017).

This economic exposure to China has brought heightened perceptions of risk. According to public opinion polling performed by the Lowy Institute, in 2019, 74 per cent of respondents agreed with the statement that 'Australia is too economically dependent on China', while in 2020, 94 per cent supported Australian government policies 'to reduce our economic dependence on China' (Lowy Institute, 2021). The view that the Australian economy is 'too dependent' on China has also been espoused by a steady stream of commentators over the past decade. Yeates (2011) asked, '[O]ur economy hasn't been so dependent on one partner since Britain dominated trade and investment in the first half of last century. But when does a booming trade relationship become unhealthy dependence?'. In 2016, Peter Jennings, Executive Director of the Australian Strategic Policy Institute (ASPI) claimed that Australia had an 'unacceptably high level of economic dependence on trade with China' (Jennings, 2016). In 2018, Paul Dibb, Emeritus Professor of Strategic Studies at the

Australian National University (ANU) contended that '[w]e have become far too dependent on China for our economic wellbeing' (Dibb, 2018).

The risks that are assumed to flow from economic exposure to China have prompted calls for public policy to be used to cut this exposure. In 2018, ASPI's Jennings said that the federal government needed to explain to state governments, businesses and universities 'why there should be limits to building economic dependence on an authoritarian state' (Jennings, 2018). In 2020, he followed up by opining that, 'a view is hardening that economic dependence on the PRC [People's Republic of China] is dangerous and steps must be taken to reduce that dependence' (Jennings, 2020). Australian news reports have also cited unnamed intelligence sources urging the government to implement measures to reduce economic dependence on China (Earl, 2019). These calls find considerable support in the US. In a 2019 report, Charles Edel and John Lee of the United States Studies Centre said that the 'The United States would like Australia...to lessen its commercial dependence on China'. They described the status quo as a source of American 'frustration'. The authors themselves argued in favour of 'active diversification' (Edel and Lee, 2019). In 2021, Matt Pottinger, a former Trump administration Deputy National Security Advisor, wrote (Pottinger, 2021):

Americans, Europeans, and people the world over are now increasingly clear-eyed about Beijing's intentions... Elected leaders must now take the next step: applying their tough new line not just to Beijing but also to elite institutions in their own societies that need to join the fight against the CCP [Chinese Communist Party]. Because companies are economic actors, not political ones, it is the government's responsibility to establish guidelines for engaging with adversaries.

This paper begins by clarifying that economic exposure to China creates three distinct risks. It is then shown that with external demand for Australia's goods and services largely exogenous, the scope to mitigate these risks by reducing exposure to China without resorting to costly market intervention is limited. Finally, the paper reviews available evidence on the probability and scale of each risk before drawing implications for public policy.

2. Identifying the China risks

The first risk stemming from an economic exposure to China is the possibility that a growth shock in China comes with a 'hard landing', which might spill over to hurt Australia's own prospects. In 2018, Governor of the RBA, Philip Lowe remarked (Lowe, 2018):

Among the largest economic risks that Australia faces is something going wrong in China. And perhaps the single biggest risk to the Chinese economy at the moment lies in the financial sector and the big run-up in debt there over the past decade.

The same year, the *Australian Financial Review's* Jacob Greber wrote (Greber, 2018):

Never forget; if China goes down hard, there's a good chance Australia will too.

The nature of this risk is not unique to the Australia-China economic relationship. Crosby and Bodman (2005) observed that it has been commonplace in Australia since the 1970s to hear the expression, 'When the US sneezes, Australia catches a cold'. The rise of China as a trading partner means that Australia may now be vulnerable to catching a cold from developments both in the US and China.

Yet in contemporary discussion concerns about economic exposure are expressed far more frequently with respect to China than the US. This reflects two further risks that are more China-specific in nature.

Unlike a mature US economy, China's economy is not only growing rapidly but also undergoing large-scale structural change. In particular, China's 'new normal' on the expenditure side of its economy sees consumption taking on a more prominent role compared with investment. This structural shift may negatively impact China's demand for Australia's natural resources. In 2014, Andrew Charlton, a senior economic advisor to former Prime Minister Kevin Rudd, contended (Charlton, 2014):

The one thing everyone agrees on – including the Chinese themselves – is that the investment-led growth model

cannot continue. This is the critical point for Australia. Whichever path China takes, the resources-intensive investment boom will slow down, with consequences for our exports.

In similar vein, Ross Garnaut, a former Australian ambassador to China and Professor of Economics at the University of Melbourne warned that, 'Australia's resources boom was a China boom' but this was set to unwind because '[China's] [d]emand for steel and therefore iron ore and coking coal is concentrated overwhelmingly in investment rather than consumption' (Garnaut, 2015).

The third risk reflects a fear that economic exposure provides China with leverage to exert coercive pressure. In 2014, former US Secretary of State, Hillary Clinton said of Australia's extensive trade ties with China (McGeough, 2014):

It's a mistake whether you're a country, or a company or an individual to put...all your eggs in the one basket.

[This] makes you dependent, to an extent that can undermine your freedom of movement and your sovereignty, economic and political.

In 2016, ASPI's Jennings warned that (Barrett and Wong, 2016):

We've never had a greater dependency with any country...The risk that creates for us is if Beijing wants to adopt politically coercive policies, it's in a fairly strong position to do so with us because of that level of trade dependence.

In 2017, Rory Medcalf, Director of the National Security College at the Australian National University (ANU) said that the reason Australia needs to worry about China is that unlike democratic countries such as the US, China 'tends to link its commercial and political demands on other countries' (Medcalf, 2017). In 2018, Peter Hartcher, political and international editor for *The Sydney Morning Herald*, made a similar assertion (Hartcher 2018):

China wields its trade as a political weapon, as nations including South Korea, Norway, Japan and the Philippines have all

discovered painfully. Whenever a foreign country celebrates a trade breakthrough into the Chinese market, the Chinese government celebrates the creation of a future point of political leverage.

3. Interrogating cutting economic exposure to China

With economic exposure to China creating three distinct risks, the question that follows is whether these risks can be mitigated by reducing this exposure, while simultaneously increasing it elsewhere? In response to Hillary Clinton's warning that Australia should not put all of its eggs in the China basket, then-Communications Minister, Malcolm Turnbull observed (Turnbull, 2014):

I'm sure that we'd love to export vast quantities of iron ore to the United States but they've never shown any enthusiasm in buying them.

This gets at an essential point: the reason Australia trades with China reflects the fundamental economic complementarities between the two countries – in straightforward terms, China wants what Australia produces – as well as the fact that China has the purchasing power to pay the prevailing market prices for these goods and services. This basic economic equation does not exist to the same extent between Australia and elsewhere.

This is not to argue that greater trade diversification is not desirable or that it should not be pursued. Rather, it is to emphasise that economic exposure is driven first and foremost by businesses and households interacting in markets, not politicians or bureaucrats located in capitals. Since 2012, official Australian government documents have emphasised that the focus for foreign policy is the 'Indo-Pacific' region. In strategic terms, this encompasses major powers such as India, Indonesia, China, Japan and the United States — a multipolar region that is resistant to the emergence of a new and potentially unfavourable hegemon. There is an economic dimension too, with aspirations of more diversified trade. The Australian government has actively sought to promote this outcome

through multilateral trade agreements such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Regional Comprehensive Economic Partnership (RCEP), as well as bilateral Free Trade Agreements (FTA) with Korea, Japan and Indonesia. FTA's with the UK and the EU are in pipeline. Efforts to forge an FTA with India have been unsuccessful to date but the Australian government commissioned a report by former Department of Foreign Affairs and Trade (DFAT) Secretary, Peter Varghese, to guide deeper, long-term economic engagement. Varghese (2018) argues that, 'A strong economic relationship with India strengthens Australia's economic resilience'. This is because 'India – a large and young population – adds balance and spreads risk in Australia's economic relationships' (Varghese, 2018). His report set out an ambitious target to triple Australia's exports to India from \$14.9 billion to \$45 billion by 2035 (measured in today's dollars).

Yet the primacy of markets and the fact that demand for Australian exports are driven by exogenous forces are plainly evident in trade data. In 2012, China accounted for 24.4 per cent of Australia's exports. This compared with 35.5 percent to the rest of Asia, 4.9 percent to the US and 4.7 percent to India. Yet by 2020, despite a host of government-led diversification initiatives during the intervening years, China's share had increased to 36.7 per cent, while the share of the rest of Asia fell to 30.5 percent and India's to 3.9 per cent. The US share increased modestly to 6.3 percent (DFAT, 2021a).

Future efforts to promote greater trade diversification will run up against the same market forces that have determined the pattern of Australia's trade to date. These could drive Australia's exposure to China down, as Charlton (2014) and Garnaut (2015) flag. But this does not require market intervention to bring about, and nor is it guaranteed. For example, while touting the potential of the India market, Varghese (2018) also recognises that, 'India's economy will be big but not as big as China's (which is currently five times its size). China's economy would have to crash and India's grow at over 10 per cent a year for several decades for India to catch up. Neither is likely'. While achieving the target of tripling exports to India and reaching \$45 billion by 2035 would be impressive in a bilateral context, it still lags far

behind the \$160.3 billion that China bought last year. The Australian government's Foreign Policy Whitepaper released in 2017 included the baseline projection that China's economy would double in size by 2030. In purchasing power parity terms, China's economy is expected to swell by \$21 trillion. By way of comparison, this is greater than the new purchasing power expected to be added in the US, Japan, India and Indonesia combined (DFAT, 2017).

What this means is that the only way the Australian government could decisively bring about a reduction in economic exposure to China is by intervening in markets to disrupt bilateral trade, such as through the use of quotas, tariffs or outright bans, despite Australian and Chinese companies and households regarding these exchanges as being mutually beneficial. This means that public policy used in this way would come at a guaranteed cost. In singling China out, it would also be inconsistent with the global trade rules that Australia regularly reiterates its support for and relies upon to protect its interests. Another, less direct, option would be for the government to try to influence the risk assessments formed by businesses, which they then apply to their China engagement. Still, whether talking up the risk in trade ties with China will have an impact on businesses decision-making depends as much, if not more so, on actions by the Chinese government. That is, the key driver is again exogenous.

With the scope for mitigating risk by reducing exposure to China limited, at least in a way that does not bring about significant self-inflicted costs, what remains is to explore the probability that a given China risk will materialise and the scale of the impact on the Australian economy should it do so.

4. If China sneezes, will Australia catch a cold?

The sustainability of Chinese economic growth has long been questioned (Chang, 2001; Lee, 2007). In recent years these fears have centred on domestic vulnerabilities such as rising indebtedness and external challenges such as the fallout from the US-China trade war.

Nonetheless, the current consensus forecast remains that robust Chinese growth will continue into the medium term. In May 2021 the Australian Treasury (2021) outlined its expectation that Chinese GDP growth would average 6.4 per cent between 2021-23. This assessment is corroborated by peak international economic institutions. The latest numbers from the World Bank (2021) see China growing at an average annual rate of 6.4 per cent out to 2023, compared with an advanced economy average of 3.9 per cent. Similarly, the International Monetary Fund (IMF) (2021a) expects Chinese growth to average 6.9 per cent in 2021-22, compared with 5.0 per cent for advanced economies, and Chinese growth being maintained at an average 6.0 per cent between 2021-2025 (IMF, 2020). Of course, there is always the possibility of these forecasts being derailed. Modelling by Tyers and Zhou (2019), for example, points to significant growth costs for China if the trade dispute with the US worsens.

Assessing the impact of a hypothetical Chinese growth shock on Australia is the job of economic modelling and in recent years several such efforts have been produced that draw on a range of methodologies.

The exercise yielding the most concerning results is Deloitte (2017). This is a large-scale structural equation model similar in construction to the TRYM model used by the Australian Treasury. The specific shock modelled was Chinese GDP growth slowing sharply from 6.5 per cent to less than three per cent over a 12-18 month period, followed by a gradual recovery thereafter. The impact was Australia's national income being seven per cent, or \$140 billion, lower in 2019. At that time there would be 550,000 fewer jobs than would otherwise have been the case. In the long run Australia's economy would be two per cent smaller than had the Chinese shock not occurred.

Various other studies, however, have produced more sanguine results.

Cashin, et al. (2016) used a global vector autoregression model (GVAR) to explore the impact of a one per cent decline in Chinese GDP over a one year (short run) time horizon. GVARs are data-driven models, dynamic in nature, include multiple linkages (such as trade and financial links) and summarise both the direct and indirect impacts of a shock. The results suggested that a one per

cent decline in China's GDP would cause Australia's GDP to decline by around 0.1 per cent. Recall that Australia's trend rate of GDP growth is around 2.5-3 per cent. This suggests the impact of a Chinese 'hard landing' would be negative and material but far from causing a certain recession. Cashin, et al. (2016) also puts the impact on Australia in a comparative context. Contrary to the perception that Australia's economy is unusually exposed to developments in China, the Australian response is found to be in line with that recorded in the US, slightly smaller than in Japan and Korea, and much smaller than in the ASEAN-5. However, a caveat attached to these findings is that a VAR-based analysis may struggle to project the impact of a major and sudden disruption in Chinese growth given that no such historical shock has occurred.

Dizoli, et al. (2016) uses the IMF's Flexible System of Global Models, a multi-region, general equilibrium model of the global economy, to consider the impact of a sharp slowdown in China sparked by an adverse event in the financial sector. A multi-region analysis adds value in that as Tyers (2016) shows, a Chinese growth shock would have complicated effects both in China and abroad, cutting across wages, the cost of living, interest rates and other variables. Dizoli, et al. (2016) assumed that asset prices such as equities and real estate fall by 10 per cent in the first year, while the corporate risk premium increases by 150 basis points. In response, China's GDP falls by 1.6 per cent below baseline. The impact on Australia is found to be that as China's GDP falls by one per cent, Australia's GDP falls by 0.2 per cent. Therefore, Dizoli, et al (2016) points to the negative impact on Australia being around double that of Cashin, et al. (2016) but still considerably short of a recession. Dizoli, et al (2016) also finds that the impact on Australia would be higher than in the US, in line with that experienced by Japan and lower than in Korea.

Inoue, et al. (2018) also use a GVAR to examine the impact of a one percentage point drop in Chinese GDP growth on various countries, including Australia. Both short and long run outcomes are presented. The conclusion is that Australia's GDP growth rate would fall by 0.06 percentage points in the short run, moderating to 0.045 percentage points over time. Therefore, similar to Cashin, et al. (2016) and Dizoli, et al. (2016), this suggests that even if the magnitude of the negative Chinese

shock was significantly larger, the impact on the Australian economy would be manageable. Also chiming with Cashin, et al. (2016) is the finding that the impact on Australia would not be unusually large relative to other high-income countries such as the US, EU, Japan and Korea.

Another paper to take a VAR approach is Groenewald (2018). This study concluded that a permanent three percentage point fall in Chinese GDP growth from 10 per cent to seven per cent would reduce Australia's GDP growth rate by between 0.15 – 0.24 percentage points in the short run and 0.42 – 0.57 percentage points in the long run. Once again, the impact is found to be material but not recession-inducing. Groenewald (2018) summarises: 'While not trivial, given Australia's current growth rate, these estimates are hardly enough to justify prophecies of doom'.

Karam and Muir (2018) draws on the IMF's multi-region dynamic stochastic general equilibrium (DSGE) model of the global economy. DSGE models have strong connections to macroeconomic theory in that they model dynamics based on optimising behaviour by businesses and consumers. Karam and Muir (2018) present results flowing from a Chinese shock not only for Australian GDP but also for other key variables such as the real exchange rate and consumption. This makes the findings less of a 'black box' compared with other previous studies. The negative shock considered is described as a Chinese 'disorderly rebalancing' scenario that manifests itself as a two per cent lower-than-expected productivity growth path in the first year (the short run impact), followed by a one per cent lower-than-expected productivity path in the subsequent three years. This means China's real GDP is five per cent below baseline in the longer term. In conjunction with this adverse productivity shock, household wealth takes a 10 per cent hit and corporate risk premiums rise. This registers as a further two per cent fall in real GDP from the baseline scenario in the short run, taking the total short run impact to four per cent. In the long run, the impact of the 'disorderly rebalancing' is real GDP in China being 10 per cent lower than would otherwise be the case.

The impact on Australia is complicated. As expected, in the short run real GDP falls relative to the baseline scenario. This is in the order of 0.4 per cent. Australia's exports of commodities fall,

and services exports to China are also reduced. However, the GDP outlook improves moving into the medium term owing to a depreciation in Australia's real effective exchange rate, making Australia's exports more competitive on global markets; exports of final and intermediate goods, as well as services, to all countries increase. The medium and longer term impact on Australia's GDP is, in fact, positive relative to baseline by around 0.4 per cent. The qualification is that consumption in Australia falls by between two to three per cent in both the short and long run owing to the higher cost of imported goods and services as a result of the weaker exchange rate.

In June 2019 the RBA released its own estimates of the implications of a Chinese growth shock using its new macroeconomic model of the Australian economy (Guttman, et al, 2019). Chinese GDP growth was cut from around six per cent to two per cent. It then considered three scenarios. The most dramatic of these supplemented the GDP growth shock with other elements of a disorderly downturn in China and ruled out an Australian policy response. This found that Australia's GDP would be 2.5 per cent lower relative to baseline after three years. This translates to an annual growth rate of around 1.9 per cent versus a baseline 2.75 per cent. Another scenario allowed for an Australian monetary policy response and the exchange rate to depreciate. Both could reasonably be expected were such a shock from China to eventuate. The impact in this case was that Australia's GDP would be just 0.3 per cent less than baseline after three years, cutting around 0.1 percentage points from the annual growth rate.

To summarise the economic modelling results: all studies are unanimous in their conclusion that in the non-consensus but plausible event of a Chinese 'hard landing' the short run impact on the Australian economy would be negative and material. However, in terms of the magnitude of this negative impact, there is more to suggest that Australia would avoid a recession rather than succumb to one.

The weight of these findings may be explained by several factors. One is identified by Karam and Muir (2018) and Guttman, et al (2019), namely, the exchange rate performs its mitigation role as a 'shock absorber' for the Australian economy. Another explanation stems from the observation

that while China is by far Australia's largest overseas customer, the economy as a whole is far more reliant on domestic demand. For example, in 2020 domestic final demand comprising of household and government consumption and private and public sector investment totalled \$1.9 trillion (ABS, 2021), more than 11 times the value of exports to China. Australian Trade and Investment Commission (2015) also reported that Australia's overall export dependence did not stand out as being high in an international context. A third explanation relates to the channels through which a shock in one country spills over to have an impact in Australia. Australian economic outcomes have long been influenced by developments in the US despite the value of Australia's exports to the US being modest. This owes to the importance of investment linkages. In 2020, the two-way stock of investment between Australia and the US stood at \$1.8 trillion. In contrast, Australia's two-way stock of investment with China was just \$143 billion (ABS, 2021b).

5. Will consumption-driven growth in China hurt Australia's exports?

In 2010 consumption accounted for 49.3 per cent of China's GDP. By 2020 this had risen to 54.3 per cent (CEIC database). Yet any negative impact on Australia's mining and energy exports has largely failed to materialise, at least not yet. This is for several reasons.

First, while Garnaut (2015) forecast that China's steel production would fall to around 600 million tonnes by 2030 (down from more than 800 million tonnes in 2014) and that 'much of the shrinkage will happen early', as of year-end 2020 this had not occurred (Table 1). In fact, China's steel production has expanded. This outcome is not entirely surprising: Australia's resources companies themselves have consistently maintained the view that China's steel demand would not plummet. In 2018, BHP was continuing to forecast 'slow, but sustainable growth' in China's steel consumption through the mid-2020s (Stinger and Ingles, 2018). Some previous research that models China's steel demand based on fundamental drivers such as the rate of urbanisation and extent of automobile penetration also concludes that a peak will not be reached until the mid-2020s (Mackay, et al.,

2010). As economic pressures on China have arisen, stemming from events such as the trade dispute with the US, the Chinese authorities have also tended to reach for resources-intensive stimulus packages focused on infrastructure and construction, keeping global iron ore prices at higher levels than would otherwise have been the case (Weinland and Ju, 2019).

Second, Australian iron ore exports have been able to displace some of the domestic Chinese iron ore that had previously fed the country's steel mills (Table 1).

Third, as a broad category, Australia's minerals and fuels exports to China have received a boost from other structural changes in China. These include an increased emphasis on environmental outcomes that has seen growing Chinese demand for relatively clean energy sources such as Australian Liquefied Natural Gas (LNG). China's emergence as a hub for electric vehicle production has also boosted Chinese interest in other Australian minerals exports such as lithium (The Economist, 2017) (Table 2).

Finally, more consumption-driven growth in China has supported demand for Australia's non-minerals and fuels exports, such as agriculture, forestry and fisheries goods, as well as services (Table 2).

That said, an argument could still be made that China's shift to an economy driven by consumption is only in its early stages, and whether the value of Australia's exports can continue to hold up if the shift proceeds more rapidly is an open question.

A recent study that sheds light on the impact on Australia of a more pronounced shift in the structure of China's economy is Ma, et al. (2017). The authors use Chinese and international input-output tables to model the implications of Chinese structural change. Input-output tables depict inter-industry relationships within an economy and show how changes in one sector might spill over to others. Ma, et al. (2017) begin by confirming that Chinese consumption has a significantly lower import intensity than Chinese gross capital formation. They then consider an overnight, 15 percentage point rotation in Chinese domestic expenditure from gross capital formation to consumption using 2011 GDP shares as the baseline. In other words, while the

Table 1. China's steel and iron ore production and imports (million tonnes)

Year	China's iron ore production	China's crude steel production	China's iron ore imports from Australia
2010	357.0	638.7	265.5
2015	123.5	803.8	607.6
2019	241.3	995.4	664.6
2020	n/a	1064.8	713.0

Source: World Steel Association (2020); World Steel Association (2021); CEIC Database.

Note: China's iron ore production is converted to correspond with world average Fe content.

size of China's economy is assumed to remain constant, the consumption share of GDP rises from around 50 per cent to 65 per cent of GDP, while the gross capital formation share falls from 48 to 33 per cent. As expected, the overall impact on Australia is found to be negative with the costs largely borne by the mining sector; in contrast, agriculture, forestry and fishing, food and beverage manufacturing and education and tourism services receive a boost. However, while the net impact is negative, its scale is put at only around 0.3 per cent of Australia's gross value-added, or GDP. Recall that Australia's trend rate of GDP growth is around 2.5-3 per cent. Recall also that what is being modelled is a large and immediate change in the structure of China's economy. In practice, this change will occur more gradually (even if at a faster rate than in recent years) and China's economy will also continue to expand. This growth will lead to increased demand for imports. The latest forecasts from the IMF (2021b) are that the volume of China's imports will rise by 35 per cent over the period 2020-2026. Another potentially instructive finding of Ma, et al. (2017) is that the overall negative impact of a shift in the structure of Chinese expenditure in favour of consumption

on Australia's economy is in the middle of the pack internationally. This again qualifies the claim that Australia's economy is exposed to an unusually high level of risk stemming from trade with China.

Dizoli, et al. (2016), cited in the previous section, also undertook a modelling scenario relevant to the international spillovers of structural changes in China's economy in favour of consumption. The authors considered a situation in which public investment as a share of Chinese GDP declined by 1.5 per cent in each year over a five year period. The saved resources were transferred to households, leading to a commensurate increase in consumption. China's GDP declined relative to baseline, with the magnitude of the spillover being that a one per cent decline in China's GDP would lead to a 0.11 per cent decline in GDP in Australia. Once again, the elasticity of the Australian response is shown to be non-trivial but modest.

Table 2. Components of Australia's exports to China (\$A billions)

Year	Minerals and fuels	Agriculture, forestry and fisheries	Services
2010	47.0	4.6	6.5
2015	53.1	11.0	11.0
2019	118.1	16.8	19.3
2020	123.4	13.4	12.4

Source: DFAT (2021a,b)

6. Will geopolitical disputes with China strike Australia's exports?

In 2020, Australia's exports to China accounted for 8.1 per cent of Australia's GDP. China's exports to Australia amount to just 0.4 per cent of China's GDP. Political economist Albert Hirschman popularised the idea that such asymmetric trade dependence can give rise to coercive leverage in the event of geopolitical disputes (Hirschman, 1945):

The influence which country A acquires in country B by foreign trade depends in the first place upon the total gain which B derives from that trade; the total gain from trade for any country is indeed nothing but another expression for the total impoverishment which would be inflicted upon it by a stoppage of trade.

Yet the theoretical foundations underpinning such an argument have been challenged, including by Hirschman himself in later work (e.g., Hirschman, 1978). Wagner (1988) begins a critique with the observation that the distribution of the gains from trade are determined by bargaining, not ultimatum. The outcome of bargaining is summarised in the terms of trade: no country is ever in the business of trading on terms weaker than market forces permit. For example, in the late 2000s, Australia was already highly dependent on China as a market for iron ore, but owing to China's booming demand and constraints on global supply, the price of iron ore tilted the gains from this trade firmly in Australia's favour. China has remained the predominant market for Australian iron ore. However, between 2014-2018, China's demand grew at a slower rate and global supply increased. This eroded Australia's bargaining position and the falling price of iron ore shifted the gains from trade more in China's direction. Since 2020, Australia's position has again been strengthened. The point is that the distribution of the gains from trade reflect the outcome of bargaining in light of the economic realities on the ground.

Against this backdrop, might China threaten to curtail trade – that is, deprive Australia of the gains from trade - in a bid to coerce Australia to modify its political positions? Given that issues such as

asymmetric trade dependence have already been factored into the distribution of the gains from trade, Wagner argues that making such a political demand would inject a new element into the bargaining process. If China were to demand a political concession from Australia, this would reduce the utility that Australia derives from its trade with China. If Australia's utility from trade with China falls, the logical consequence is a shift in relative bargaining power, but in Australia's favour. Wagner (1988) concludes:

Bargainer 1 [e.g., China] must therefore decide whether he prefers less money and Bargainer 2's [e.g., Australia] political support, or more money without his political support. If he [China] prefers the former then he will want to make this demand, but otherwise he will not.

Further, even if China did make such a demand, Australia would still have no incentive to acquiesce unless it were compensated for doing so. If such a deal were struck in which China gave Australia additional bargaining gains from trade in exchange for Australia giving China political concessions, then Wagner (1988) surmises:

Because both would be made better off by such a trade, neither could be said to have been coerced.

Such theoretical insights are potentially illuminating because they help to explain why despite the political relationship between Australia and China deteriorating sharply since 2017 (Zhou and Laurenceson, 2021), and frequent claims that China has a predilection for pursuing economic coercion, pinning down actual incidents has proven harder. While Medcalf (2017) asserted that China 'tends to link its commercial and political demands on other countries', he also conceded that despite Canberra having on occasion 'seriously annoyed' Beijing, it 'hadn't directed economic pressure specifically at Australia'. This largely remained the case through to the end of 2019 (Laurenceson, et al., 2020).

It is also a relevant point of context that a liberal democratic US regularly engages in economic coercion too, qualifying the extent to which any Chinese coercive pressure stems from the nature of

its political system rather than its status as a great power. An April 2019 report by the Washington-based Center for New American Security highlighted that ‘Coercive economic measures have been a longstanding tool of American foreign policy, dating back to the early 19th century’ and in recent years these have become ‘increasingly important’ (Harrell and Rosenberg, 2019). Since 2018, China has been a particular focus of US coercive pressure. This has included measures judged inconsistent with global trade rules (Baschuk, 2020).

China’s reluctance to target Australia with coercive pressure ended in 2020. By the end of last year, access to the Chinese market was disrupted or blocked entirely for around a dozen Australian exports. Yet big ticket export items like iron ore continued to be traded as before – not surprising given China’s own economic self-interest. In 2020, China faced a global market in which Australia accounted for 53 per cent of global, seaborne iron ore supply (DIIS, 2021). Owing to an upswing in global iron prices, even as multiple Australian exports were being disrupted the overall value of Australia’s goods exports to China in the first half of 2021 was 37 per cent higher than the previous record set in 2019 (Glasgow, 2021).

Aside from China having a dependence on Australia for items like iron ore, there are a number of other factors that act to restrain China’s willingness to use coercion and Australia’s willingness to acquiesce if it does.

For starters, there is the bargaining reality outlined by Wagner (1988). It is true that by not acquiescing to coercive pressure from China, Australia faces a potential cost from disrupted trade. But by acquiescing Australia faces a certain cost from shifting its political positions in ways it considers not to be in the national interest. Acquiescing also does not prevent repeated demands in the future. In other words, the bargaining reality means there is a strong, in-built incentive for Australia not to acquiesce. Since China began to target Australia in 2020, public attitudes towards China have soured rapidly and support for the Australian government maintaining its political positions has strengthened. Lobbying pressure from affected businesses has been limited too (Power, 2020). In

other words, the cost to the Australian government of acquiescing has increased.

Next, Australian targets of coercion have access to mitigation mechanisms that reduce the costs incurred. Laurenceson and Pantle (2021) show that for nine of the 12 Australian goods hit with disruption by China since 2020, a guide to the costs incurred by businesses is less than 10 percent of total export value. Some of the industries that had the largest exposure to China, such as barley and cotton, subsequently incurred the lowest cost when the China market was closed. The most valuable mitigation mechanism for businesses has been ready access to global markets. When the Chinese government closed its market to Australian goods, Chinese importers had to connect with alternative suppliers. This, in turn, created opportunities for Australian exporters in the markets these suppliers previously serviced.

At a national level, mitigation measures can also be pursued even while maintaining exposure to China. Reilly (2012) remarked that:

Australia has responded to deepening economic dependence upon China with classic balancing strategy: strengthening security ties with its Asian neighbours and the United States while bolstering its military capacity...

The efficiency of responding to an economic risk with balancing in the security realm is arguable. But the basic proposition is that China’s economic rise presents Australia with opportunities through trade but potential security risks if China converts this economic power to military power and uses it in a way that is contrary to Australian interests. Maintaining economic exposure allows for the opportunities to be seized, while building military coalitions helps to mitigate the security risks. Other available national-level mitigation mechanisms include ‘self-insuring’ through the Future Fund maintained by the Department of Finance. What is notable, however, is the limited scale of contributions made to the fund even as a booming iron ore price since 2020 delivered billions into Australian Treasury coffers (Australian Government Department of Finance, 2021). This represented a missed opportunity to further enhance Australia’s capacity to absorb shocks

whether these be in the form of economic coercion from China or otherwise. Yet another mitigation option is public investment to diversify Australia's industrial base. In 2020, iron ore accounted for one-third of Australia's goods exports and China accounted for 68 per cent of global seaborne iron ore imports (DISS, 2021). These numbers make plain that if mining remains the biggest sector of the Australian economy by value, and iron ore maintains its prominent place in Australia's goods export basket, China will inevitably be a principal market destination.

It is also worth noting that the Australian case in successfully resisting coercive pressure applied by China is not unique. Goh (2016), for example, shows that China's success in translating economic ties into political influence has been limited even amongst its closest and weakest neighbours.

Finally, in his original work, Hirschman (1945) foreshadowed the construction of an international mitigation mechanism to constrain the ability of larger countries to wield economic power over smaller ones:

...the exclusive power to organize, regulate, and interfere with trade must be taken away from the hands of single nations. It must be transferred to an international authority able to exercise this power as a sanction against an aggressor nation.

An international body to set and enforce trade rules was manifest in the formation of the General Agreement on Tariffs and Trade in 1948, and subsequently, the WTO in 1995. Productivity Commission (2017) reports that in the case of China's dispute with Japan over rare earth metal trade in 2010, Japan, the US and EU took action against China in the WTO and China 'accepted the ruling against it'. When Korea faced economic coercion from China in 2017, it immediately notified the WTO that China's actions may be in violation of its trade agreements (Reuters, 2017). Such recourse to the WTO raises reputational costs for China even before any legal process begins. Reich (2017) found that after having been a member of the WTO for nearly two decades, China has yet to be found in continued violation of a ruling against it. Australia has already begun WTO proceedings against China for two of the

goods recently disrupted (Sullivan, 2021). WTO rules are incomplete and receiving a judgement is a technically demanding and time-consuming endeavour. Nonetheless, it serves to strengthen the hand of smaller, target countries.

7. Conclusion

Deepening trade ties and growing economic exposure have raised concerns that Australia's economy may have become 'too dependent' on China, creating risks. This paper began by identifying three distinct risks. These include the risk of a growth shock spilling over to have negative consequences in Australia, the shift in China's growth model in favour of consumption, reducing demand for Australia's natural resources and the Chinese government using economic links to apply coercive pressure on Australia in an attempt to shift its political positions.

With external demand for Australian goods and services largely exogenous, the scope to mitigate these risks by reducing exposure to China is limited, at least not without incurring significant self-inflicted costs. This then prompted a consideration of the probability that a given China risk would materialise, as well as an assessment of the impact on Australia should it do so.

A Chinese 'hard landing' remains a non-consensus forecast. Both Australian and international institutions expect China to continue to grow robustly into the medium term. In the event that a Chinese 'hard landing' does occur, economic modelling is unanimous in its conclusion that in the short run the impact on Australia will be material and negative. However, the weight of evidence also suggests that Australia will not be pushed into recession. In the medium and long term, 'shock absorbers' in Australia's economy such as a flexible exchange rate will mitigate the blow. Other factors also work in Australia's favour, including the predominance of domestic demand and the modest investment links between Australia and China that might otherwise also transmit a shock between the two countries. Modelling further suggests that the scale of impact on Australia of a 'hard landing' in China will be no more material than in many other high-income countries.

The impact of the shift in China's growth model towards consumption has been far from negative for Australia's exports to date. That said, there remains the possibility that a more consumption-driven Chinese economy could curtail demand for goods such as iron ore in the future. Modelling confirms that Chinese consumption is less import and resources-intensive than Chinese investment. At the same time, it also points to the scale of the negative impact from structural change in China on Australia's exports being modest. Meanwhile, amidst undergoing structural change, China's economy will also continue to expand, boosting imports. As with a 'hand landing' scenario, modelling finds that the impact on Australia of structural change in China is no more significant than for other high-income countries.

It is perhaps the coercive risk that has been most acutely highlighted in Australian commentary in recent years. Since 2020, this risk has been a reality with around a dozen Australian exports hit with disruption. Yet big ticket items mostly continue to flow as before owing to China's own economic self-interest, and ready access to global markets meant that many of the Australian businesses no longer able to access the Chinese market were able to successfully mitigate the impact by diverting sales elsewhere. Numerous national-level mitigation mechanisms are also available to the Australian government if it chooses to use them.

Trade by definition is mutually beneficial. The fact that two-way trade between Australia and China now amounts to \$246.3 billion – 3.4 times that with the US in second place - implies that these benefits are large. While Australia's exposure to China also entails risks, the available evidence reviewed in this paper suggests that the probability and scale of each of these risks should not be overstated. Given that the Australian economy as a whole, as well as many businesses, already have access to effective mitigation mechanisms, the link between exposure and risk is weaker than commonly assumed. And since market intervention is not cost-free, the case for using intrusive public policy to reduce exposure to China is also more dubious than much conventional wisdom suggests.

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Notes

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