Future Ready? Australia and international trade in the post-pandemic global economy

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Introduction

Thank you for inviting me to speak today on the important topic of international trade.

As some of you may know, the Commission has had a long history of engagement with and analysis of trade issues. The Commission was created as an independent authority by an Act of Parliament in 1998, replacing the Industry Commission, Bureau of Industry Economics and the Economic Planning Advisory Commission.

But the birth of the Commission can be traced back even earlier, to the Industries Assistance Commission in 1974, which itself replaced the Australian Tariff Board that was set up in 1921. The Commission's independence, transparency and economy-wide focus means that we are very well placed to examine and assess trade and related policies.

Today I will discuss some recent global developments as well as some recent trends in Australia's trade and investment position. I will also discuss some of the trade-related policy challenges that Australia faces as a small open economy. Along the way I will discuss some recent work that the Commission has undertaken in these areas. I will also mention some ongoing and forthcoming work.

Trade as Technology: The Fable of James Ingram

Fables are a powerful way of illustrating economic ideas. I would like to frame my remarks today around two economic fables. At the Commission we know that innovation and new technologies are key determinants of productivity growth. Thus I will begin with a fable about trade and technology.

It is due to James Ingram, from his 1970 book *International Economic Problems*. I first read about it in Steve Landsburg's book *Fair Play*. The tale begins with a mysterious entrepreneur, let's call her Miss X, who invents an incredible new technology. The technology turns wheat into cars.

Miss X's invention is hailed by all as completely revolutionising the automobile production process. She builds a massive factory near the sea. And the technology works incredibly well. Wheat goes in, cars come out. But the factory has very tight security and the production process is kept totally secret.

Consumers love Miss X's new technology – the cars are cheaper and better than many on the market. And local wheat farmers are thrilled at the new demand for their product, as orders for thousands of tonnes of their crop are placed.

One day, an investigative reporter manages to breach security and enter the secretive factory. And the journalist makes a shocking discovery. The factory is totally empty. There is no machinery or equipment. There is, in fact, no magic invention that produces cars from wheat.

The journalist discovers that the back wall of the factory opens onto a shipping dock. Wheat comes into the front of the factory and is put on a boat for exporting to foreign countries. And separately, cars come into the dock on boat from overseas, and move out the front of the factory.

Miss X's innovative "discovery" was international trade.

The story is apposite to several public policy themes that I will touch upon today. The fable underscores the fact that in a very concrete sense, international trade – and more generally, market exchange - can be regarded as just another way of "transforming" some goods and services into others. Viewed in this way, the ability to trade with others is akin to having access to a very special kind of technology.

Going a bit further, as Arnold Harberger has famously pointed out, the other side of a productivity improvement is a real cost reduction, with widespread benefits. In Ingram's fable, Miss X had discovered a real cost reduction for cars – but instead of opening a sophisticated automobile factory, she simply bought wheat and put it on a ship.

To take another example: in the classic Robinson Crusoe/Friday economy that all first-year economics students encounter, Crusoe and Friday discover a very sophisticated technology that transforms coconuts into fish, and fish into coconuts.

The "sophisticated technology" they discovered is known as barter. From Crusoe's perspective, transforming coconuts into fish is a genuine cost reduction. The same applies to Friday.

It's a very simple transformation which no physical technology, no matter how sophisticated, could ever hope to replicate. As an innovation it would be truly revolutionary; yet as a form of exchange, it is quite routine, something we observe in families as well as in towns, cities and communities.

In the modern economy, highly sophisticated real cost reductions – whether through improvements in technology or via domestic exchange or international trade – are taking place every day: think of the boundaries of the firm; the make or buy decision; or issues around onshoring, offshoring and, as I will discuss later, friend-shoring.

Trade and Supply Chains: The Fable of *I, Pencil*

Of course, inside every real-world production function there is an implicit assumption that market exchanges can occur – that the firm is able to purchase labour, physical capital, energy, intellectual property and a host of other inputs. Along each theoretical isoquant, as firms substitute capital for labour (or vice versa), there are market trades taking place.

And the fact that Ingram's story concludes with an empty factory does not mean that Miss X was not an amazing entrepreneur – she was. After all, she identified emerging export markets and new domestic demand for imports. So as powerful as Ingram's story is, it does not go far enough.

As Smith, Hayek and many others have emphasised, the entrepreneurial process of knowledge discovery, price formation and matching demand and supply is so important in the modern market economy.

Entrepreneurialism and market exchange lies at the heart of just about every discussion regarding productivity growth and improvements in living standards.

And this leads me to my second fable today: *I, Pencil*, written by Leonard Read in 1958. In this fable,[1] Read tells the story from the point of view of an ordinary pencil and how it is produced using knowledge, materials and labour inputs from right across the world. At each step, individuals are making decisions based on signals from market prices.

The journey begins with forest grown cedar, which is then transported to a mill, then onto a pencil factory. Each and every step involves a complex, intricate production process of its own – think of the production processes for wood, graphite, machinery, not to mention the markets for skills, communications equipment, marketing, and on and on it goes with each worker specialising in activities where they have a unique advantage.

Today, we might refer to this as describing a supply chain: or what the Commission last year defined as a "network of firms participating in the process of transforming inputs into final products and delivering these to consumers."[2]

Recent Developments in Australia's Trade and Investment Position

In the aggregate, decisions about what to trade internationally – and with whom – show up as Australia's trade balance with the rest of the world. For Australia, the gains from trade have been large. According to estimates from the Centre for International Economics (CIE 2017), one in five Australian workers are employed in a trade-related activity.

The CIE also finds that Australia's program of merchandise trade liberalisation over the last 30 years has permanently lifted our GDP by 5.4 percent, increased real wages by 7.4%, and boosted real exports by 28.5%.[3] As a result, average family household income is estimated to be $8,448 higher than it otherwise would be.

Anyone involved in economic policymaking understands that these are huge numbers. Indeed, it is difficult to think of another set of policies that could engineer such large improvements in living standards.

In related research, the CIE (2018) found that expressed as a share of income, lower income households have gained more from liberalisation than higher income households. This data underscores the fact that Australia's prosperity relies upon on free trade and open markets, the rules based liberal international order, and the architecture that underpins it.

Simply put: trade means more jobs, higher wages and higher living standards. It also reduces risk by diversifying the source of products.

And putting Australia first means continuing to promote free trade, encouraging open markets and supporting mutually beneficial global trade and investment rules.

Over the last few years we have witnessed some profound global trade disruptions. One medium term trend is that we have gone from the fable of Ingram to the fable of Read: the simple textbook story of trade – produced by country A, consumed by country B – has become less and less relevant.

[1] https://fee.org/resources/i-pencil/

[2] See page 1, https://www.pc.gov.au/inquiries/completed/supply-chains/report/supply-chains.pdf

[3] As the CIE note, these estimates represent a lower bound, as they exclude services and investment liberalisation, as well and liberalisation undertaken by our trading partners.

So-called simple value chains now account for only 30% of all global trade.[4] The rest – around 70% of global trade – involves global value chains (GVCs), where production crosses at least one border, before final assembly and consumption.

The most recent policy issue has been whether Read's fable stands the test of time: are these supply chains sufficiently resilient? Do they have the capacity to cope with – and recover from – adverse shocks? I will return to this question below.

A second disruptive trend is one of protectionism. A direct challenge to the fable of Ingram. Over the 2011–2016 period there was a global slowdown in trade: trade as a share of world GDP fell from 60% to 54% – nearly reversing all of the pre-GFC increase.[5]

Then the COVID-19 pandemic hit. A huge disruption. During the pandemic, compared with the last quarter of 2019, the volume of global trade in goods fell by 12.2 percent, and trade in services fell by 21.4%.[6]

Evidence presented by the IMF suggests that trade in goods that rely heavily on global value chains was more volatile than that in other goods. But the IMF's analysis also shows that trade in goods – particularly GVC intensive goods – recovered quite rapidly.

On the other hand, trade in services has yet to fully recover, mainly due to the impact of border closures on travel services. And just as this recovery in trade has been gathering pace, Russia invaded Ukraine. In addition to the very direct impact of this conflict on the people of Ukraine in terms of lives lost and destruction of property and livelihoods, Russia's invasion has further disrupted world trade. I will also return to this below.

Turning to Australia, we are now running a current account surplus. The last time that happened was 1975.

In the space of just 5 years, we have moved from running a quarterly current account deficit of more than $20bn to running a quarterly current account surplus of more than $20bn. A complete reversal. And the trade side of our balance of payments has been a big part of the story. The shift began prior to the pandemic and has continued over the last two years.

Between December 2019 and February 2022, the monthly value of our goods exports increased from $32.1bn to $44bn. Over the same period, the monthly value of goods imports increased from $26.4bn to $35.4bn. So whilst the value of goods imports has risen, this has been outpaced by the increase in the value of our exports.

On the services side, we've had exactly the opposite story. Between December 2019 and April 2020, the monthly value of services exports fell massively, from $8.77bn to $5.5bn. As at February 2022 services exports were even lower, at $4.8bn. But between December 2019 to April 2020, the monthly value of services imports fell even more, from $8.4bn to $3.8bn. As at February 2022 services imports had recovered slightly, to $5.9bn. As a result of all of these changes, our most recent trade balance came in at $7.5bn, after reaching a peak of $13bn in July 2021.

Of course, the other way to view these changes in the balance of payments is from a saving and investment or capital account perspective. Over the last few years, as a share of GDP, saving has increased, and investment has fallen.

Australia has had a net foreign equity asset position for nearly a decade: we own more equity in foreign companies than foreigners own in our companies. And that trend is continuing: our net equity asset position now sits at 15% of GDP.

[4] https://www.oecd.org/trade/topics/global-value-chains-and-trade/

[5] https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS

[6] See page 87. https://www.imf.org/-/media/Files/Publications/WEO/2022/April/English/text.ashx

As the RBA has documented, as the mining construction boom ended, foreign direct investment declined. There has been less reinvestment of earnings by mining companies, and a marked increase in portfolio equity outflows as superannuation funds have increased the share of foreign equity assets in their portfolios.7

Overall, the current account surplus means that in flow terms, Australia has become a net lender to the rest of the world. And in stock terms, our net foreign liabilities are now at 37% of GDP - the lowest level in more than 30 years. That is coming off a peak of 61% of GDP just 5 years ago.

On an individual country basis, China remains our largest trading partner. In 2020, the first year of the pandemic, bilateral trade in goods and services with China totalled $246bn. China accounts for more than 40% of our goods exports. And we have a sizeable trade surplus with China – the value of our exports to China is nearly double the value of our imports. This is not surprising nor alarming, given the structure of China's economy and of ours.

Indeed, all countries which have relatively open borders will tend to run trade surpluses with some countries and trade deficits with others. It certainly should not be an aim of trade policy to target the trade balance with each and every trading partner; nor should it be the overall aim of trade policy to secure a trade surplus with the rest of the world.

While China is obviously important, taken as a bloc, our biggest trading partner remains the OECD grouping of 38 advanced economies – although the OECD's share has been declining steadily over time. In 2020, bilateral trade in goods and services with OECD countries totalled $327bn.

In terms of the composition of our exports, resources – particularly iron ore, coal and LNG – continue to dominate, and during the pandemic reached nearly a 70% export share in terms of value. Agriculture, manufacturing and services are about 10% each, with the latter share declining rapidly during the pandemic as a result of the impact of border closures on education and tourism service exports.

On the import side, things are more diversified, both in terms of countries and categories of goods and services. The value of our imports of goods from the OECD are nearly 60% higher than the value of goods imports from China. And 60% of our services imports are from OECD nations.

On the other side of the balance of payments, capital inflows have been declining since the GFC, and this trend continued during the pandemic, notwithstanding the large amounts of public sector borrowing. And OECD economies – the US, the UK, Europe and Japan – have continued to account for most of the foreign investment in Australia over the past decade.

Recent Trade Policy Developments: Opportunities and Challenges

Turning to recent trade policy developments, there are a number that are relevant for Australia. Some of these developments represent huge challenges. Others represent opportunities. Much of what I will discuss here has been examined by the Commission in last year's *Trade and Assistance Review* (TAR) publication.

Every year the TAR quantifies assistance to Australian industry but also contains a thorough overview of recent trade outcomes and policy developments. Let me first turn to the TAR's analysis of industry assistance. The *Productivity Commission Act 1998* (Cwlth) defines government assistance to industry as:

[7] See https://www.rba.gov.au/publications/bulletin/2022/mar/pdf/the-significant-shift-in-australias-balance-of-payments.pdf

> … any act that, directly or indirectly: assists a person to carry on a business or activity; or confers a pecuniary benefit on, or results in a pecuniary benefit accruing to, a person in respect of carrying on a business or activity.

Under s. 10 of the Act, the Commission has an annual obligation to report on the effect of assistance on industry and on the economy as a whole. That is what the *Trade and Assistance Review* does. The Commission will release the next edition the coming months.

As has been the case for many years, last year's TAR found that most of the government assistance provided to Australian businesses in 2019-20 was in the form of budgetary assistance – direct outlays and tax concessions. These forms of assistance have become increasingly prominent over time, relative to more traditional protection measures such as tariffs.

Overall, the TAR found that Australian industry received $12.1 billion in Government assistance in 2019-20, consisting of:

- Net tariff assistance: $0.3 billion
- Budgetary outlays: $5.1 billion
- Tax concessions: $6.7 billion

The relatively small amount of net tariff assistance raises the question of the precise of purpose of Australia's tariff regime in the modern era, and whether tariffs merely possess a nuisance value.

Last year's TAR also sets out the progress that has been made with respect to Australia's bilateral and regional trade agreements. As of last year, Australia had signed 17 bilateral and regional trade preference agreements. Since then, the Regional Comprehensive Economic Partnership (RCEP) came into force (in January 2022); and the Australia-United Kingdom free trade agreement is expected to come into force later this year.

RCEP – which is an agreement between Australia, Brunei, Cambodia, China, Indonesia, Japan, Republic of Korea, Laos, Malaysia, Myanmar, New Zealand, the Philippines, Singapore, Thailand and Vietnam – is the largest free trade agreement in the world. It covers about 30% of global GDP.

Other bilateral and regional agreements under negotiation include the Australia-European Union Free Trade Agreement; the Australia and India Comprehensive Economic Cooperation Agreement (CECA); and the Australian and United Arab Emirates (UAE) Comprehensive Economic Partnership Agreement.

Turning to global trade policy developments, as I pointed out earlier, the period between the GFC and the pandemic was one of rising protectionism. Work by the Commission in 2017 demonstrated that between 2011 and 2016, the stock of trade restrictions more than tripled.[8] This coincided exactly with the slowdown in global trade that I mentioned earlier.

On a more positive note, recent evidence presented by the OECD[9] suggests that global services trade restrictiveness declined in 2021, with the steady build-up of trade barriers identified in previous years slowing. The trend was observed across most of the sectors covered.

If this trend continues it would be a very welcome development, particularly if further progress can be made on negotiations for the Trade in Services Agreement, which was initiated in 2013 by 27 WTO members (including Australia), representing 70% of global trade in services.

Australia is also chairing negotiations on the Environmental Goods Agreement, between 46 WTO members. These are great opportunities for Australia. But there are many challenges on the horizon.

[8] https://www.pc.gov.au/news-media/articles/pc-news/pc-news-august-2017/rising-protectionism

[9] https://www.oecd.org/trade/topics/services-trade/

The same OECD restrictiveness data shows that in 2021, several countries introduced tighter conditions on foreign investment screening. And the international rules-based order continues to come under pressure.

The functioning of the World Trade Organisation's (WTO's) dispute process still faces challenges. Settlement of disputes has been curtailed, and there has been reduced progress on multilateral agreements. 47 WTO members (including Australia) have established an interim WTO appeals body, but it is yet to hear any disputes.

This is relevant for Australia because, as the Commission outlined in last year's TAR, China has imposed several trade measures on Australian merchandise exports, including on barley, beef, wheat, cotton, wine, lobsters, timber, coal and coral trout.

The good news is that the growth in the value of our iron ore exports to China grew significantly in 2020 and more than offset the decline in the value of the affected exports. The bad news is that along with these challenges, there are a number of other global risks on the trade policy front. Let me mention three of them.

First, let me turn to global supply chains generally. There is no doubt that supply chains came under pressure during the pandemic. The question is how quickly they recovered and in which industries – if any - vulnerable supply chains may present a problem for Australia. And whether such vulnerabilities are amenable to policy interventions. And at what cost.

On the first question, analysis of trade patterns during the pandemic by the OECD and the IMF suggests that global supply chains were more resilient than many first thought. But following Russia's invasion of Ukraine, as well as the resurgence of COVID in China, there is a renewed and growing concern among policymakers around global supply chain bottlenecks, particularly their role in fuelling global inflation.

In the year to March, consumer prices in the OECD area rose at annual rate of 8.8% – the most rapid increase since October 1988. Around one fifth of OECD countries recorded double-digit inflation.

The concern for policymakers is that this inflation is due to global supply chain problems. My own view, based on both theory and empirical evidence, is that while supply chain bottlenecks can help to explain temporary relative price increases, they do not explain inflation – a continuous increase in the general price level, sustained over a period of time.[10]

For that we must turn elsewhere. The stance of monetary policy is certainly a significant contributing factor, in a global economy that is now characterised by very high capacity utilisation.

The unemployment rate in the OECD area fell to 5.2% in February, below pre-pandemic levels and reaching the lowest level since the start of series in 2001.[11] The global policy reality is that there are very few idle resources just sitting around, waiting to be soaked up by a monetary policy-induced increase in aggregate demand.

Of course, none of this means that supply chain resilience does not matter. In the case of Australia, in our 2021 report[12] the Commission developed a framework to identify supply chains for goods and services that are vulnerable to disruptions *and* whose absence would jeopardise the functioning of the economy, national security and Australians' wellbeing.

The methodology involved three steps:

- Identifying those products that are vulnerable to supply chain disruptions using a data scan.
- Identify which of these vulnerable products are used in essential industries.

[10] Landsburg, page 315.

[11] https://www.oecd.org/newsroom/unemployment-rates-oecd-update-april-2022.htm

[12] *Vulnerable Supply Chains, Study Report,* https://www.pc.gov.au/inquiries/completed/supply-chains/report/supply-chains.pdf

- Use expert assessment to stress test the data-driven analysis and to determine, from among the vulnerable products used in essential industries, those which are critical (goods and services that cannot be substituted easily, or the production process cannot be adjusted in the short term to avoid their use).

After applying all three filters, the Commission found that one-in-twenty Australian originated from concentrated sources of global supply and *might* be vulnerable. And two thirds of these vulnerable imports came from China.

However, the analysis also found that many of these products, while having high import concentrations, are unlikely to be *critical* — either directly or as an input into the production of essential goods and services — to the wellbeing of Australians.

The Commission's analysis – which I should emphasise is suggestive rather than conclusive – found that the main supply chain disruption risks that could be problematic arise from the reliance on concentrated imports of some basic chemicals, or some personal protective equipment.

This brings me to my second policy challenge: energy.

Over the year to March, energy prices in the OECD rose by 33.7% – the highest rate since May 1980. The Commission's analysis did not identify petroleum products as being vulnerable. Indeed, the work concluded that identifying fuels as vulnerable "would require changing the analysis significantly". But quite understandably, concerns around energy supply chains remain. And they are not confined to traditional forms of energy.

Indeed, the International Energy Agency[13] has recently noted that demand for minerals that are essential components in clean energy technologies – solar, wind and batteries – will grow quickly, as economies adjust towards their net-zero emissions targets.

Of particular note is the IEA's finding that "production of many energy transition minerals today is more geographically concentrated than that of oil or natural gas". In particular, the IEA finds that for lithium, cobalt and rare earth elements, the world's top three producing nations control well over three quarters of global output.

While Australia accounts for more than half of the world's lithium production, the Democratic Republic of the Congo (DRC) and China account for 70% and 60% of global production of cobalt and rare earth elements respectively. And in processing, China's share of refining is around 35% for nickel, 50-70% for lithium and cobalt, and nearly 90% for rare earth elements.

The general policy debate around resilient supply chains has once again generated debate around the concepts of onshoring and offshoring – concepts which have been around for several years.

But concerns around critical minerals supply chains have given rise to a relatively new policy approach: "friend-shoring". This concept was recently promoted by US Treasury Secretary Janet Yellen:[14]

> friend-shoring means—and you've seen this in action—that we have a group of countries that have strong adherence to a set of norms and values about how to operate in the global economy and about how to run the global economic system, and we need to deepen our ties with those partners and to work together to make sure that we can supply our needs of critical materials.

This debate is likely to intensify.

[13] https://iea.blob.core.windows.net/assets/ffd2a83b-8c30-4e9d-980a-52b6d9a86fdc/TheRoleofCriticalMineralsinCleanEnergyTransitions.pdf

[14] https://www.atlanticcouncil.org/news/transcripts/transcript-us-treasury-secretary-janet-yellen-on-the-next-steps-for-russia-sanctions-and-friend-shoring-supply-chains/

Since the beginning of 2021, the price of lithium has increased more than eight-fold; the price of cobalt has more than doubled; the price of nickel has roughly doubled; and the price of aluminium has increased by around 75%.

As a result, the prices of batteries, solar PV modules and wind turbines have all seen prices rise in 2021. This contrasts sharply with the decades-long trend of cost declines for these clean energy technologies.

Finally, in addition to supply chain and energy challenges, there is the not unrelated prospect of carbon border tariffs (CBTs) – new taxes on imported products, levied on the basis of their carbon equivalent content. Several jurisdictions are considering such policies, including the European Union, the United Kingdom, Canada and Japan.

Part of the impetus behind such moves is the fact that emissions generated from the production and transportation of internationally-traded products now account for between 20 to 30% of global emissions.

In principle, the purpose of a CBT is to create a 'level playing field' between domestic producers and foreign competitors with respect to explicit emissions pricing, helping to mitigate the problems associated with carbon leakage. Whether such mechanisms would achieve this in practice – and whether they will be WTO compliant – are open questions.

And the extent to which *implicit* or shadow carbon prices – rather than just explicit prices – will be taken into account in such measures is also one that is very relevant for a number of countries, including Australia.

Conclusion

My remarks today have highlighted the implications of recent global disruptions for Australia's trade and investment position, and some of the challenges that may lie ahead in the trade and investment policy space.

I have also discussed the Commission's work on *Vulnerable Supply Chains* and the *Trade and Assistance Review*, and highlighted how useful this work has been in helping to understand recent policy debates.

As Australia's economy continues to recover, new and emerging trade opportunities are likely to be a key driver of improvements in productivity and living standards.

At the same time, as I have outlined today, we are likely to face a number of headwinds. Navigating such challenges will require a sound evidence base and careful and thorough economic analysis.

The Commission very much looks forward to contributing to these debates.