Trade Wars: There are no winners

KPMG Economics & Tax Centre

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Executive Summary

The two largest economies in the world, the United States (US) and China, are waging an escalating trade war with each other. The latest round of trade talks between the two countries, held in Washington D.C. in late August, failed to resolve the economic tensions between the US and China.

Modelling by KPMG Economics, in Australia, (‘KPMG Australia’) shows that as this scenario progresses from one of relatively open trade between the two countries to one of restricted trade, the economic consequences for both the US and China are negative, and the follow-on impact to the global economy is also detrimental.

This report looks at what has happened to date - what has already been legislated and enacted – and then assesses three scenarios:

i. **Limited escalation, no contagion**: the restriction of the current trade war between the US and China to already announced tariff increases

ii. **Full escalation, no contagion**: what is now proposed to occur in terms of the next step up in aggravation between China and the US - an escalation of tariffs to 25% between the two countries

iii. **Full escalation, full contagion**: what would happen if a substantial number of other countries joined in and raised tariffs by 15%.

The macroeconomic modelling shows that if the trade war is contained just to the US and China the negative impact on the global economy can be kept to be below -0.5% on world GDP, but if other countries enter the fray and the trade war escalates, world GDP is likely to contract by more than 3%. This trade war contagion scenario would cause a major downturn in the global economy.

An even more pessimistic scenario, where risk premiums rose sharply and financial markets over-reacted, could result in a major global recession.

Far from winning an all-out trade war, the US economy would endure a recession and annual growth rates almost 1% slower over five years.

An all-out trade war would hit China hard. Its economic growth rate would slow to just 4% per annum and would stay below 5% per annum for around five years. This is well below official targets and would be China’s worst economic growth performance in almost three decades.

An escalation of the trade war would also be extremely serious for Australia. Its impacts would last almost a decade, with an estimated loss of national income of nearly half-a-trillion dollars over 10 years, or the equivalent of losing just over 40% of last year’s household disposable income. Job losses in Australia would also be significant under such a scenario, falling almost 60,000, and pushing real wages down by about $16 per week for the average worker.

The modelling by KPMG Australia confirms the best strategy for the rest of the world is to resist the political pressure to join a US-China trade war, despite the likelihood there may be increased domestic pressures to protect local industries from any displaced US and Chinese products looking for a new market.

In a limited trade war between the US and China, where the tariff increases are restricted to those already announced and foreshadowed by the US, Australia’s GDP would be about 0.3% lower after five years and we would incur a real GDP loss of A$36 billion over a decade. This is mostly due to the reliance of Australian commodities as intermediate inputs in the production process in China, and the likely loss of services exports in education and tourism to China.
Executive Summary

The European Union (EU) and Japan would be less affected than Australia.

If the US-China trade war escalated to a 25% tariff on all goods traded between the two countries, both countries would end up with GDP about 1% lower than would have been the case without the trade war, with China faring worse than the US over time. Australia would experience a real GDP loss of about 0.5%.

Australia, like other countries, has nothing to gain and everything to lose from getting involved in the escalating trade war between the US and China. If increasing protectionist measures escalate into an all-out trade war, then economic pain worsens significantly for everyone.

The US also pledged to put 25% tariffs on cars imported from the EU, although a US government report on automotive tariffs still had not been published by late August.

This is KPMG Australia’s second report on this topic in the past six months.

The first report, The Re-emergence of Protectionism, looked at a hypothetical scenario of all countries participating in a trade war with tariffs increasing on current levels by 5% or 10% on either all manufactured goods or all tradable goods. That paper was prepared when the trade war between China and the US was still at very early stages: there were public statements and threats of action, but little was confirmed about what would happen. In essence, the first report was a ‘what if’ analysis.

This new report assesses what has now happened and what would be the consequences of limiting it to the actions that have already occurred; what is planned; and thirdly, most seriously, if the trade war spreads to the wider world.
The fears of an all-out trade war between the US and China have been growing steadily since the release of KPMG Australia’s earlier report, The Re-emergence of Protectionism, in April 2018.

Our earlier report was brought about by the prospect of the US looking to implement protectionist tariffs on a range of goods, which it ultimately applied to imports of steel and aluminium from the EU, Canada and Mexico, to which those countries have all retaliated. At that time the US also pledged to put 25% tariffs on cars imported from the EU, although a US government report on automotive tariffs still had not been published by late August; and it also foreshadowed a 10% tariff on US$200 billion of Chinese merchandise imports.1

In early-July the US government in fact did impose 25% tariffs on US$34 billion of Chinese goods, and it further proposed that an additional US$16 billion of Chinese imports would also be subject to 25% tariffs, and depending how its negotiations progressed with China, a 10% tariff could be extended to US$500 billion worth of imported Chinese goods.2

In response to this action in early-July, China immediately retaliated by applying a similar tariff on the same value of US imports; while in early-August it also implemented tariffs ranging from 5% to 25%, on a list of US imports valued at US$60 billion. The next move in this escalating trade war saw the US carry out on its threat to impose 25% tariffs on a further US$16 billion of Chinese imports; which happened during late August’s trade negotiations in Washington D.C.

Separately, the US increased the tariffs it applied on aluminium and steel from Turkey in August to 20% tax and 50% tariff respectively. This resulted in an immediate financial market response, with the Turkish Lira falling dramatically, placing the country in the middle of a currency crisis.

This separate trade action is underscored by the fact that companies in Turkey have US$217 billion in net foreign-exchange debt, equal to about a quarter of gross domestic product. In response, Turkey announced a raft of new tariffs on US products, ranging from 50% to 140% on rice, alcohol and cars.

In this paper, KPMG Australia seeks to examine what could be the economic consequences of an all-out trade war between the US and China, and how other countries should respond.

A trade war that spreads to other countries

KPMG Australia has modelled the economic impacts of the US and China engaging in an escalating trade war, increasing their rates and coverage of tariffs as they retaliate against each increase.

KPMG Australia then considers a scenario where other countries are brought into the escalating trade war, as they seek to protect their industries from an influx of low-price goods from the US and China which are being diverted to other markets.

In total, three scenarios are modelled, as set out below.

Scenario 1: Limited escalation, no contagion: The US applies a 25% tariff on US$50 billion of goods imported from China and a 10% tariff on a further US$200 billion worth of goods imported from China - with China applying a 25% tariff on US$50 billion worth of goods imported from the US and a 10% tariff on all remaining goods imported from the US.

Scenario 2: Full escalation, no contagion: The US applies a 25% tariff on all its imports of Chinese goods and China applies a 25% tariff on all its imports of goods from the US.

Scenario 3: Full escalation, full contagion: all countries apply a 15% tariff on imports.

1Office of the US Trade Representative, at https://ustr.gov/sites/default/files/301/2018-0026%20China%20FRN%207-10-2018_0.pdf
2See United States Census Bureau, at https://www.census.gov/foreign-trade/balance/c5700.html
The modelling results

The KPMG Australia economics model

The trade-war scenarios are simulated in KPMG-MACRO, which is an elaboration of NiGEM, a quarterly macro-econometric model of the entire global economy developed and maintained by the National Institute of Economic and Social Research in the United Kingdom.

KPMG-MACRO models the entire global economy split into more than 60 separate economies. All the major economies, including Australia, are separately modelled. The model is based on a powerful combination of real data and theory. Economic theory strongly conditions the specification of long-run behaviour. Short-term dynamics are more heavily driven by data and are designed to capture disequilibrium in financial markets, labour markets and markets for goods and services.

Modelling results

The results are presented as percentage deviations from a base case of no trade war. For example, a result of -0.2% means that GDP in that year would be an estimated 0.2 percentage points lower than if no trade war had occurred.

Scenario 1: Limited escalation, no contagion

Chart 1 summarises the modelling results for Scenario 1 – a limited escalation of the current trade war between the US and China, with tariffs applied to no more than US$200 billion of goods from either country, that does not spread to other countries.

A trade war that is limited to the announced and planned tariff increases between the two countries would have only a small effect on the GDP of those countries and an even smaller effect on other countries. China’s GDP would be up to 0.61% smaller in Year 4 than it otherwise would have been, while the US would suffer damage to its GDP of up to 0.58%.

Australia’s GDP is projected to be 0.29% lower in Year 5 owing to the trade war. The present value of Australia’s real GDP losses over the next decade is estimated at A$36 billion.

The EU’s estimated GDP loss peaks at 0.22% in Year 4, before recovering to around half that loss on an ongoing basis. World GDP is about 0.4% lower in Year 4, recovering to be just over 0.1% lower after 10 years.
The modelling results

Scenario 2: Full escalation, no contagion

Chart 2 presents the modelling results for Scenario 2 – a full escalation of the trade war between the US and China, with a 25% tariff applying to all goods traded, but with no contagion to other countries.

Chart 2: Impact of an escalating US-China trade war, no contagion

An escalating trade war confined to the US and China would amplify GDP losses. China’s GDP is estimated to be almost 1% lower in 2021 than it otherwise would have been, and US GDP is estimated to be more than 0.9% lower in year 4.

In the modelling results, the impact of the escalated trade war on the rest of the world continues to be contained. After four years Australia’s GDP is almost 0.5% lower than it would have been in the absence of the trade war. Beyond year 4, the GDP losses for Australia are slightly less, with the present value of Australia’s real GDP losses over the next decade estimated at A$58 billion.

The EU’s loss of GDP peaks at 0.37% after four years. World GDP is about 0.6% lower after four years, recovering to be just over 0.2% lower after 10 years.
The modelling results

Scenario 3: Full escalation, full contagion

Chart 3 presents the modelling results for Scenario 3 – a full escalation of the trade war between the US and China, with all countries applying 15% tariffs on imports.

Chart 3: Impact of an escalating US-China trade war, full contagion

A trade war between the US and China that spills over to the rest of the world has the potential to cause significant damage to the global economy. Even conservative modelling suggests that an all-out trade war would inflict a prolonged recession on the world economy. The trajectory of world GDP ends up being around 3.8% lower with an all-out trade war.

The US would fare worse than the world as a whole, its GDP being around 5.3% lower than if an all-out trade war had not occurred. China would be worst hit, with a loss of GDP of almost 6% after a decade. Australia would face a hit to its real GDP of more than 3.5% after a decade, and the EU a more modest impact of around 2.0%.

Cumulative GDP losses

KPMG Australia has estimated the cumulative loss of GDP after five years under the three scenarios. The results are presented in Table 1.

Table 1: Cumulative loss of GDP from a US-China trade war (%)

<table>
<thead>
<tr>
<th>Description</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>US and China impose 15% tariffs on each other, with no policy changes in other countries</td>
<td>Same as Scenario 1, except the trade between the US and China escalates with bilateral tariffs increased to 25%</td>
<td>The trade war between the US and China spills over to the rest of the world with all countries imposing 15% tariffs</td>
<td></td>
</tr>
<tr>
<td>Cumulative percentage GDP loss after five years relative to ‘no trade war’ baseline</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>-0.3%</td>
<td>-0.5%</td>
<td>-2.4%</td>
</tr>
<tr>
<td>US</td>
<td>-0.4%</td>
<td>-0.7%</td>
<td>-4.6%</td>
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<tr>
<td>China</td>
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<td>-1.0%</td>
<td>-5.3%</td>
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<td>Europe</td>
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<td>-0.3%</td>
<td>-2.1%</td>
</tr>
<tr>
<td>Global</td>
<td>-0.3%</td>
<td>-0.5%</td>
<td>-3.5%</td>
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</table>
The modelling results

KPMG Australia’s economics modelling estimates an all-out trade war would inflict a prolonged recession on the world economy. After five years, world GDP is estimated to be around 3.5% lower in the event of an all-out trade war.

After five years, China’s GDP is estimated to be almost 5.5% lower. America’s GDP loss of 4.6% of GDP is slightly less than China’s in the longer run but its losses in the first few years are greater. The US economy endures a recession that extends for almost a year and it takes the best part of a decade for growth to recover to pre-trade-war rates.

Although not as heavily affected as the US and China, all other countries would experience substantial GDP losses, with the EU’s estimated cumulative losses exceeding 2%.

For Australia, GDP in five years’ time is estimated at 2.4% lower than it would have been in the absence of the trade war. The present value of Australia’s real GDP losses over a decade is estimated at A$364 billion. The present value of the loss in Real Household Disposable Income for Australia is estimated at A$474 billion.

The modelling results for the all-out trade war scenario are conservative. KPMG Australia has assumed that in this scenario financial markets accommodate the trade war in an orderly fashion. In a more pessimistic scenario the trade war is assumed to adversely affect risk premia and lead to dislocations in financial markets. Under such a scenario the global economy is affected more severely by the trade war than it is in the scenarios we have modelled.
Conclusions

No country benefits from a trade war; including the nation that starts the dispute. In the country instigating the trade war by raising tariffs on imports, the cost of goods to its consumers rises, as does the cost of imported inputs for domestic producers.

Losses to the instigator increase where the targeted country retaliates. KPMG Australia’s economic modelling suggests a trade war limited to the US and China and to goods valued at up to US$200 billion would result in GDP losses for those two countries of up to 0.6% in the near term and 0.2% in the longer term.

Under a limited trade war with no escalation to other countries, Australia’s GDP could be around 0.3% lower after a couple of years, equating to a loss of A$36 billion in present value terms over a decade. The EU and Japan would face smaller proportionate losses than Australia.

Losses would be greater if the US and China ramped up their trade war. Both countries could have GDP losses of around 1% in the near term and 0.3% in the longer term. Australia’s GDP would end up being around 0.4% lower in the longer term, equating to a loss of almost A$60 billion in present value terms over a decade.

If limited to the US and China, a trade war would not have as serious an impact on the global economy or on third countries. However, if other countries joined the trade war they would all be worse off.

An all-out trade war would plunge the global economy into recession. If financial markets got the jitters and over-reacted to such a trade war, all bets would be off and a global recession would occur.

The lesson from KPMG Australia’s economic modelling is that even in the event of a full-blown trade war between the US and China, it would be in the best interests of other countries to stay out of the dispute. Australia and other nations should resist pressure to impose or increase tariffs on goods imported from the US and China, since doing so would do much more harm than good to their own economies.
<table>
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