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.
- It is unclear how China will react to an increase in tariffs, but it is likely that there will be some retaliation in the form of trade restrictions against US imports. China would have to depart from its historical pattern of behaviour (e.g. the restraint displayed during the Asian Financial Crisis) to use competitive devaluation of the renminbi as a means of retaliation.

- Other things equal, a US-China trade war is likely to adversely affect the US, Chinese, and Australian economies.

- 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.

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)
- 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 1-2ppts 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

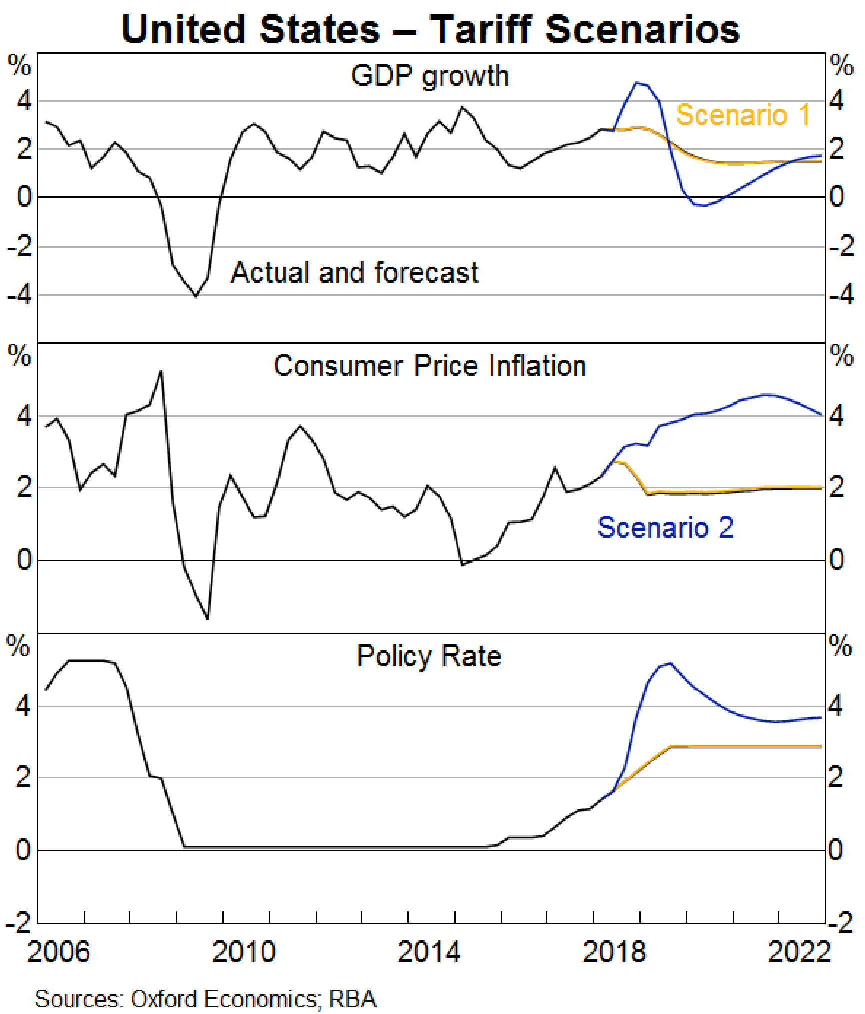
Macroeconomic Modelling and Overseas Economies Sections

Scenarios

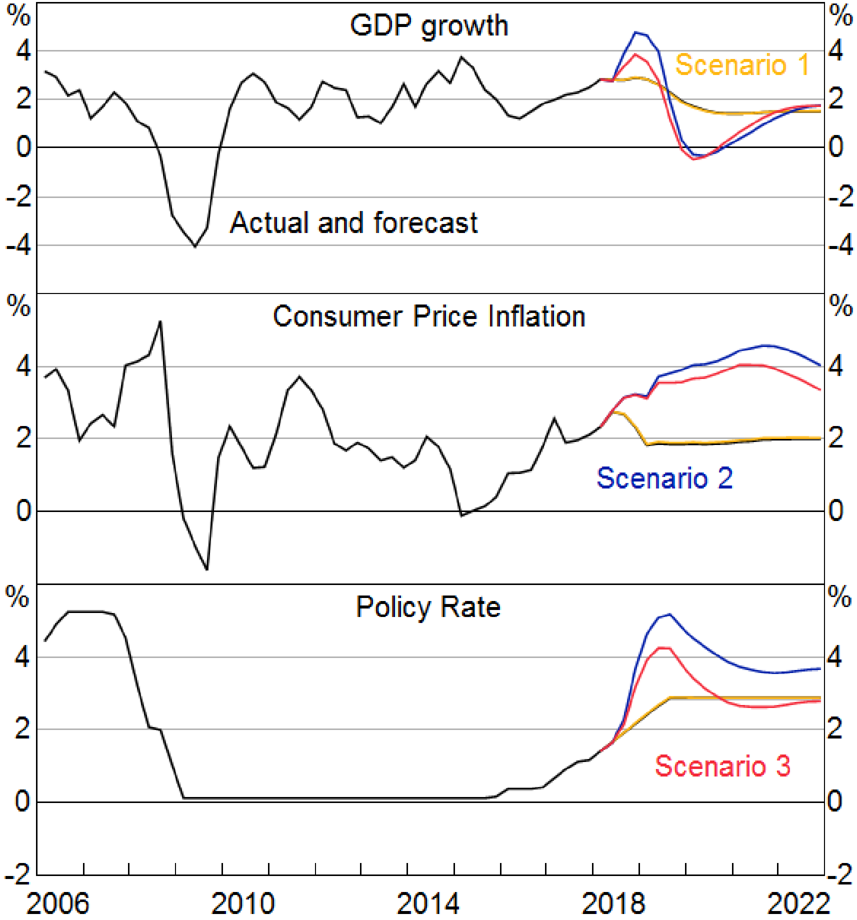
1. Announced: Only tariffs on US steel and aluminium imports

2. US escalation: 20% tariff on all US goods imports

3. Retaliation: all countries (ex Australia) apply 20% tariff on US goods exports

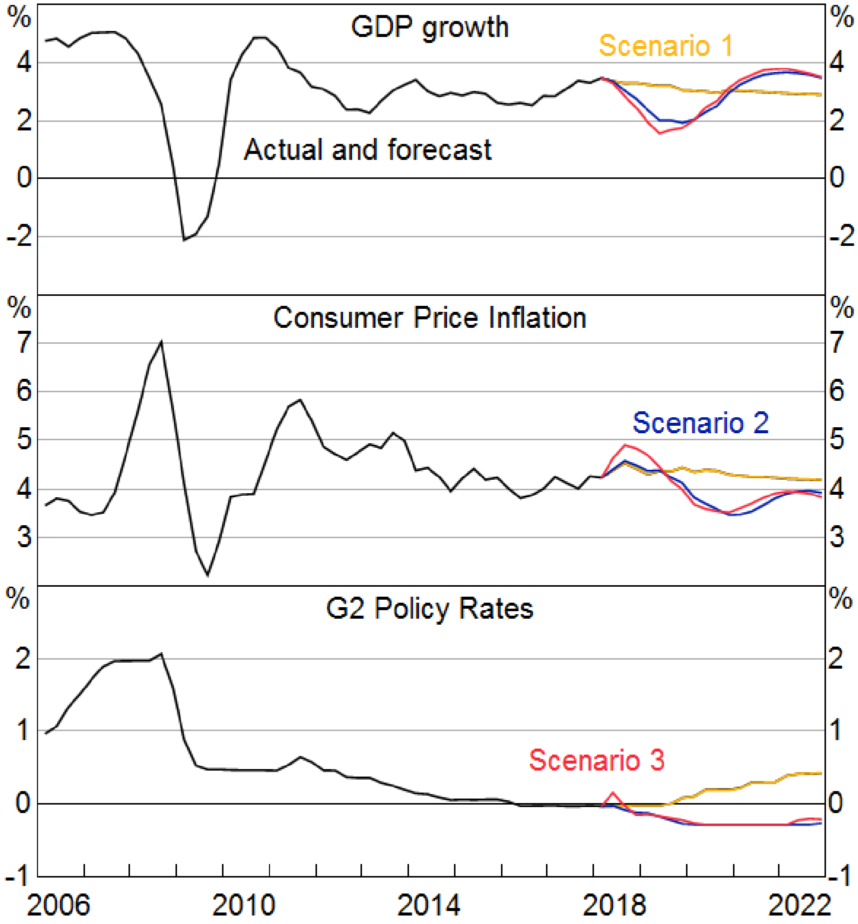

United States – Tariff Scenarios
GDP growth
Scenario 1
Actual and forecast
Consumer Price Inflation
Scenario 2
Policy Rate
%
4
2
0
-2
-4
2006
2010
2014
2018
2022
Sources: Oxford Economics; RBA

United States – Tariff Scenarios



Sources: Oxford Economics; RBA

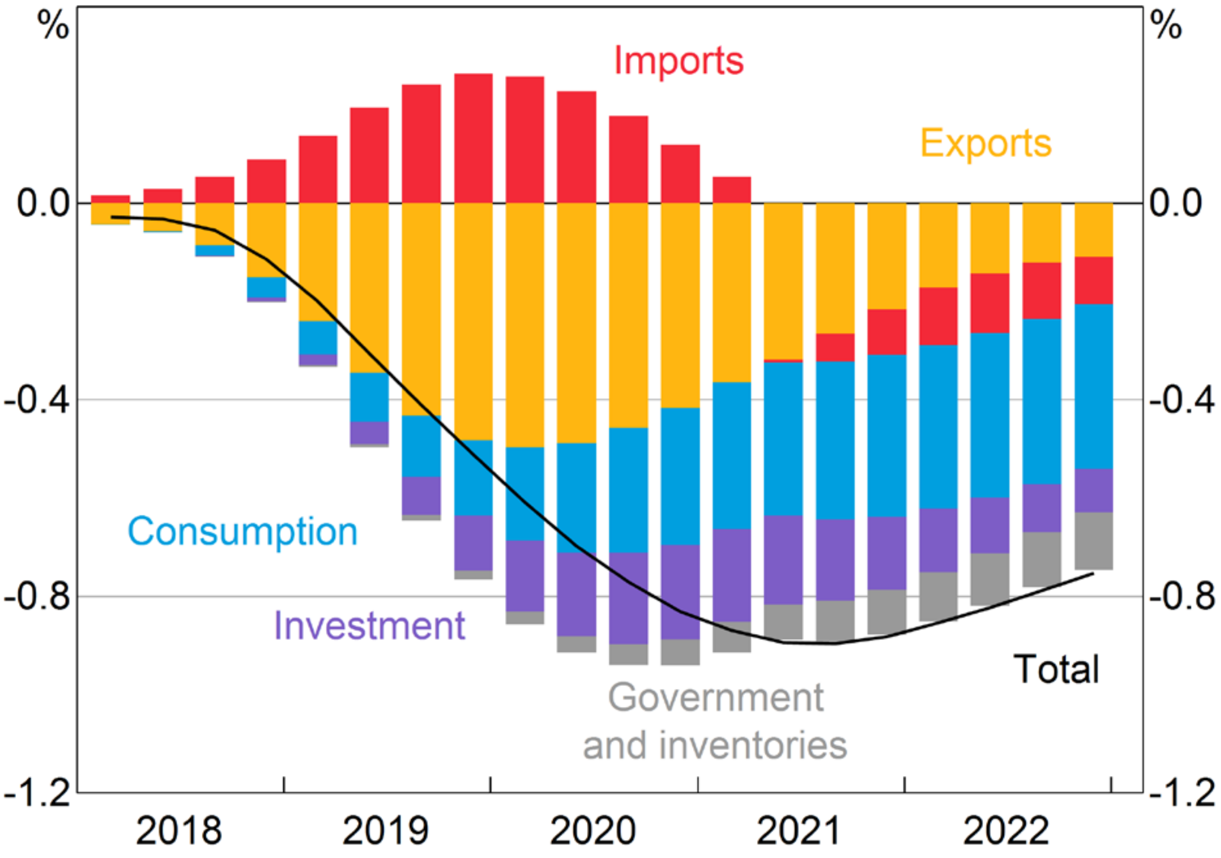
World ex-US – Tariff Scenarios



Sources: Oxford Economics; RBA

Scenario 3 GDP Decomposition

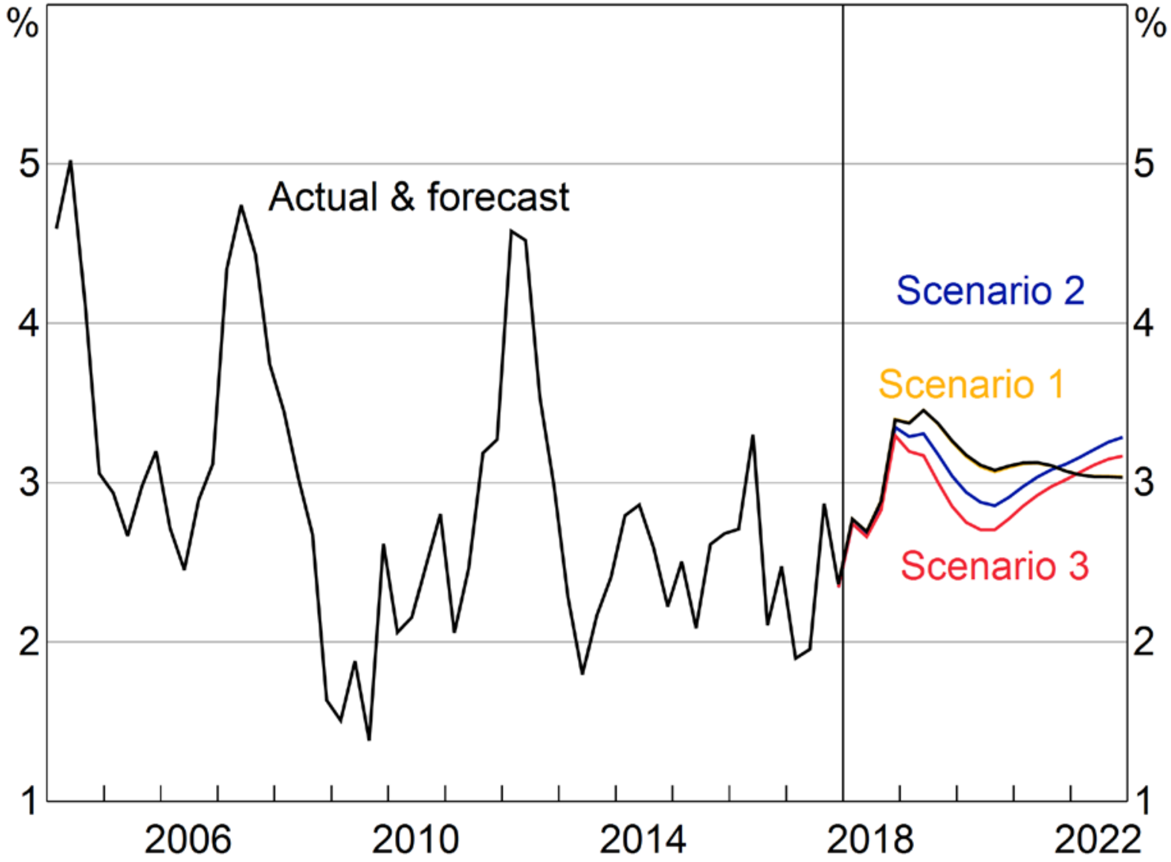
Per cent deviation from baseline



Source: RBA

GDP Growth

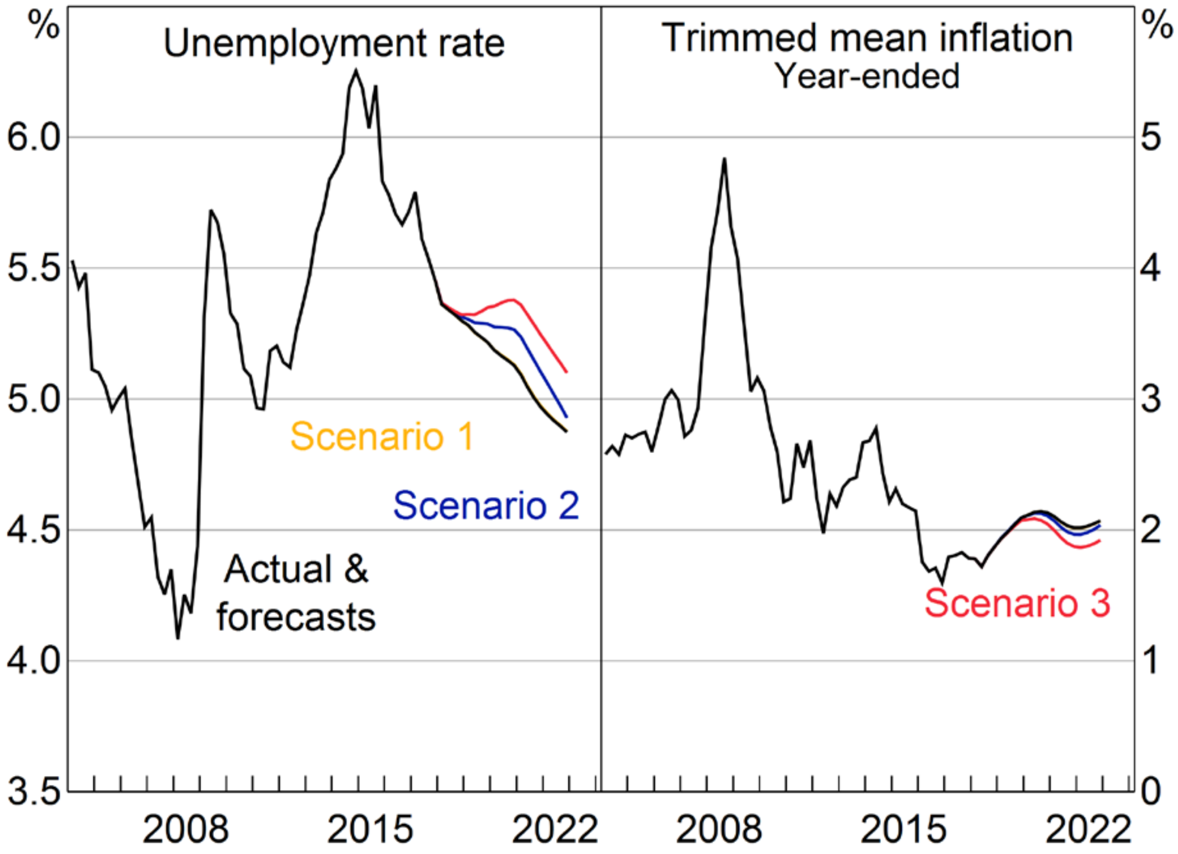
Year-ended, assumes no RTWI response



Source: RBA

Unemployment and Inflation

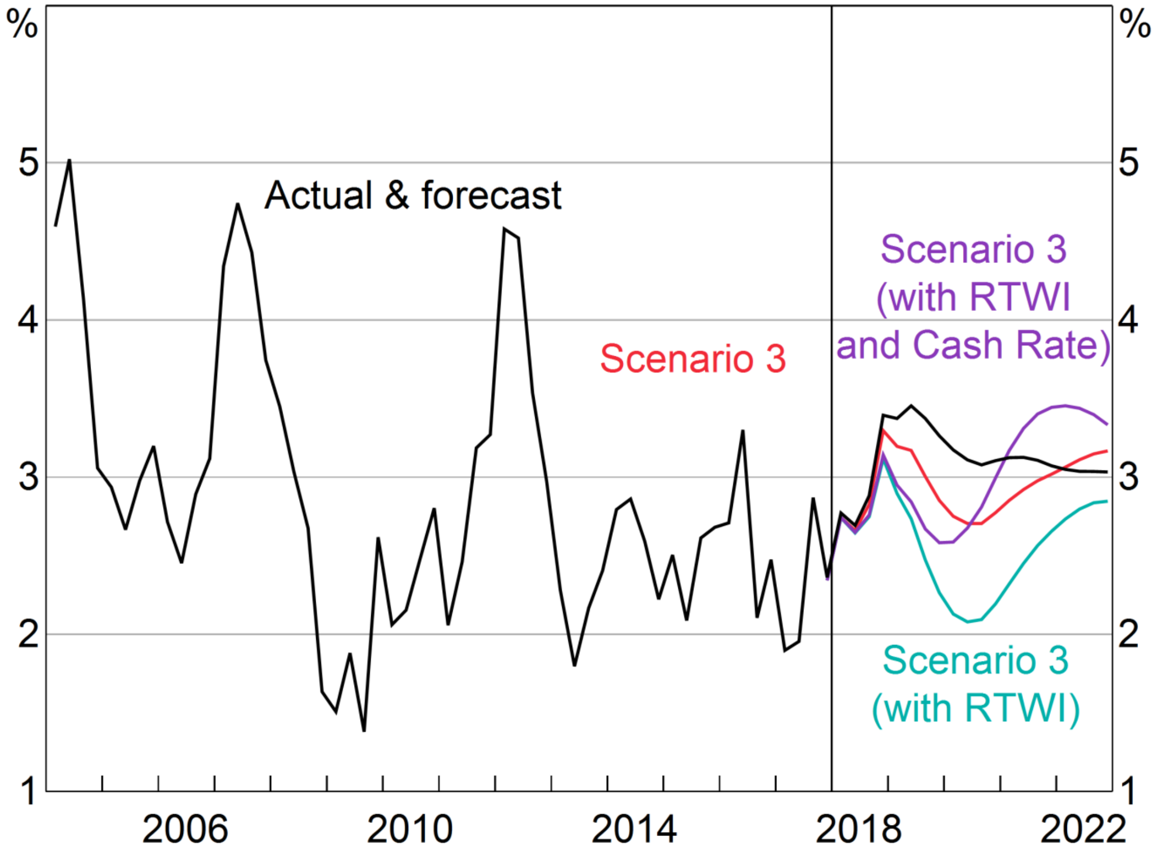
Assumes no RTWI response



Source: RBA

GDP Growth

Year-ended



Source: RBA

From:
Sent: Tuesday, 6 March 2018 4:29 PM
To:
Cc:
Subject: Impact of US Tariffs on Australian Commodity Exports [SEC=UNCLASSIFIED]

Dear all,

Please find below some information on the recent US tariff announcements.

| Economist | Business and Trade | Economic Group
RESERVE BANK OF AUSTRALIA | 65 Martin Place, Sydney NSW 2000
| w: www.rba.gov.au

From:
Sent: Monday, 5 March 2018 4:42 PM
To:
Cc:
Subject: Impact of US Tariffs on Australian Commodity Exports [SEC=UNCLASSIFIED]

Dear

Following the recent US tariff announcements, please find below (and attached) some more information on these developments.

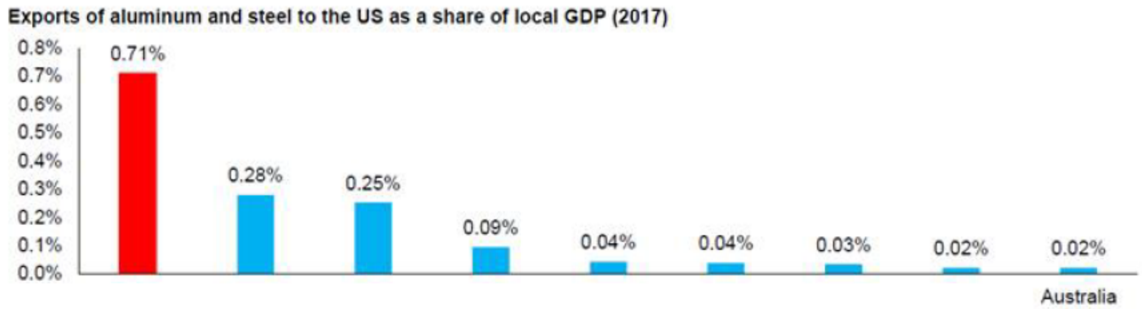
Australian Aluminium and Steel Exports

- Late last week US President Trump announced that the US will impose tariffs of 25 per cent on US steel imports and 10 per cent on aluminium imports. The tariffs are expected to be finalised this week when President Trump signs a formal order. At this stage it is unclear if some products or countries will be exempted, nor is it clear the length of time the tariffs will be in place. The US imports around 30 per cent of its steel consumption and 90 per cent of its aluminium consumption.
- The immediate impact on Australian exports of these tariffs is likely to be small.

Commodity Prices

- The announcement of tariffs on US imports of steel and aluminium has had little impact on commodity prices to date.
- Aluminium and steel prices are down around 0.7 per cent and 0.4 per cent in USD terms, respectively, since the announcement by US President Trump.

Fig 3



Source: US Department of Commerce, Macquarie Research, March 2018

[1] There are four aluminium smelters operating in Australia, which are majority owned by: Pacific Aluminium, Alcoa, Rio Tinto Alcan.

2 Bluescope Steel is Australia's largest steel exporter.

Please let us know if you have any further questions.

Kind regards,

| Economist | Business and Trade | Economic Group
RESERVE BANK OF AUSTRALIA | 65 Martin Place, Sydney NSW 2000
| w: www.rba.gov.au

From:
Sent: Monday, 12 March 2018 3:25 PM
To:
Cc:

Subject: Briefing: Implications of a rise in US protectionism [SEC=UNCLASSIFIED]

Hi

I have pulled together some data in light of the recently announced US tariffs to get a read on which countries would be most exposed to a broader escalation in US protectionism.

Key takeaways:

- Little concern for Australia; exports to the US only account for 1 per cent of GDP.
- Geopolitics are likely to influence how trade restrictions are implemented across countries and should be kept in mind when interpreting the table below (eg. China would likely face harsher policies than Canada).

Note the table does not account for the second order effects of trade restrictions.

US Imports*			Vulnerability Indicators*		
Source country			Current acct balance	Fiscal balance	FX Reserves
	% of US imports	% of GDP	% of GDP	% of GDP	% of GDP
Advanced					
Australia	0	1	-2.7	-0.9	4

Sources: Bloomberg; CEIC Data; IMF; RBA; World Bank
*Most recent data

| Senior Analyst | International Financial Markets
RESERVE BANK OF AUSTRALIA | 65 Martin Place, Sydney NSW 2000
| w: www.rba.gov.au

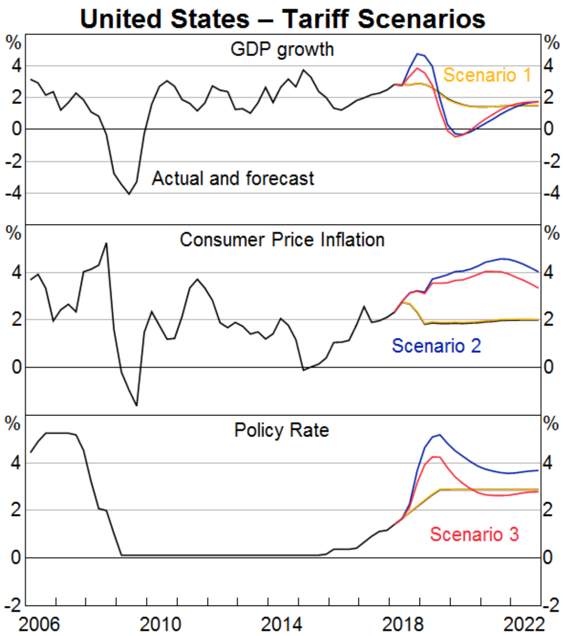
US PROTECTIONISM SCENARIOS BRIEFING

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:

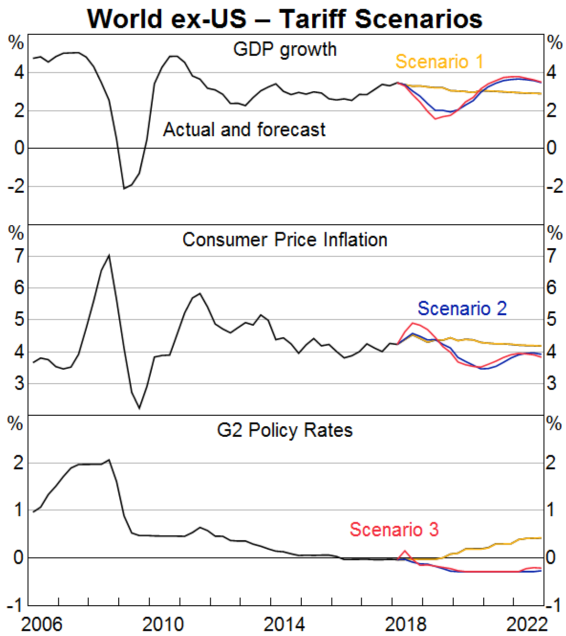
1. *US steel and aluminium tariffs only.* This scenario models the effect of the currently-announced tariffs of 25 and 10 per cent on steel and aluminium US imports, respectively. Canada and Mexico have been exempted for now while NAFTA is renegotiated. Australia is also exempt, and other countries can 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



Sources: Oxford Economics; RBA



Sources: Oxford Economics; RBA

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:

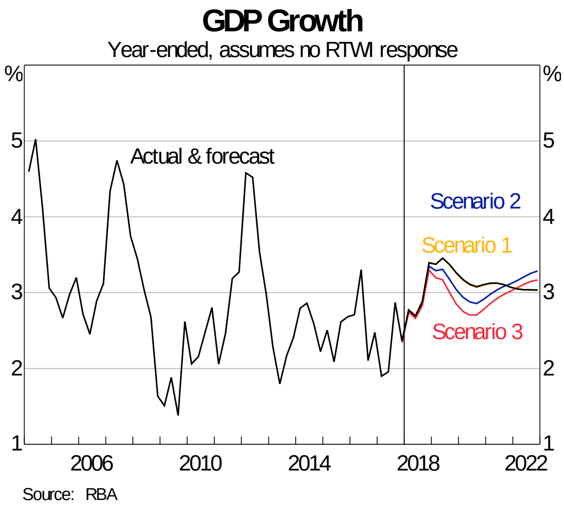
- hold the domestic cash rate fixed at the baseline level;
- hold the real TWI constant – this shuts off the exchange rate channel;[2] and
- include financial spillovers to domestic equity prices and domestic credit spreads. Specifically, Australian share prices fall by 8–10 per cent, lowering household wealth by between 1.5 and 1.8 per cent at its trough in 2020. Corporate borrowing rates also increase by 20 basis points.

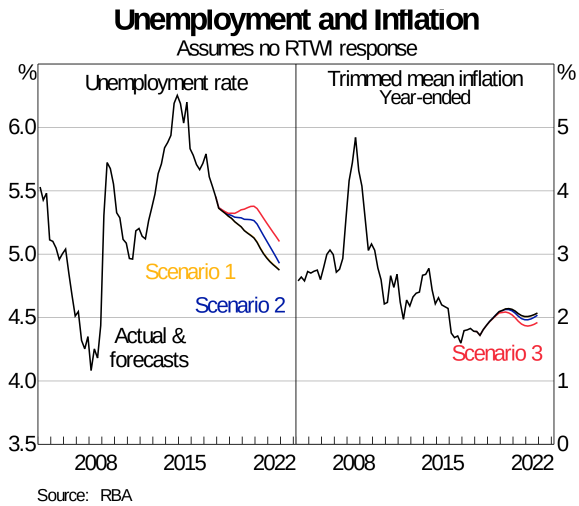
2 It is difficult to predict the effect of an increase in global trade protectionism on the Australian dollar. A deterioration in global economic conditions is typically associated with a depreciation of the dollar. On the other hand, the reduction in non-US policy rates, which increase the attractiveness 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.

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.[3] 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.[4]

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.



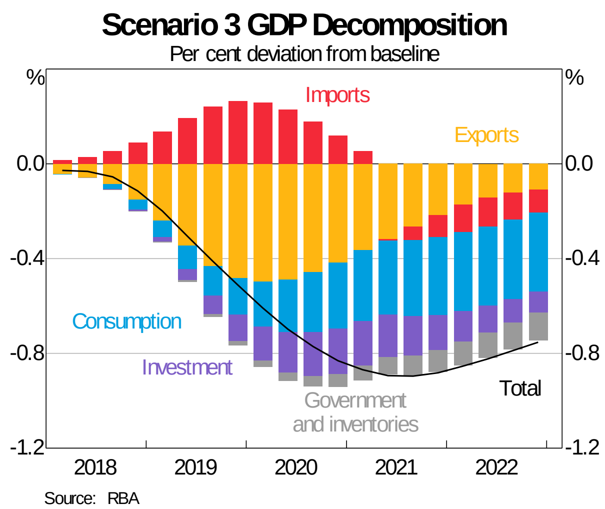


If we allow the cash rate to respond to the weaker unemployment and inflation outcomes, MARTIN's standard reaction function suggests a cut of 50 basis points in Scenario 3. This response sees unemployment and inflation return to around baseline levels by the end of 2022.

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.



| Economists | Economic Analysis Department

16 March 2018

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

4 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 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 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.

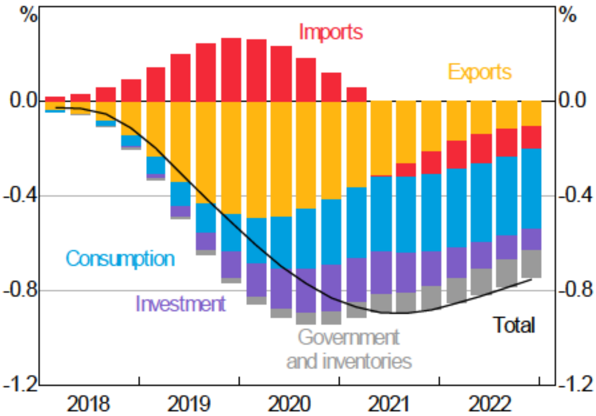
- **The financial conditions channel:** Lower equity prices reduce household wealth, which leads to lower consumption. Wider spreads on corporate borrowing rates also weigh modestly on investment.

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.

Scenario 3 GDP Decomposition

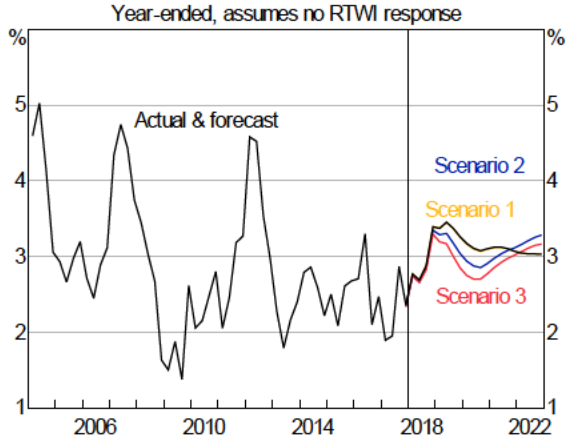
Per cent deviation from baseline



Source: RBA

GDP Growth

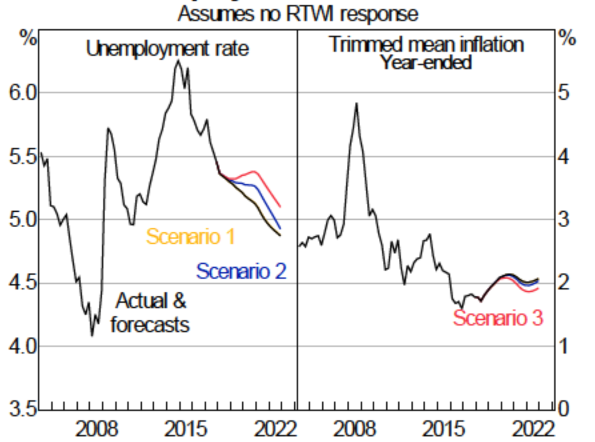
Year-ended, assumes no RTWI response



Source: RBA

Unemployment and Inflation

Assumes no RTWI response



Source: RBA

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

MARCH 2018

Summary of Economic Conditions

Special Topic: Implications of an Increase in Global Trade Protectionism

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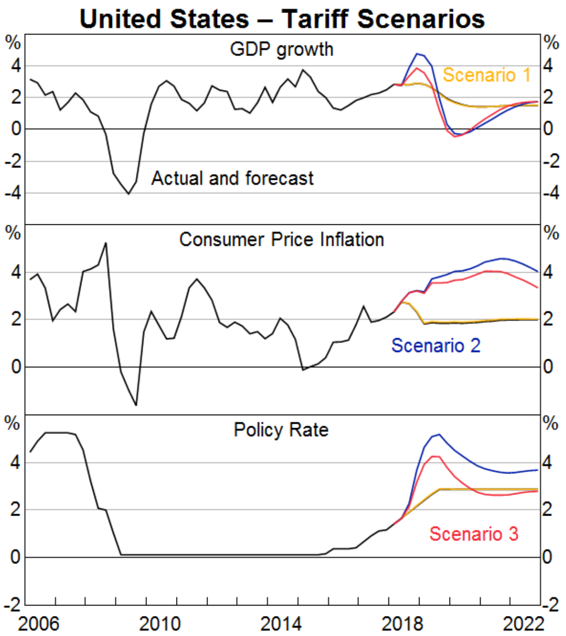
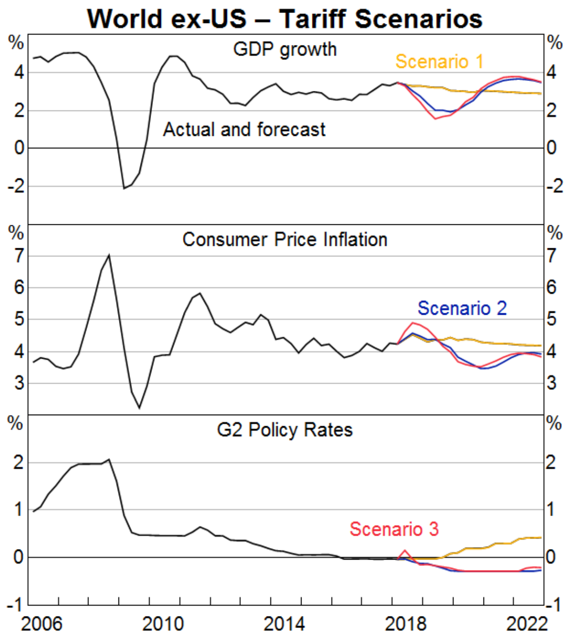


Sources: Oxford Economics; RBA



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Implications for Australia

To aid in understanding the impact of the modelled global outcomes on Australia, 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 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.

Putting the effects of the two channels together, 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.

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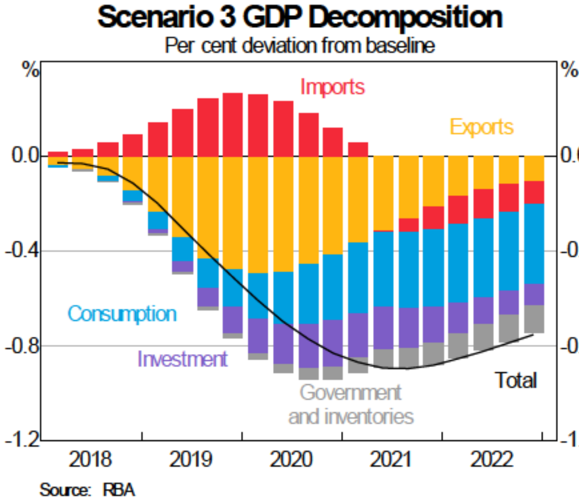

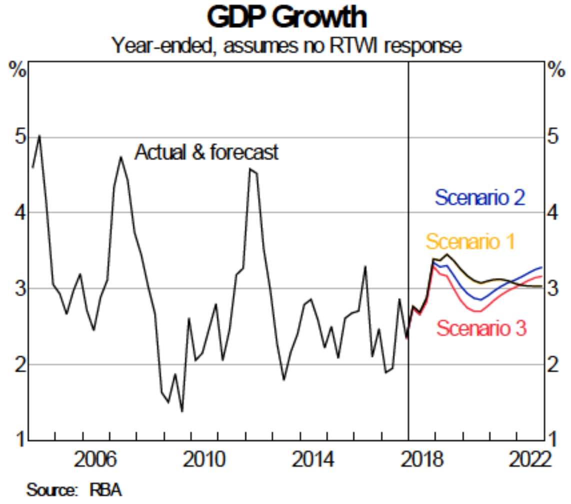

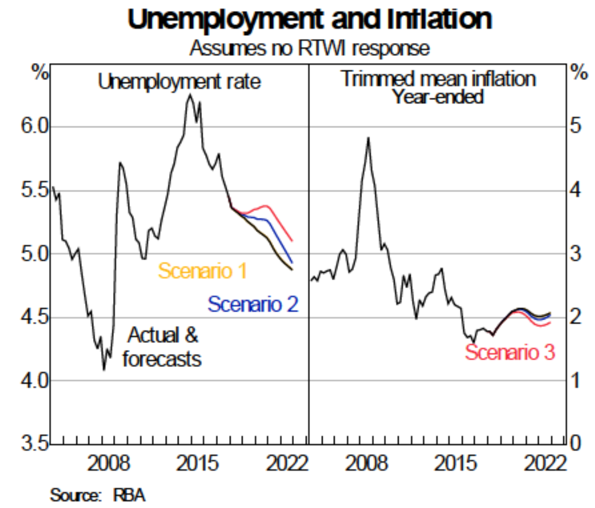

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Economic Group

21 March 2018