The Treasury

COVID-19 Information Release

April 2020

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TE TAI ŌHANGA
THE TREASURY

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Date: 14 February 2020

To: Minister of Finance (Hon Grant Robertson)

Deadline: 17 February 2020

Aide Memoire: Macroeconomic impact of COVID-19 on the New Zealand economy - Update

This Aide-Memoire updates you on our view of the macroeconomic implications of the coronavirus (COVID-19) outbreak for the New Zealand economy ahead of Cabinet on Monday, where the macroeconomic impact and possible policy response options may be discussed. Potential talking points for this discussion are below. Treasury has also provided a briefing for the Cabinet Paper '*Immediate and medium-term response options for the economic impacts of the COVID-19 outbreak'*, which comments on the specific sectoral policy options that will be presented to Cabinet.

Treasury will provide further advice next week (in collaboration with MBIE) on the economic impacts of a prolonged coronavirus epidemic under different scenarios, including what the triggers for further policy interventions under each scenario would be.

The situation is fluid and the overall impact and prospects are highly uncertain. We will continue to monitor the impacts and incoming information and adjust our outlook accordingly.

Talking Points for Cabinet

- Treasury's preliminary BEFU forecasts will include a measureable but moderate and short-lived impact from COVID-19, with economic activity quickly returning to normal in the second half of 2020. The impact is expected to be concentrated in a few sectors.

- Automatic macroeconomic stabilisers will help partially offset the negative impacts on the affected sectors.

- Treasury does not think that any further funding / fiscal policy measures are required at this stage. If it takes longer to contain the virus, it is possible that targeted interventions would need to be considered. Treasury will provide more information on the scenarios that might trigger possible policy responses next week.

Note that we have provided to MBIE the information contained in this note on the global macroeconomic impacts and assessment and on the transmission channels, for incorporation as an Annex in a paper they are preparing for the Minister of Economic Development to put to Cabinet on Monday. We have not provided to MBIE the assessment in this note of the likely impact on Treasury forecasts, because the forecasts are still under development.

Summary

- The COVID-19 outbreak has had and will continue to have a negative effect on the New Zealand economy, particularly in some sectors such as tourism. The size of that effect is uncertain. It will depend crucially on the duration of the outbreak and the success of measures in containing its spread.

- Past outbreaks of new viruses have caused significant, but short-lived, disruption to activity for those economies at the centre of the outbreak and those with a high degree of dependence on those economies. It is difficult to know if past episodes are representative of the current outbreak. For now, we take the view that they are and that the negative effects begin to ease within the next few weeks, with economic activity (and prices) quickly returning to normal.

- Treasury's preliminary economic forecasts, finalised on 13 February, include an assumption about the macroeconomic impacts of COVID-19. We assume that GDP growth will be weaker than otherwise in the first half of 2020, but will correct over the second half of 2020 as the virus is contained, global growth picks up and supply conditions normalise.

- Other forecasters have made similar assumptions. New Zealand's major private sector banks assume that GDP growth will be between 0.5 and 0.6 percentage points lower in total than otherwise over the March and June 2020 quarters. The Reserve Bank's February *Monetary Policy Statement* assumes that GDP growth is 0.3 percentage points lower than otherwise in the March quarter. These kind of assumptions would still leave real GDP growth clearly positive in the 2.0% - 2.5% range for 2020.

- Treasury will report to you on the preliminary economic and tax revenue forecasts next week, while an updated view of the fiscal outlook will be available ahead of Cabinet making final Budget 2020 decisions.

- The downside risks to our outlook stemming from coronavirus are mainly from a longer outbreak and more severe disruption. We think that the current probability of a recession is low. It could come about if the virus takes a lot longer to be contained and spreads to a number of countries outside of China, thereby severely restricting the movement of people and goods.

- We provide an annex with a summary of the analysis presented by Wigram Capital Advisors to the Minister of Finance on 13 February on the possible path of the virus and the macroeconomic implications.

Impacts on China, East Asia and Australia

The COVID-19 outbreak has lowered the near-term growth outlook for China and some other countries, particularly in Asia. In China, the economic effects include lower domestic travel and other goods and services consumption, and disruption to the movement of goods. Business interruptions and closures are negatively affecting production. A number of international investment banks have revised their forecasts for China's full-year GDP growth from about 5.8% to 5.3%.

The effects of the outbreak are flowing through to other economies, particularly in East Asia, including through sharp falls in inbound Chinese tourism, disruption to supply chains and weaker Chinese demand for imports.

Activity in Australia is also being negatively affected through these channels and through education services exports, particularly higher education.

The Chinese authorities have announced a range of measures to help mitigate some of the adverse financial effects of disruption caused by the virus, including the provision of liquidity to maintain credit flows and relief for interest rate payments by firms. It remains unclear whether further support will be needed in response to the crisis. Monetary policy in some other Asian economies has been eased in response to the effects of COVID-19, while others have indicated a willingness to ease policy. In addition, some countries have signalled a willingness to provide fiscal support. Singapore's budget, due to be delivered on 18 February, will give an indication of their thinking on the economic effects.

China, East Asia and Australia are large trading partners for New Zealand (taking 23%, 17% and 15% respectively of total exports, and 55% in total), and overall growth in New Zealand's major trading partners will be lower as a result.

There is considerable uncertainty regarding the severity and duration of the viral outbreak. The more persistent the virus proves to be, the larger the effects on activity are likely to be. The economic outlook for China, and how policy responses there could affect China's demand for New Zealand's exports and the exports of New Zealand's other major trading partners in Asia, remains an important consideration for the New Zealand economy.

The table below illustrates the range of uncertainty around the situation. The Annex summarises the views of Wigram Capital Advisors.

Table 1: Citigroup forecasts of Chinese GDP growth under different scenarios

Scenario	2019-nCoV Outbreak Basically Comes Under Control	Probability	GDP Growth in 20Q1 (YoY)	GDP Growth in 2020 (YoY)
Optimistic	By end-February	20%	4.5%	5.5%
Baseline	**By end-March**	**60%**	**3.6%**	**5.3%**
Pessimistic	By end-May	20%	2.3%	4.4%

Source: NBS and Citi Research

Channels of transmission to New Zealand

The impacts on New Zealand can be viewed through three channels: trade, financial markets and confidence, discussed below.

Trade

Tourism is the most immediately affected industry. Chinese tourists typically spend around $180 million per month in the peak travel months of January through to April. Education services are at risk, particularly if restrictions on foreign travel remain in place into April. Prices for some goods exports, including meat, forestry and seafood have fallen, apparently because of the outbreak. Risks to these and other industries are summarised in the table below, which also shows how much more significant China is today for NZ exporters compared to 2002, before the SARS outbreak.

Overall, we expect export volumes and prices to ease in the first half of 2020. As China's activity returns to normal, so should export volumes and prices. Oil prices have declined from USD$60/barrel in January to around USD$50/barrel currently, which will likely result in lower petrol prices in New Zealand. Some goods imports may be disrupted, such as machinery and building materials.

The Chinese economy is a key driver of regional and global economic growth and has extensive global supply chains. There is a risk that disruption spreads throughout the region and beyond, further reducing export demand. In addition to the general impacts on demand (and therefore on exports), prolonged closure of borders and China's internal travel restrictions will increasingly disrupt supply chains, including for New Zealand firms.

Table 2: Impacts and risks to goods exports

New Zealand's merchandise trade with China: Key Sectors			
Sector	**Exports: 2002 (NZD'bn)**	**Exports: 2019 (NZD'bn)**	**Impacts & risk of disruption**
Dairy	0.2	5.3	**Medium risk**. Limited impact so far, and products have a long shelf life. Companies have been able to work around the challenges of slower port clearances and smaller air freight capacity.
Meat	0.1	3.4	**High risk:** Trade is continuing, but volumes are a bit lower. Storage and processing is at capacity, though market fundamentals remain strong. Companies are trying to shift supplies to other markets.
Forestry	0.2	2.9	**High risk**. Affected by port delays. Bad timing for the industry, as market conditions are already weak.
Preparations of milk, cereals, flour etc.	0.0	0.8	**Medium risk.**
Fruit & Nuts	0.0	0.7	**Medium risk**. Limited impact so far. Kiwifruit exports to China usually start in March and peak in April.
Seafood	0.1	0.7	**High risk**. The biggest impact is on rock lobsters, with diversion to other lower-value markets. Price declines of around $60/kg have been reported by some players in the industry.

Sources: Stats NZ, MPI

Financial markets

The exchange rate has depreciated a little against other major currencies in recent weeks, with the trade weighted index around 71.6 currently compared to an average of 72.7 over January. The lower exchange rate will provide some offset to exporters from the lower world prices being received for their goods. A further deterioration in the outlook for China would likely lead to further declines in the exchange rate, reflecting the tendency for higher global uncertainty to reduce demand for the New Zealand dollar. The stock market has not been affected much. The NZX All Index was up 3.1% for the year as at 13 February. Bond yields are slightly lower compared to the start of the year. In general, NZ financial markets are functioning normally.

Confidence effects

A short-lived period of disruption is unlikely to materially impact economic activity through lower business or consumer confidence. However, the risk grows as the duration and severity of disruption increases.

Data to monitor

The first signs of the impact of COVID-19 are likely to be reflected in confidence indices released at the end of February. Official data on February trade will be available in mid-March, while February travel data will be released in mid- April. March quarter GDP will be released after the Budget (but before PREFU). Please refer to the table below for the relevant data releases.

More timely data from other institutions (e.g. Customs, information from ports, and air passenger data from IATA) will help to inform our forecasts and judgements in the interim. We will also incorporate insights from importers and exporters that other agencies are receiving and from our business visits in coming weeks.

Table 3: Upcoming data releases

Date	Data Release
27 Feb	Overseas merchandise trade: January 2020
27 Feb	ANZ Business Outlook: February 2020
28 Feb	ANZ-Roy Morgan Consumer Confidence: February 2020
4 Mar	ANZ Commodity Price Index for February
7 Mar	Quarterly Survey of Business Opinion: April 2020
16 Mar	International travel: January 2020
25 Mar	Overseas merchandise trade: February 2020
27 Mar	ANZ-Roy Morgan Consumer Confidence: March 2020
30 Mar	Finalisation of BEFU forecasts
6 Apr	ANZ Commodity Price Index for March
14 Apr	International travel: February 2020
29 Apr	Overseas merchandise trade: March 2020
6 May	ANZ Commodity Price Index for April
14 May	International travel: March 2020
4 Jun	ANZ Commodity Price Index for May
18 June	Gross domestic product: March 2020 quarter

Overall assessment

Our preliminary BEFU forecasts will include a measureable impact from the coronavirus, reflecting impacts we have seen on services exports and on merchandise trade volumes and prices. Our assumptions and forecasts of the impact of the virus are broadly in line with those of the Reserve Bank and other domestic commentators. Under this assumption, the consequent impact on tax revenues should not be substantial.

These preliminary forecasts are based on the assumption that the virus is contained in the next couple of weeks and that activity returns to normal in China within a few weeks after that.

In the case of a more severe outbreak, these effects would be larger. Extensive outbreaks in other countries (with associated border closures and supply chain disruption) or ongoing infections and travel disruptions inside China, will lead to upward revisions of the impact. It is unlikely that the economic impact will be less than what we are currently assuming – the risk is all on one side.

Further work and advice

The Treasury is leading, coordinating and contributing to a number of work streams going on across government, including the following:

- We are working on joint advice, alongside MBIE, on the economic impacts of COVID-19 and possible responses. This will provide Ministers with advice on the economic impacts of a prolonged coronavirus epidemic under different scenarios, including what the triggers for further interventions under each scenario would be, and possible policy interventions that could be used. We expect to be able to provide this to you **on 21 February or earlier.**
- You will receive the preliminary BEFU forecasts **on 21 February.**
- We are involved in ODESC, including participating in the Watch Group and convening and chairing the Economic Advisory Group (EAG) that supports ODSESC. The EAG is meeting as often as needed currently. The last meeting was on 14 February, and the next one will be organised to align with the ODESC schedule.
- We have set up a process to respond to any additional funding requests that may come from other agencies, seeking funding for the response to COVID-19.
- Treasury is also engaged with the Export Advisory Group (led by New Zealand Trade and Enterprise), and Trade Response Coordination Group (led by the Ministry of Primary Industries).

Treasury will provide further advice next week on the economic impacts of a prolonged coronavirus epidemic under different scenarios, including what the triggers for further policy interventions under each scenario would be. Below is an initial plan for how we will approach that advice.

Status Quo

To reiterate, the analysis in this briefing is based on a scenario where the macroeconomic impacts are measurable, but temporary in the first half of 2020. This is consistent with the outlook of other forecasters in New Zealand.

Nevertheless, the impacts on specific sectors of the economy – in particular tourism, international education, and forestry – are more significant. On Monday, Cabinet will be considering the current measures in place to support these affected sectors and what could be done further immediately. MBIE is leading this advice and Treasury is providing input.

Under this scenario, no immediate macroeconomic policy response should be required. On 26 February, Treasury's advice on the fiscal strategy for Budget 2020 will take into account the impact of COVID-19, in the context of the general economic situation. That will inform the extent to which the fiscal policy stance may need to change in response to this scenario. The RBNZ will also make its next OCR decision on 25 March, and have signalled that they are monitoring the situation as an emerging downside economic risk.

Prolonged but Contained

The current uncertainty around the impact of COVID-19 may continue for longer than expected. For instance, the spread of the virus may peak later than mid-April, as currently expected by many forecasters. This could occur without an increase in the severity of the outbreak. But this prolonged uncertainty would increase the likelihood of disruptions to global supply chains and global market confidence and trading activity. All of this could occur without cases of the virus being confirmed in New Zealand.

Under this scenario, the damage to the directly impacted sectors of the New Zealand economy would deepen, and it is possible that many firms may struggle to absorb a prolonged downturn in activity. Further targeted interventions would need to be considered, through the welfare and business support policy systems. This should include consideration of whether additional funding may be required for certain agencies to implement the activity they are already beginning.

The economic impacts on New Zealand may also be broader in this scenario, in particular through channels like business confidence, and second-round impacts through domestic supply chains and reduced incomes for households and firms. However, in this scenario there will be some automatic macroeconomic stabilisers that will assist, such as a weakening NZD, which will assist exporters.

Treasury will continue to update its outlook on the likelihood of such a prolonged but contained scenario. Working with MBIE and other economic agencies through the ODESC, we will alert ministers on whether conditions justify a more coordinated macroeconomic policy response to such a scenario.

A More Severe Outbreak

In a case of a more severe outbreak, New Zealand will face a more fundamental economic disruption. The Chinese economy may slow considerably, outbreaks in Asia and other countries could bring further associated border closures and supply chain disruptions, and global trade and financial markets will be turbulent. Domestically, it may be accompanied by confirmed cases of the virus in New Zealand.

This is a tail-risk scenario. It is worse than the worst-case scenarios assumed by many domestic and international forecasters right now. If it occurs, it will be likely to require a rethink of the overall economic outlook for New Zealand, and require fiscal and monetary policy responses to offset the impact on the domestic economy.

[34] [39]

Hamish Slack, Team Leader, Forecasting,

Annex: Wigram Capital Advisors – Analysis on the possible path of the virus and the potential economic impact, as presented to the Minister of Finance on 13 February

Path of the virus

Wigram use a data science approach to estimate the evolution of the virus and to try to predict when it will peak. There are two key metrics: the reproduction (R0) rate, and the generation time interval. The R0 measures how many people, on average, one infected person will infect. The generation time interval is the difference between the symptom onset time of the infected and the symptom onset time of this person's infector.

Wigram estimate these numbers by estimating the distribution of the virus using data on SARS that was available at the time. While SARS and COVID-19 are both coronaviruses, there are some key differences between them – in particular the lower mortality rate of the latter. This diminishes the validity of this approach, but it is the best data that is available.

It is posited that, when R0 falls below 2.0, it is an indication that the virus has peaked. According to Wigram, the data on infections and R0 values do not support the view that the virus is currently contained. Although they have declined, current R0 values for China are still above 2.0 (between 2.5 and 3.0). While the under-reporting of cases from the Chinese health ministry was acknowledged, Wigram remains of the view that their R0 estimates remain valid. A key concern that was noted was that as people start returning to work in greater numbers (the week of 17 February), there could be a spike in new infections due to increased human-to-human contact, and the fact that people will be forced to travel through infected regions.

Economic impact of the virus

Wigram estimate that for every week the economy is in lockdown, the economic impact is roughly 1% of GDP, of which 50% would be a permanent loss. It is difficult to estimate the economic impact at this stage as there is no real precedent. The impact can be divided into the direct effects of the lockdown, and the longer-term impacts from a loss of confidence.

Their estimates for China's 2020Q1 real GDP growth is as low as 0% year-on-year, with full-year growth possibly falling to 2% - 3%. The underlying vulnerabilities of the Chinese economy was mentioned, with the fear that COVID-19 could be the catalyst for a deeper downturn.

It is important to note that Wigram are among the more pessimistic of economic commentators, likely because they assume that it will take longer to contain the virus.