

The importance of trade

Implications for carbon pricing

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What this paper is about

The three points I want to make in this paper are as follows.

1. The exchange of goods and services is one of the main pillars of prosperity. International trade confers enormous benefits on our nation.
2. The trade sector is highly exposed to competition. As we have moved to make our trade sector more competitive, so our trade performance has improved.
3. Pricing carbon in this country will be a large change and, depending on how such taxes are imposed and what others in the world are doing, there could be large implications for trade. The carbon tax model proposed so far is based on production and will necessitate some form of compensation to address the distortion to trade. But there are alternatives. A consumption-based carbon tax could be trade neutral.

The importance of trade

That trade is one of the pillars of prosperity should be self-evident, well-known and barely worth repeating. But if this point is widely understood, how is it that we still see so many silly policy proposals that fly in the face of that basic proposition?

- If we knew trade was such a good thing, how come we have some politicians (on both sides of the political divide I might add), some union officials and some business leaders calling for anti-dumping duties on so-called ‘unfair’ imports?
- If we knew trade was such a good thing, how come it has taken the world eight years (and counting) to get a Doha deal done to liberalise world trade and lift some 300 million people out of poverty?
- If we knew trade was such a good thing, how come we are debating imposing a production-based tax on carbon rather than a consumption-based tax as a way to shield Australia from the harmful effects of climate change?

These are just three of the conundrums we see in the local and international policy debate. All have their genesis in a basic misunderstanding on the role and benefits of trade. So to see what is wrong with the climate change debate, and why this trade aspect is so crucial, I find myself first having to give a brief refresher on the real basis of trade.

The one thing that sets mankind apart from all other species is that humans trade and exchange. Sure, there is specialisation in some colonies of ants or bees, but it is mankind alone that undertakes voluntary exchange. Adam Smith's famous quote was ‘you don't see one dog exchanging a bone with another dog’.

This discovery of trade and exchange goes to the core of the human progress. Through trade and exchange we have been able to use the time of others and so free up time to invent and discover new things. It has allowed people to become more productive. A lot of people would say property rights and the rule of law underpins trade and exchange. And in a modern economy these aspects are vital to allow anonymous trade between individuals. But trade appeared in every corner of the planet way before any institutional development of property rights and formal enforcement of contracts. And the reason it appeared is it allowed people to become better off.

Stop and think for a moment what life would be like if you didn't trade and exchange. If I did not work as an economist and tried to become self-sufficient, I would have no hope of growing my own food, making my own clothes, building my own house, making my own car, computer and so on. If I didn't specialise and exchange my wares in the market for all the things I want to consume, my standard of living would plummet to that of some primitive highland tribesman. The gains from trade and exchange are absolutely enormous.

Some powerful points emerge.

1. It is consumption that makes me better off. Imports allow me to consume more than otherwise. Exports are good too, but *only* because they allow me to buy and consume more imports than otherwise. Failure to understand this basic point is the root cause of the failure of the Doha round of trade talks. The Doha talks are based on an 'exports good, imports bad' mentality and framework. This is dead wrong. Fortunately for us Australians, mostly we've been able to sort this out and just how and why is instructive for our carbon tax debate I will come to later on.
2. The reason why we specialise and trade is due to comparative advantage. This is a relative concept. Note that to successfully work as an economist I do not have to be absolutely good at economics; I just have to be *relatively* better at economics than at mechanics, cooking or anything else. And because comparative advantage is a relative concept and that there are always relative differences in endowments and talents, you get the powerful conclusion: *it always pays to trade*.¹

From these two points we can deduce that every time we impede trade — explicit or implicit — we make ourselves worse off.

Let me go back to what is wrong with anti-dumping duties because this sets up the points I want to make about carbon pricing, competitiveness and trade. Many people think that when a country (say Korea) sells, say, motor cars to Australia for less than the price they sell on the domestic market — that is, they dump cars onto our local

¹ There is an enormous literature that explores exceptions to this rule, such as strategic trade theory. But while these theoretical 'wrinkles' can exist, the practical reality is that it is rare to find these 'curiosities' in the real world.

market — then this must be bad for Australia. Well, it does have bad effects. Local car makers find the competition harder and sales and jobs are lost. But there are benefits too. Users of cars, both firms and consumers, are better off. Because they make savings, they spend or invest that money somewhere else and generate new activity and create new jobs.

Do the gains outweigh the losses? Should Australia impose anti-dumping duties? In every case I can recall, and there have been plenty of them as at times Australia has had more dumping claims than any other country in the world, when all of the upstream and downstream direct and indirect effects from imposing anti-dumping duties are properly measured, we find that the losses are less than the gains².

The operative word here is ‘properly’. An economywide model is required to capture all the cascading costs of the anti-dumping duties as they permeate through an economy. Each time there is an additional cost, firms attempt to pass this on. To some degree they can and do, except for one group. Mostly, exporters cannot pass these costs on because they find that when they try, they lose sales to some other country not saddled with the same burden of higher duties on imported products.

The world market is a far bigger place than the local market with more choice and more players. It is more competitive. When extra costs from a host of direct and indirect sources are imposed, exporters are placed at a competitive disadvantage. It is exporters that bear the burden of bad policy.

This is why putting a price on carbon — depending on how it is done and who else in the world is doing it — can impact so significantly on competitiveness. I will come back to this point later, but first let us take a look at Australia's trading performance for a demonstration of the importance of how a ‘little cost here and a little cost there’ can impede our trade performance and welfare.

Australia's trade performance

Up until the start of the seventies, Australia had some high barriers to imports. We had an average effective tariff of some 35 percent as shown on chart 1. In passing, note the use of effective tariffs or effective protection, a concept promulgated internationally by Australia as it has a parallel in calculating an ‘effective carbon price’, which can be crucial for international comparisons³. But after repeated and

² Alan Mitchell is one journalist who understands the point that anti-dumping duties are protection. See for example, Mitchell A 2001, ‘Protectionists have no case’, *Australian Financial Review*, Wednesday 23 February, p. 62.

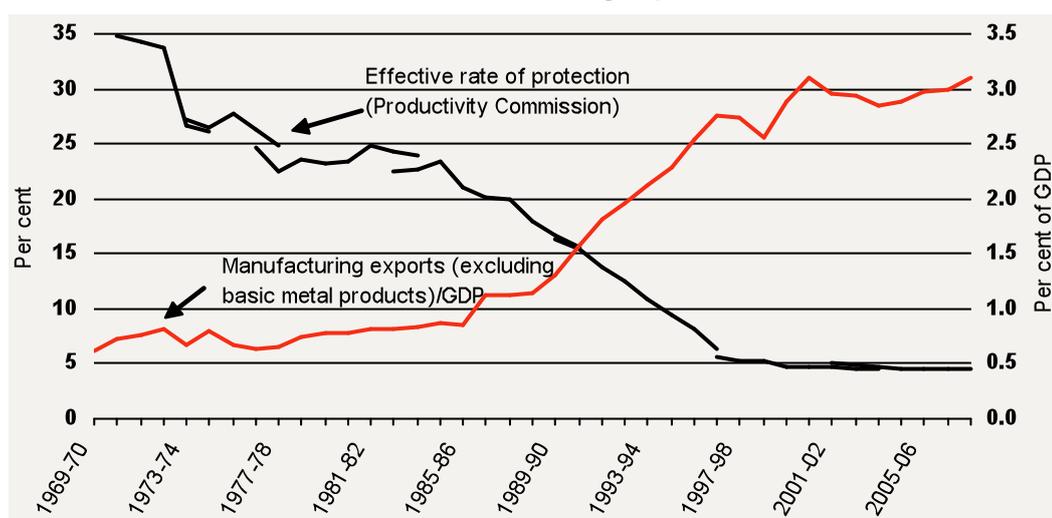
³ CIE 2011, *Comparing Effective Carbon Prices*, Canberra. This publication gives a good description of the issues involved. Also, note in passing that Australia made an enormous intellectual contribution to the international debate and use of effective rates of protection and is a good example of how Australia can shape the world of ideas. Max Corden deserves

systematic economywide appraisal of the benefits and costs of these tariffs, it became more widely accepted by business and large parts of the public that we would be better off without them. So, under the Hawke–Keating government and also later Liberal governments, Australia unilaterally lowered import barriers.

The result was exports and welfare blossomed. The link between falling protection and rising exports is shown on chart 1. As protection fell (as measured by the effective rate of protection), after a lag, manufacturing exports started to rise strongly, exactly as predicted by theory.

Notice too another factor. Manufacturing exports rose most in those sectors where the removal of import taxes was greatest, as seen in chart 2. As noted by Gary Banks, Chairman of the Productivity Commission⁴, ‘The liberalisation initiatives by Australian governments over the past two decades have contributed to the transformation of the Australian economy. Australia’s exports and imports as a proportion of GDP are now one-third higher than they were in the mid-1970s’.

Chart 1 Trade liberalisation and manufacturing exports



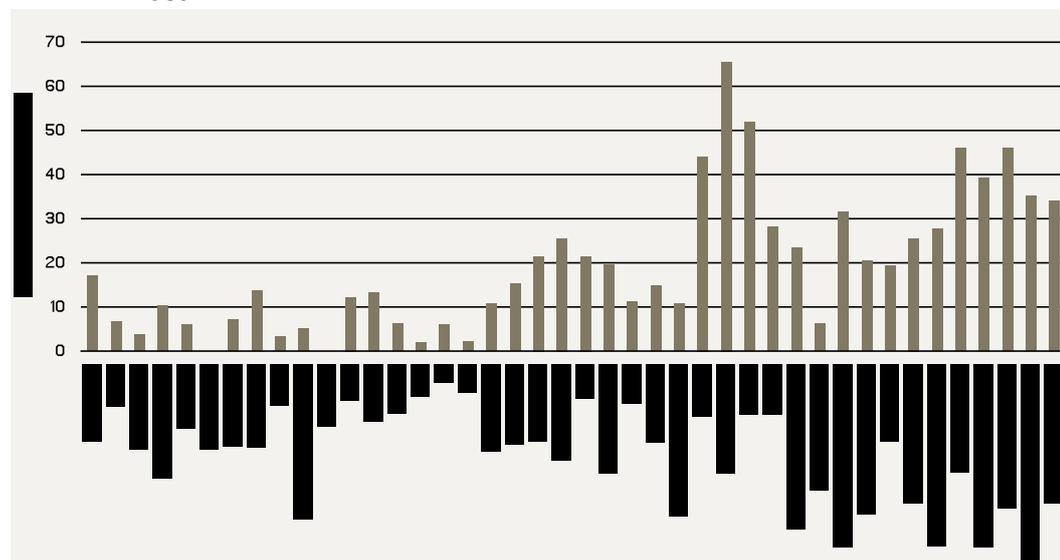
Notes: Effective rates of assistance for manufacturing calculated by the Productivity Commission, manufacturing export volumes excluding basic metal products as a percentage of GDP at 2005-06 constant prices.

Source: CIE 2009, *Benefits of Trade and Trade Liberalisation*, prepared for Department of Foreign Affairs and Trade, Canberra.

a lot of this credit through his seminal work in Corden W M 1971, *The Theory of Protection*, Oxford, Oxford University Press.

⁴ Banks 2003, ‘Gaining from trade liberalisation: reflections on Australia’s experience’ in Productivity Commission 2010, *An Economy-wide View: Speeches on Structural Reform*, Canberra.

Chart 2 **Manufacturing exports rise most in sectors where tariffs are reduced the most**



Notes: Data shown is measured as per cent deviation from baseline in export volumes by sector.

Source: CIE 2009, *Benefits of Trade and Trade Liberalisation*, prepared for Department of Foreign Affairs and Trade, Canberra.

Why did exports take off with falling taxes on imports? The import taxes ended up increasing domestic costs, a little cost increase here, a little increase there; it all added up and eventually hurt exporters. Exporters were at a competitive disadvantage. So an apparently small extra cost, in this case on imports, can impose a large cost on the nation.

We might reiterate that what turned this policy debate around back then was the independent, systematic, repeated economywide analysis of the benefits and costs of the policy by the then Industries Assistance Commission, now the Productivity Commission. We now need to repeat that exercise for the carbon tax. The reason is because we have unnecessarily got ourselves in a tangle over a production-based carbon tax and the trade effects.

Carbon pricing and trade

When a carbon tax is imposed on producers that emit carbon dioxide it increases their costs. This extra cost is passed on to downstream users of energy and users of all of the products and services that use energy as an input. So buildings cost more, accountancy fees, legal fees and so on all rise, each step passing on the costs as far as possible. But one group who can't pass on these costs are the exporters. Competitive conditions on world markets mean that they lose market share to others. Industries move offshore and emissions globally may not change much at all.

This point about carbon leakage is well known and I am aware of analysis by Treasury, among many others, that suggests leakage may be overstated as a problem⁵. But I reserve judgement about this and other analysis and would need to examine it myself from the ground up because we learnt from bitter experience with our wool industry about how little power we have on world markets and how easily sales can shift elsewhere and to alternative products when there is an incentive to do so. Australian producers and policy makers thought because we were the world's largest producer and exporter of wool we could successfully run a minimum reserve price for wool. Even Treasury with their supporting analysis backed the scheme, right through its death throws, so much so the Primary Industries Minister at the time gave an 'iron clad guarantee' that the scheme would hold. It was an abject failure and cost the industry and the nation dearly.

The same point about leakage happens for industries competing with imports. If competitors do not face a carbon tax, their costs will be lower and they will have an advantage in sending their exports to Australia.

Of course this is well known and, for example, the latest Garnaut update goes through a mechanism for the possible treatment of trade intensive exposed industries⁶.

The explicit treatment of emissions intensive, trade exposed industries in the Garnaut report is explicit recognition of the potential for trade competitive effects that might arise from a production-based carbon tax. Garnaut recommends a progressive approach to implementing, refining and removing the emission intensive, trade exposed assistance package. The rationale for emission intensive trade exposed assistance spelled out in the Garnaut Update is to correct for the distortion that results from this failure of Australia's competitors to implement a comparable carbon price. It was envisaged that assistance would address the difference between the outcome for Australian emission intensive, trade exposed industries as a result of implementing a carbon price and the outcome for emissions intensive, trade exposed industries had the whole world implemented a carbon price. The assistance would be paid for by the gap between the world product prices expected with a global carbon price and without global carbon pricing. This principled approach could be administered by an independent regulatory authority.

A two-part package is envisaged. Initially there would be an interim approach for three years based on a modified version of the former Carbon Pollution Reduction Scheme. But by 2015 there would be a shift to a principled approach outlined above.

There are many problems here including rent seeking behaviour, the difficulty of measuring comparable effective carbon prices across the globe, and the regulatory

⁵ Department of Treasury 2008, *Australia's Low Pollution Future: The Economics of Climate Change Mitigation*, Australian Government, Canberra.

⁶ Garnaut R 2011, *Carbon Pricing and Reducing Australia's Emissions*, Update Paper 6.

capture by the agency calculating the ‘gap’ between the Australian price and the comparable world price had everyone participated in a global scheme. The difficulty with calculating domestic prices for anti-dumping cases mentioned earlier and the legal challenges behind these should be a cause for serious thought.

But the biggest problem of all is that all of this compensation for trade effects is that it is unnecessary. Think for a moment about how much trade compensation was given out when Australia introduced the goods and services tax. There was none. The reason is because the goods and services tax was trade neutral⁷. Exports were zero rated and imports were automatically picked up by the GST.

The point is that the GST is a consumption-based tax, not a production-based one. This difference between a production-based tax and a carbon-based carbon tax turns out to be profound and it has been given a lot of analysis and ‘air time’ by Geoff Carmody⁸. Astonishingly, his analysis and ideas have not been taken up. Yet I have not been able to find sound rebuttal of his analysis.

The reason the difference between a production-based carbon tax and a consumption-based carbon tax matters is because the whole world has not yet signed up to effective climate change policies. If the whole world signed up and implemented a scheme now, there would be no difference between the two approaches because what the world produces is the same as what the world consumes. Nor would there be any case for trade compensation if the whole world was signed up.

But the world has not, nor is it likely to act as one for some time on this policy. Of course, the difference between what we produce and what we consume is the amount of our trade. So a production-based carbon tax without compensation is an export tax and import subsidy. The problem with carving out emissions intensive, trade exposed industries for special treatment is that it leaves other exporters out and, as the production base shrinks, the relative burden on others not compensated rises. A consumption-based carbon tax eliminates this problem.

The extent of this problem of trade neutrality depends on the degree to which countries sign up to a carbon price (explicit or implicit) and a lot of work is going into this aspect. Importantly, it seems the cost rises significantly the less the participation. Nordhaus estimates that with a third of emissions participating, the cost could be 7.4

⁷ See Bengt M 1998, Taxes on business inputs and the effects of a goods and services tax , *Agenda*, Vol. 5, No. 4, pp. 399–406.

⁸ See, for example, Carmody G 2009, Consumption-based emissions policy: a vaccine for the CPRS ‘trade flu’? in CEDA (Committee for Economic Development of Australia) 2009, *Growth 61: A Taxing Debate – Climate Policy Beyond Copenhagen*, Oh, and can you add this to the Carmody reference, http://www.ceda.com.au/media/10457/growth61_carmody.pdf, Accessed 22 March 2009.

times the cost of the same emissions reduction with complete international participation⁹.

So clearly there is some serious debate yet to come on how we might deal with this trade question as a result of imposing a carbon tax. But there is an even more profound issue behind the choice of base for a carbon tax. It goes to the core of the benefits and costs of Australia addressing climate change. Australia's total carbon emissions are small by world standards, which is what matters for warming. If Australia participates or not it will change the amount of warming we are likely to see, according to the scientists, in 100 years by a matter of days. The benefits and costs of Australia doing something are more affected by how we influence others. If we could encourage others to act, it would benefit us greatly.

One of the main problems with the world participating fully is the free rider problem. Because the Kyoto model of a production-based carbon price has been put on the table, countries fear losing trade to others because the production-based model is not trade neutral when the world does not fully participate. Could Australia lead the world in the debate on a trade neutral carbon tax? By Australia going down the production-based route, do we make the free rider problem worse?

I won't attempt to answer these questions here because they are profound subjects in their own right. The point of conclusion is that trade is enormously beneficial to Australia; even if at times we do not act consistently with that proposition. Australia's trade performance lifted when we started removing impediments to trade. Imposing a carbon price could, or could not, impose a large impediment to trade depending on how it is done and what others are doing in the world. A production-based model, under current conditions of less than full world participation in carbon pricing (explicit and implicit), necessitates addressing the trade distortions it imposes and there are different suggestions on how that might be done. Practical problems are likely to arise, and who is in and who is left out? But there are other tax models — for example, a GST-style model (and the machinery for this exists) — for introducing a carbon tax that is trade neutral. Serious debate and analysis is still needed.

⁹ Nordhaus W 2009, *Economic Issues in Designing a Global Agreement on Global Warming*, Copenhagen, Denmark.