### POTENTIAL EFFECTS OF A US-CHINA TRADE WAR ON AUSTRALIA

### **Summary**

- During his presidential campaign, President Trump proposed an across-the-board tariff of 45 per cent on Chinese imports.
- The imposition of higher tariffs on Chinese imports by the US will be inconsistent with its WTO obligations. Thus, a US-China trade war could be short-lived unless the US leaves the WTO. Product-specific or company-specific trade measures may be more likely.
- Other things equal, a US-China trade war is likely to adversely affect the US, Chinese, and Australian economies.
- Chinese steel exports to the US are insignificant (<2%) so this channel alone is unlikely to be very important.
- Through its broader trading relationship with China the US ultimately accounts for about 5% of demand for Chinese metal manufacturing (compared to 56% domestic investment and 29% total foreign demand) so Australia could be affected through this channel.
- A back of the envelope calculation suggests a fall in Chinese X to the US of between ¼ and ½ could subtract 1-2ppts from Chinese GDP growth. The direct effect via China on Australia would probably be a fraction of this and would be cushioned by any depreciation of the AUD (either due to commodity prices falls or changing interest differentials) or domestic policy stimulus in China if that were to eventuate in response. The negative effect would be compounded by any negative effect of the trade war on US growth (Australia's 3<sup>rd</sup> largest trading partner), and by any second-round effects on upstream production sectors in affected countries.

### US / China trade relationship

US accounts for 18% of Chinese exports (largest partner; mostly capital and consumer goods) China accounts for 22 % of US imports (largest partner)

China accounts for 8% of US exports (3<sup>rd</sup> largest partner; mostly capital goods) US accounts for 9% of Chinese imports (2<sup>nd</sup> largest partner)

### **Effect on China**

- If higher tariffs reduce Chinese exports to US, then one could see a reduction in Chinese GDP and increase in unemployment, particularly for export-oriented sectors. Roughly 62% of the value of secondary industry production was accounted for by merchandise exports in 2014, and 30% of total employment was accounted for by the secondary industry, suggesting that merchandise exports could have accounted for 18% of total employment. As 18% of China's exports go to the US, a crude calculation (assuming no variance in labour intensity across industries) suggests 3% of total employment (i.e. 23 million out of 776 million total employed) could be exposed. However, there is no reason to assume that all would lose their jobs.
- NB: When considering impact on GDP, gross export flows misleading: domestic value added in Chinese exports ~60% in 2010
- A range of upstream domestic manufacturing industries (including metals manufacturing) would be affected and there could be more medium term negative effects on economies (and property markets) in regions with high exposure to export-oriented industries.

### **Effect on US**

China is likely to retaliate to an increase in tariffs by imposing trade restrictions on US imports, possibly
in a targeted fashion. Chinese citizens may also choose to boycott some US imports in the event that
bilateral relations deteriorate.

- The US relies on Chinese imports for intermediate inputs as well as final goods. Inflation is likely to
  increase in the short run (either through higher prices due to tariffs, or a need to source those goods
  from higher cost producers domestically or abroad).
- This could place upward pressure on the federal funds rate and negatively affect growth and employment.
- Sectors that export to China or engage in processing trade in China would be exposed to Chinese retaliation e.g. aerospace, engineering, IT

### **Effect on Australia**

- China accounts for 29% of Australian exports, and is Australia's largest trading partner.
- US accounts for 6.8% of Australian exports and is our third largest trading partner.
- World input-output tables suggest that 70% of Chinese metal manufacturing value added results from domestic demand and 29% ultimately is due to foreign demand. Roughly 5% is directly or indirectly due to US demand, e.g. for imported manufactures that embody manufactured metal components.
- Little direct impact from lower Chinese steel exports to US (US accounts for <2% of Chinese steel exports)</li>
- Harder-to-predict confidence effects could be significant, though any stimulus policies or support for the export sector could mitigate this.
- Net exports have contributed little to Chinese GDP growth in recent years and exports have declined as
  a share of nominal GDP. Nonetheless, rough calculations based on the US trade share and the ratio of
  exports to GDP suggest that if Chinese export volumes to the US fell by ¼ ½, that would subtract 12ppts from Chinese GDP growth, which is not insignificant.
- A negative shock to Chinese exports would weigh on commodity demand, but any compensating domestic stimulus (akin to the response to the GFC export shock) could provide an offset, albeit at the cost of exacerbating longer-term structural problems and contributing to financial risk. Net negative effects on commodity demand could place downward pressure on commodity prices and the AUD, which would cushion Australian commodity exporters. Fed tightening could have a similar effect if not matched by the RBA. Nonetheless, overall slower MTP growth arising from a trade war, second-round effects on upstream production sectors in affected countries and harder-to predict global confidence effects could mean that the net effect is negative.

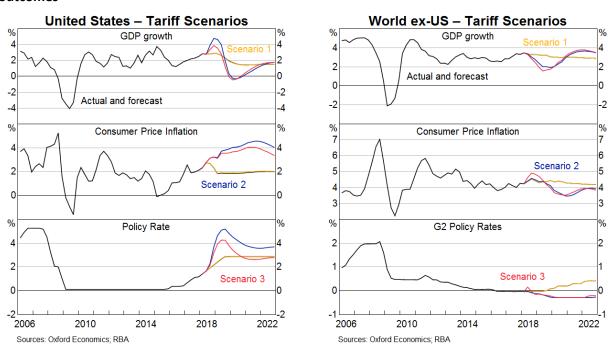
### **US PROTECTIONISM SCENARIOS BRIEFING**

The United States has announced wide-ranging tariffs on steel and aluminium imports, in effect from late March; some countries have suggested that they may retaliate in response. We assess the global and domestic impact of a possible 'trade-war' using the Oxford Economics and MARTIN models. The three scenarios we explore are:

- 1. US steel and aluminium tariffs only. This scenario models the effect of the currently-announced tariffs of 25 and 10 per cent on steel and aluminium US imports, respectively. Canada and Mexico have been exempted for now while NAFTA is renegotiated. Australia is also exempt, and other countries can apply and secure exemptions on the grounds of being US national security partners. As such, the share of US imports affected by tariffs is very small at 1½ per cent.
- 2. Wide-ranging US tariffs. In this scenario the United States applies a 20 per cent tariff on all goods imports from all countries.
- 3. *Retaliation*. In this scenario all countries except Australia retaliate to the wide-ranging US tariffs and impose tariffs of 20 per cent on all of their US goods imports.

We assess the impact of these scenarios over a five-year horizon (to the end of 2022), assuming that tariffs are implemented immediately and remain in effect over the whole period.

### **US outcomes**



In the first scenario there is only negligible deviation from the baseline pre-tariff forecast. The share of affected US imports is very small. As a result, we estimate that US goods import volumes will decline by 0.1 per cent.

The effects are larger in the more-protectionist scenarios. The increase in tariffs on US imports has three key effects on aggregate demand in Scenarios 2 and 3:

- Initially, the **price effect** of the 20 per cent across-the-board tariff reduces US import volumes by 8 per cent. The increase in import prices induces a substitution to domestically-produced goods, which causes GDP to increase above baseline for the first year or so.
- This is offset by a negative income effect and tighter monetary policy. Higher import prices flow through to consumer and producer price inflation; after 4 quarters, CPI inflation in the United States is around 2 percentage points higher. The initial pickup in GDP growth also pushes inflation higher as it opens up a large positive output gap, given that the United States is currently at full employment. The sharp pickup in inflation lowers real incomes, which weighs on domestic demand. This effect is reinforced by

<sup>1</sup> This is calibrated using a 40 per cent price elasticity of substitution for imports. It is broadly in line with the Oxford model coefficients and the literature.

tighter monetary policy. The US Federal Reserve responds to the above-target inflation by significantly increasing the fed funds rate. US equity prices also decline by around 8–10 per cent, due to lower corporate profits and higher long-term interest rates. By 2019, the income effect and tighter monetary policy outweigh the positive GDP effect from substitution to domestic production and the US enters a recession.

• In Scenario 3, there is an additional negative **external demand effect**. Retaliatory tariffs on US exports reduce other economies' demand for US produced goods. Relative to scenario 2, this weighs on US GDP and mutes the increase in US inflation and the fed funds rate.

### **Rest of world outcomes**

The current form of the US tariffs on steel and aluminium has a negligible impact on the rest of the world. However, GDP growth declines markedly in the more-protectionist scenarios as US demand for goods produced overseas falls and global trade slows (the US accounts for 13 per cent of global imports). Overall, Australia's major trading partner GDP growth is between 3 and 3½ per cent lower in levels terms by 2020 relative to baseline. In the retaliation scenario, global GDP declines further in the near term as the effects of retaliatory tariffs on US exports imposed by the rest of the world raise inflation outside the US which in turn lowers real incomes and demand.

While a US-centred 'trade-war' is inflationary for the United States, it is deflationary for the rest of the world. The effect of lower external demand (from the United States mainly) more than offsets the inflationary impact of the retaliatory tariffs. In contrast to the Federal Reserve, most central banks ease monetary policy in response.

### Comparison with other trade scenarios

The longer-run effects on US and world GDP from the most-protectionist scenario are broadly in line with other estimates when scaled by the size and scope of the tariffs:

### **Australian outcomes**

### Scenario details

Australia is exempt from the aluminium and steel tariffs in scenario 1. In scenarios 2 and 3 we assume that the United States applies a 20 per cent tariff on Australian exports. However, we assume that Australia does not retaliate with tariffs on US imports.

We take the results from the Oxford Economic Model and feed them into MARTIN. For all three scenarios we:

- hold the domestic cash rate fixed at the baseline level;
- hold the real TWI constant this shuts off the exchange rate channel;<sup>2</sup> and

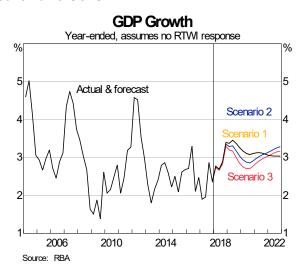
<sup>2</sup> It is difficult to predict the effect of an increase in global trade protectionism on the Australian dollar. A deterioration in global economic conditions is typically associated with a depreciation of the dollar. On the other hand, the reduction in non-US policy rates, which increase the attractiveness of Australian dollar assets, and might be expected to cause the dollar to appreciate. When we allow the real TWI and cash rate to respond endogenously, Australian GDP declines by a little more in the near term, and a little less by the end of 2022.

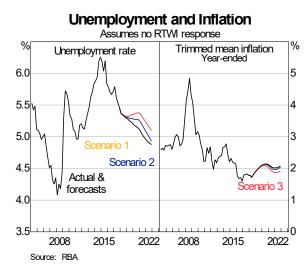
• include financial spillovers to domestic equity prices and domestic credit spreads. Specifically, Australian share prices fall by 8–10 per cent, lowering household wealth by between 1.5 and 1.8 per cent at its trough in 2020. Corporate borrowing rates also increase by 20 basis points.

### Results

There is effectively no impact on the Australian economy from the United States applying tariffs to aluminium and steel imports, in line with the negligible effect for the global economy.<sup>3</sup> Additionally, the indirect effects on demand for Australian iron ore are also expected to be small as the tariffs on US steel imports are not expected to have a substantial effect on Chinese steel production.<sup>4</sup>

In the more-protectionist Scenario 3, the level of GDP is around 1 per cent lower. The unemployment rate is ¼ percentage points higher and inflation is around 0.2 percentage points lower. The effects of Scenario 2 are around half the size.



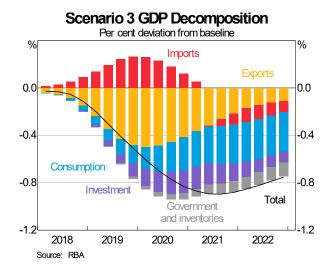


If we allow the cash rate to respond to the weaker unemployment and inflation outcomes, MARTIN's standard reaction function suggests a cut of 50 basis points in Scenario 3. This response sees unemployment and inflation return to around baseline levels by the end of 2022.

### Main drivers

An increase in overseas tariffs affects the domestic economy through two main channels:

- The direct demand channel accounts for around 85 per cent of the decline in GDP in Scenario 3. This is due to the effect on exports, which are 2.4 per cent lower in 2020. Lower export revenue reduces domestic income which weighs on consumption and investment.
- The financial channel, via lower equity prices and wider spreads on corporate borrowing rates, accounts for the remaining 15 per cent. This is mostly through the effect of the decline in equity prices on household wealth, which weighs on consumption; wider spreads also weigh modestly on investment.



### **Economic Analysis Department**

### 16 March 2018

<sup>3</sup> A BAT briefing suggests that effect on Australia would remain very small even without the exemption for Australian products.

<sup>4</sup> Ma and McLoughlin (2017) find that there is little difference in the size of the decline in Chinese steel product exports to countries with trade barriers in place relative to those with no additional trade protection. Instead, strong Chinese demand for steel appears to be driving the recent decline in Chinese steel product exports; external factors have only a marginal impact.

### ATTACHMENT - APRIL 2018 - DRAFT MEMORANDUM

# Implications of an Increase in Global Trade Protectionism

The United States announced wide-ranging tariffs on steel and aluminium imports that took effect from late March. The share of US imports affected by the tariffs is small, at 1½ per cent, but these measures may have broader implications for future global trade policies. For instance, some economies have suggested that they may retaliate in response. Moreover, the United States is reported to be considering imposing further wide-ranging tariffs on China.

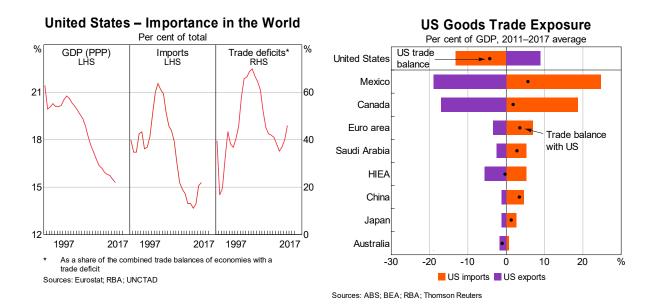
To quantify the global and domestic economic impact of a possible 'trade-war' we use Economic Analysis's macroeconomic model, MARTIN, and a model of global linkages from Oxford Economics. We explore three scenarios with increasing severity of trade protectionism:

- 1. *US steel and aluminium tariffs only:* This scenario only includes newly imposed tariffs on US imports of steel (25 per cent) and aluminium (10 per cent), with exemptions for Canadian, Mexican and Australian imports.
- 2. *Wide-ranging US tariffs*: This scenario assumes United States applies a 20 per cent tariff on all goods imports from all economies, including Australia.
- 3. *Retaliation:* In this scenario, all economies except Australia are assumed to retaliate by imposing tariffs of 20 per cent on all of their imports of US goods.

## Implications for the World Economy

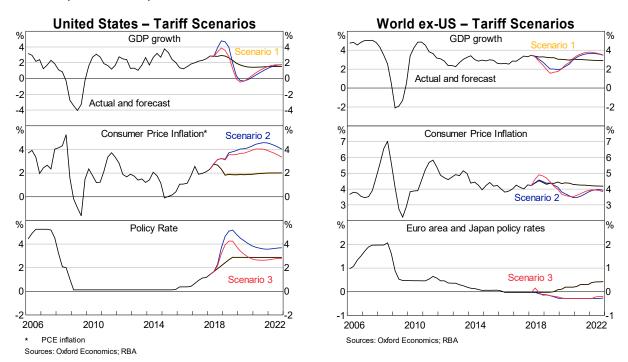
Although its share of world GDP and trade has declined over the past three decades, the United States remains a significant source of global final demand. The United States currently accounts for a little more than 15 per cent of global GDP and is the second largest economy in purchasing power parity (PPP) terms.<sup>1</sup> In comparison, China's share in world GDP is about 18 per cent and the euro area's is 12 per cent; the fourth largest economy is India is much smaller than the three largest economies, with a share of only 41/2 per cent of global GDP. The United States accounts for only around 15 per cent of global imports, which is in line with its GDP share. However, the US trade deficit is large and in 2017 was around 3 per cent of US GDP; the trade deficit in goods is even larger at 4 ½ per cent of GDP. As result, the United States accounts for about half of the global trade deficit (i.e. the sum of negative trade balances across economies). This highlights the importance of the United States as a source of global final demand. The United States' largest bilateral trade deficits are with China, the euro area, Japan and Mexico. When considered from the perspective of the exporting economy, goods trade surpluses with the United States can be quite significant (although this is partially offset for most economies by their services trade deficits with the United States). Given the interconnectedness of the global economy, through global value chains and financial channels, the impact a US-centred trade war is likely to be larger and more broad-reaching than what the direct trade channels would suggest.

<sup>1</sup> US share of global output is currently the same when measured at market exchange rates and in PPP terms. However, measured at market exchange rates the United States economy is slightly larger than China's and is the largest in the world.



In the first scenario the imposition of steel and aluminium tariffs has only a negligible effect on the United States and the rest of the world because the share of US imports that is affected is very small. As a result, the outcomes under Scenario 1 are virtually indistinguishable from the baseline projection. The baseline projections for the global variables are from Oxford Economics as of February and are broadly in line with the Bank's outlook for overseas economies.

The effects are larger in the more-protectionist scenarios. The key macroeconomic variables evolve somewhat differently in the United States and the rest of the world, given that the United States is at the centre of the protectionist push.



**In the United States**, activity would be boosted in the short-term by the imposition of broad-based tariffs under Scenario 2 before declining significantly, and inflation would be exted to increase substantially. The key channels are:

- Initially, the **price effect** of the 20 per cent across-the-board tariff induces an 8 per cent reduction in US import volumes and a substitution towards domestic production.<sup>2</sup> This causes US GDP to increase above baseline (and the outcomes under Scenario 1) for the first year or so.
- The higher import prices flow through to domestic US inflation. The initial pick-up in GDP growth also pushes inflation higher, given that the United States is currently at full employment. As a result, US inflation increases by around 2 percentage points.
- The sharp pick-up in inflation lowers real incomes. This **negative income effect** is reinforced by **tighter monetary policy** in the United States. US long-term interest rates increase, equity prices decline and the US dollar appreciates. By 2019, the income effect, tighter monetary policy and tighter financial conditions outweigh the positive GDP effect from substitution to domestic production and the United States enters a recession.
- In Scenario 3, there is an additional negative **external demand effect**. Retaliatory tariffs on US exports reduce other economies' demand for US-produced goods. This weighs on US GDP growth and mutes the increase in US inflation and the fed funds rate relative to Scenario 2.

**Outside the United States**, domestic GDP growth declines markedly in the more-protectionist scenarios as US demand for overseas-produced goods falls and global trade slows. This reflects the decline in the external demand faced by the rest of the world from the substitution to US domestic production and the subsequent decline in US growth as US monetary policy is tightened. The increase in long-term US interest rates initially leads to higher long-term rates in the rest of the world, which tightens financial conditions and depresses GDP in the rest of the world further. Overall, Australia's major trading partner GDP is between 3 and 3½ per cent lower in levels terms by 2020 relative to baseline in the second and third scenarios.

In contrast to the experience of the United States, the more-protectionist scenarios are deflationary for the rest of the world. This is because:

- These scenarios assume that tariffs in the rest of the world are raised only on imports from the United States, whereas in the United States tariffs are raised on all imports. As a result, the substitution to domestic production is much smaller than is the case in the United States.
- The decline in external demand and the tightening in financial conditions in the rest of the world
  create spare capacity, which more than offsets the inflationary impact of the retaliatory tariffs beyond
  the first year. It should be noted that the role of financial conditions channel is model dependent. The
  Oxford Economics model assumes a significant spillover of US financial conditions, especially US longterm interest rates, to the rest of the world.
- In some of the affected economies (mainly the euro area and Japan) the scope for monetary policy support is limited as policy rates are close to their effective lower bound.

## Implications for Australia

To understand the impact of these modelled global outcomes on Australia using MARTIN, we assume that the domestic cash rate is unchanged (that is, monetary policy does not respond) and the real exchange is fixed. This exchange rate assumption is discussed further below. We also assume that the changes in global financial variables affect Australia too, so that share prices and household wealth are lower and corporate borrowing rates rise.

The effects of the scenarios on Australian economic conditions come through two main channels:

• The demand channel: The imposition of tariffs raises the price of Australian exports for US consumers, lowering US demand for these goods. The reduction in Australian export volumes then leads to lower

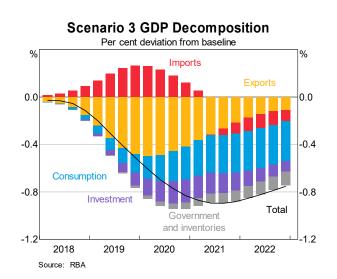
<sup>2</sup> This is calibrated using a 40 per cent price elasticity of substitution for imports, which is broadly in line with the literature.

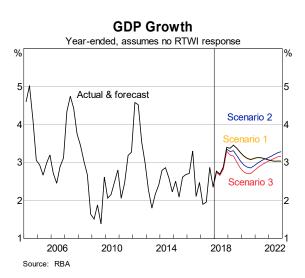
export revenue. This reduces domestic income, which weighs on consumption and investment. Lower domestic demand and higher world prices also lead to less demand for imports.

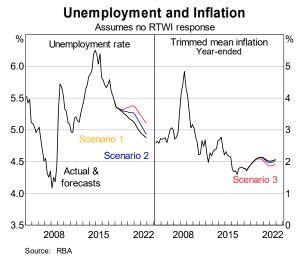
• The financial conditions channel: Lower equity prices reduce household wealth, which leads to lower consumption. Wider spreads on corporate borrowing rates also weigh modestly on investment.

The largest impact occurs in the retaliatory scenario (Scenario 3). At its trough in 2021, the level of GDP is around 1 per cent lower. The unemployment rate is ¼ percentage points higher and inflation is around 0.2 percentage points lower. The effects of the full US tariff scenario (Scenario 2) are around half the size.

Under the limited tariff scenario (Scenario 1), the effects on Australian GDP are negligible. This magnitude is line with the very small global effects. Even without the exemption on Australian products, the impact would be small; Australia's exports of aluminium and steel account for less than 1 per cent of total export values. Additionally, the indirect effects on demand for Australian iron ore are also expected to be small as the tariffs on US steel imports are not expected to have a substantial effect on Chinese steel production.







We leave the exchange rate unchanged as its response to trade protection is uncertain. On the one hand, a deterioration in global economic conditions, heightened risk aversion and a fall in commodity prices would typically be associated with a depreciation of the Australian dollar. In that case, the consequences of the scenarios for economic activity in Australia would be less severe because the depreciation would support exports. On the other hand, Australia may be less exposed to the scenario than other economies that rely more on global trade flows as a source of demand for their products and have larger manufacturing

sectors. As a result, it is possible that the Australian dollar could appreciate. Were this to occur, the downside risks of this scenario would be greater. To illustrate the potential magnitude of these effects, when we allow the exchange rate to respond to the imposition of tariffs in the Scenario 3, it suggests that the real exchange rate would appreciate by 6 per cent. GDP would then fall by an additional 2.5 per cent. A lower cash rate could largely offset these effects in the long run.

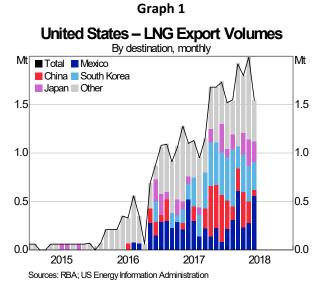
Economic Analysis 20 March 2018

### THE IMPACT OF CHINESE TARIFFS ON US LNG EXPORTS

- China recently announced that it would impose further tariffs on \$60 billion of US imports in retaliation to the latest tariffs on \$200 billion of Chinese goods, effective from 24 September. These measures include a 10 per cent tariff on LNG shipments from the US.<sup>1</sup>
- Overall, it is expected that the impact of the tariff on US LNG exports will be fairly small. China
  accounted for around 17 per cent of US LNG exports in 2017/18 and US LNG cargos destined for
  China can reportedly be re-routed to other destinations where they will not attract the new tariff.
  As such, the impact of the recent tariffs on Asian LNG spot prices is expected to be small.
- There appears to be limited upside risk to Australian LNG exports from Chinese tariffs on imported US LNG. Most Australian production facilities are already operating at around nameplate capacity and those that aren't are constrained by other factors.

### **US LNG exports – Recent trends**

- US LNG exports have increased significantly since late 2016, as the development of shale gas spurred an expansion in domestic LNG production capacity (Graph 1).
- South Korea was the largest destination of US LNG exports in 2017/18, accounting for around 24 per cent of the total. This was followed by Mexico (18 per cent) and China (17 per cent). Chile, India, Japan and Jordan are also significant export destinations for US LNG. Growing energy demand and a widening spread between the crude oil price (which most contracted Asian shipments are priced off) and US LNG prices (based off the Henry Hub natural gas price) has helped drive the increase in US LNG exports to Asia.



After reaching a peak in December 2017, US LNG exports to China have fallen so far in 2018
(particularly in recent months), possibly as a reflection of ongoing US-China trade tensions. Some
reports suggest that Chinese buyers have been seeking alternative sources of supply from the LNG
spot market.<sup>2</sup> Nonetheless, US LNG exports have also declined to some other destinations this year,
notably South Korea.

### **US LNG capacity**

 There are two LNG projects operating in the US, which have a combined nameplate capacity of 23.5Mt
 Four further projects are currently under construction and are expected to come online by the end of 2019; this expansion will result in US nameplate capacity roughly tripling to around 70Mt.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Tan, A (2018), 'Briefing: Implications for China from US trade protections and facts on China-US trade', internal briefing, 19 September.

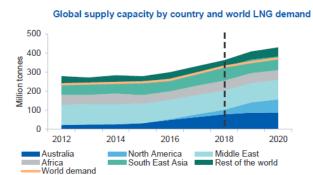
See for example DiSavino, Scott (2018), <a href="https://www.reuters.com/article/us-usa-china-trade-lng/us-lng-exports-to-china-decline-as-trade-war-escalates-idUSKCN1LY2W0">https://www.reuters.com/article/us-usa-china-trade-lng/us-lng-exports-to-china-decline-as-trade-war-escalates-idUSKCN1LY2W0</a>, <a href="https://example.com/article/us-usa-china-trade-lng/us-lng-exports-to-china-decline-as-trade-war-escalates-idUSKCN1LY2W0">https://example.com/article/us-usa-china-trade-lng/us-lng-exports-to-china-decline-as-trade-war-escalates-idUSKCN1LY2W0</a>, <a href="https://example.com/article/us-usa-china-trade-lng/us-lng-exports-to-china-decline-as-trade-war-escalates-idUSKCN1LY2W0">https://example.com/article/us-usa-china-trade-lng/us-lng-exports-to-china-decline-as-trade-war-escalates-idUSKCN1LY2W0</a>, <a href="https://example.com/article/us-usa-china-trade-lng/us-lng-exports-to-china-decline-as-trade-war-escalates-idUSKCN1LY2W0">https://example.com/article/us-usa-china-trade-lng/us-lng-exports-to-china-decline-as-trade-war-escalates-idUSKCN1LY2W0</a>, <a href="https://example.com/article/us-usa-china-trade-lng/us-lng-exports-to-china-trade-lng/us-lng-exports-to-china-trade-lng-us-

<sup>&</sup>lt;sup>3</sup> These projects are:

These projects are: Elba Island (Georgia), Freeport (Texas), Corpus Christi (Texas) and Cameron (Louisiana)

 Over the next year or so, the US will account for around half of new global supply capacity and by the end of 2019, the US is expected to become the third largest exporter in the world behind Australia (nameplate capacity 88Mt) and Qatar (nameplate capacity 77Mt; Graph 3).

Graph 3



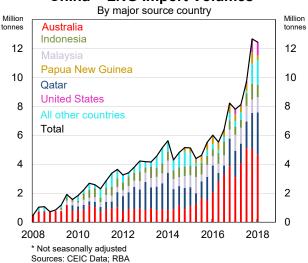
Notes: (Nameplate) capacity is the maximum annual production capacity of an LNG plant. Source: Department of Industry, Innovation and Science (2018); Nexant (2018)

### **China's LNG imports**

- China is the second largest LNG importer in the world. Australia is the largest source of imports (45 per cent), followed by Qatar (20 per cent) and Malaysia (11 per cent) (Graph 4). US exports account for around 4 per cent of total Chinese LNG imports.
- Import demand has grown strongly in recent years as China has implemented environmental policies to reduce coal consumption, which includes switching coal energy generation to gas. The Chinese government aims to increase the share of gas in its energy mix to around 10 per cent by 2020, from around 6 per cent in 2015.
- Chinese companies have interests in both upstream gas and liquefaction capacity in the US, and are reportedly continuing to engage in

Graph 4

China – LNG Import Volumes\*

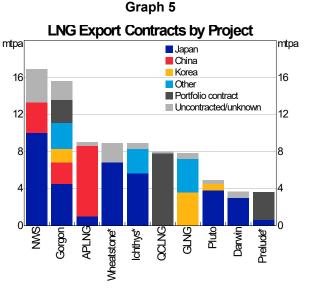


- and are reportedly continuing to engage in contracts with North American companies to secure future gas supply<sup>5</sup>; these LNG supply contracts are reported to have flexible destination clauses, meaning that shipments can be re-routed and/or swapped with cargoes from other countries. This suggests that the recent tariff developments have not significantly affected China's longer term gas procurement strategy.
- China produced around 100Mt of natural gas in 2017 and is targeting production of around 150Mt per annum by 2020; however, the Department of Industry, Innovation and Science notes that China is not expected to meet this production target due to unfavourable geology and location of gas reserves. China also imports gas via pipelines (mainly from Turkmenistan) and is also expected to start importing gas via pipeline from Russia from 2020; imports are expected to increase from about 3.5Mt to almost 30Mt by around 2026.

<sup>&</sup>lt;sup>5</sup> Information from AME, September 2018.

### **Opportunities for Australia**

- China is Australia's second largest export market for LNG, accounting for around one-third of LNG exports in 2017-18. China has long-term purchase agreements with three Australian LNG projects and China has also invested heavily in gas projects in Australia (Graph 5). Prices for Australia's contracted LNG exports are generally linked to oil prices.<sup>6</sup>
- There appears to be limited upside risk to Australian LNG exports from Chinese tariffs on imported US LNG.
  - Tariffs on US LNG exports into China are likely to result in a reshuffling of LNG import destinations in Asia, rather than an increase in demand for Australian LNG exports. If LNG demand in the region is



- \* Ramping up or yet to start production
- \*\* Calculated from the higher of nameplate or steady state capacity Source: company reports
- sufficient to absorb current LNG import volumes (which elevated Asian LNG prices indicates) then US LNG exports will go to countries where tariffs do not apply (thanks to destination flexibility) and spot cargoes from other countries such as Australia will shift from these countries to China.<sup>7</sup>
- o In the event that tariffs on US LNG exports into China result in greater demand for LNG exports from Australia, there appears to be limited ability for Australian producers to increase their supply into the spot market. Most production facilities in Australia are already operating at nearnameplate capacity and those that aren't (mainly the east coast projects) are constrained by other factors such as domestic gas supply concerns. In any case, only a small share of existing Australian LNG production capacity (around 15 per cent) is available for spot sales (uncontracted; Graph 5). In terms of new LNG production capacity, the completion of the two remaining construction projects would increase spot cargo capacity by around only ½ Mtpa in 2019. While Woodside is planning to build additional capacity of 4–5 Mtpa at its Pluto LNG plant in WA, very long lead times on gas projects means this project is not expected to start production until 2023/2024.

<sup>&</sup>lt;sup>6</sup> See Jenner, Lam and Poole (2017)

<sup>&</sup>lt;sup>7</sup> The majority of Australia's LNG export contracts do not allow destination flexibility and hence only spot cargoes can be diverted.

### **US TRADE PROTECTIONISM**

Trade protectionism risks remain high and have increased uncertainty about the global growth outlook.

There have already been adverse economic effects (slower US-China trade, drop in export growth and new export orders, weaker business surveys citing concerns about tariffs/trade policy uncertainty).

**Intensification of protectionism could materially weaken growth** through lower investment, financial market reactions and confidence. The IMF estimates (Oct 2018) that in a more severe protectionism scenario with large negative confidence effects, global GDP growth could fall by 50bp but such estimates are highly uncertain. Internal RBA estimates are similar (see below).

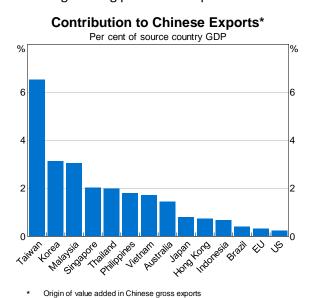
**Little direct effect on Australia to date.** Australian exports of aluminium and steel to the US have been exempted from US tariff measures.

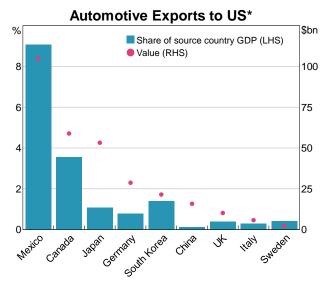
• But: Australia benefits from open, inclusive, rules-based international system; a material weakening in global growth would affect Australian trade; and China is Australia's largest trading partner.

### **US-China**

US and China agreed in late November to delay further tariff rate increases until 1 March 2019 to allow more time for bilateral trade negotiations. If no deal is struck, the US is likely to increase tariffs from 10% to 25% on US\$200 billion of imports from China on 1 March 2019. For previous measures, see table below.

**US, China and the more highly trade-exposed east Asian economies** with strong links to global supply chains (e.g. Korea, Taiwan) are most exposed to **negative impacts** from US-China trade protectionism; domestic policy is likely to offset some of the effects in China. However, some other countries (particularly in east Asia) could benefit from a restructuring of supply chains, with the escalation of trade tensions accelerating existing plans to shift production to lower-cost producers in the region.





 Includes exports of motor vehicles, motor vehicle bodies and trailers, and motor vehicle parts in 2017

Sources: US Department of Commerce; World Bank

### **US** automotive

Sources: OECD; Refinitiv

Potential increase in US automotive tariffs remains a concern for a number of economies.

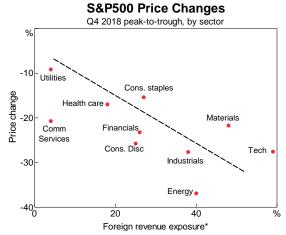
Canada and Mexico are the largest source of US automotive imports, but are likely to be exempt from higher tariffs because of the USMCA (i.e. renegotiated NAFTA which is not yet ratified by US Congress).

**Germany and Japan** are the second and third largest exporters or cars to the US (although these exports account for less than 2% of their GDP). The US is holding early trade negotiations with the EU and Japan.

The US Commerce Department is investigating increasing tariffs up to 25% on most automotive imports on national security grounds (report due 17 February). Current (non NAFTA) tariffs are 2.5% on passenger cars and 25% on trucks (including some SUVs). In 2017, automotive imports were 14% of total US imports.

### Financial market impact

- Trade tensions have played a larger role in financial markets in recent months than previously.
- Increased concerns about the negative effects for global growth and corporate earnings was a key factor in the equity prices declines and the widening of credit spreads in late 2018 (see Recent Moves in Financial Markets briefing).
- Sectoral moves in the US during Q4 2018 reflected the international revenue exposure.
- Easing in trade tensions following US-China negotiations contributed to a recovery in equity prices in January.
- An escalation of trade tensions remains an important downside risk to equity and credit markets



\* Percent of revenue generated outside the US Sources: BAML; Bloomberg

### **US trade exposures**

**US** is a major source of global final demand (15% of global merchandise imports in 2017). US share of world GDP and trade declined over past 30 years.

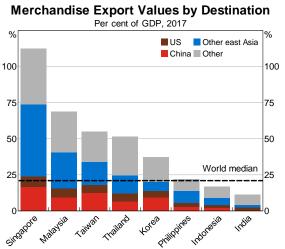
China accounts for the largest share of the US trade deficit ( $^{\sim}$  1/2), followed by the euro area ( $^{\sim}$  1/5) and Mexico ( $^{\sim}$  1/10).

- China is the largest exporter of goods to the United States (24% of all US imports; 19% of total Chinese merchandise exports)
- Most are machinery and equipment (about 70%).

Mexico and Canada are US largest trading partners (by share of US imports)

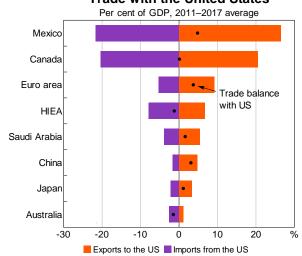
- Mexico's exports to the US are 80% of its total exports and 30% of its GDP.
- Canada's exports to the US are 3/4 of its total exports and 20% of its GDP.

Average tariff rates in the US are broadly similar to other advanced economies, but the US has more non-tariff barriers than other countries.

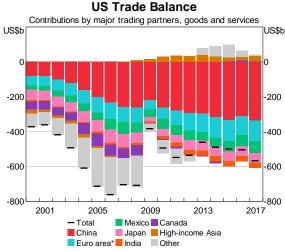


Sources: IMF; RBA; United Nations

### **Trade with the United States**



Sources: ABS; BEA; RBA; Thomson Reuters



Includes Germany, France and Italy Sources: BEA; RBA

Key US protectionism events	
Steel & Aluminium (implemented)	March 2018: US tariff of 25% on steel and 10% on aluminium imports (with many temporary exceptions)
	April 2018: China responds, tariffs between 15–25% on US\$3bn of US goods.
	June/July 2018: Exemptions lapse. Tariff hiked on nearly all imports. EU, Canada and India impose tariffs on similar value of US imports.
	August 2018: US doubles steel and aluminium tariffs on Turkey; Turkey retaliates with higher tariffs on a range of US imports.
US-China tariffs	<u>July 2018:</u> US tariffs of 25% on US\$34bn of Chinese imports (additional US\$16bn imposed mid-August). China responds with 25% tariffs on US\$34bn of US imports (with US\$16bn to follow US developments)
	September 2018: US imposes tariffs of 10% on \$200bn of Chinese imports (with threatened increase to 25% in Jan 2019); China imposes tariffs of 5–10% on \$60bn of US imports.
US auto imports (threatened)	May 2018: US launch investigation into car and truck imports. Threat of 25% tariffs on automotive imports.
	Report due 17 <b>February 2019</b> .
Negotiations	July 2018: Japan and EU sign FTA. US and EU agree to 'work together towards zero tariffs' on non-automotive industrial goods.
	November 2018: US and China delay further tariff increases until 1 March 2019.  NAFTA replacement (USMCA) signed but yet to be ratified.
	January 2019: Revised US–Korea FTA came into effect

### **RBA Protectionism scenario analysis**

- 1. Tariffs on steel and aluminium plus tariffs of 25% on US\$50 of Chinese products. Countries targeted retaliate with 25% tariffs on similar values of US products
- 2. US imposes 10% tariffs on an additional \$200bn and China imposes 10% tariffs on \$80bn (in addition to scenario 1 tariffs)
- 3. Scenario 2 + decline in confidence

