

Contents

Introduction	
Global Outlook	
Australian Outlook	<u>1</u>
Scenario Analysis	<u>3</u>
KPMG Contacts	<u>3</u>



Introduction

Economic activity continues to build on the back of the vaccination roll-out...

In early 2020 a new strain of severe acute respiratory syndrome, SARS-CoV-2, referred to as Covid-19, first emerged in the Chinese City of Wuhan. This zoonotic strain of coronavirus escalated rapidly in Wuhan, and then spread creating a world-wide pandemic.

The initial public health response to reduce the spread Covid-19, including social distancing and shutting down non-essentially work places for periods of time, significantly reduced consumer expenditure over the year. The consequence of marked reductions in consumption activity, and to lesser degree investment activity, has been a global recession of a size and scale much larger than the Global Financial Crisis.

During the past 12 months the scientific and health communities across the world have been working to develop vaccines to respond to Covid-19. Numerous vaccines have now been approved for broad use (Pfizer Biontech, Moderna, Gamaleya, University of Oxford AstraZeneca, CanSino, Sinovac and Sinopharm), while a further five vaccines have been approved for emergency or limited use (Johnson & Johnson, Vector Institute, Novavax, Sinopharm-Wuhun and Bharat Biotech).

While there has been a broad focus on the development of a vaccine, there has since been a narrow focus on delivery of the vaccine. At the end of February 2021 high income countries, which represent about 13 per cent of the world's population, account for more than half of the confirmed vaccine purchases.

Further, what has also become apparent in the race for vaccine supply is that countries that secured vaccines first tended to be countries that also had domestic vaccine manufacturing capabilities (or an ability to quickly develop those capabilities).

To minimise the risk that vaccines would be hoarded by the wealthiest countries the COVAX initiative - a joint proposal by Gavi (a Geneva based funder of vaccines for low-income countries), the Coalition for Epidemic Preparedness Innovations (CEPI) and the World Health Organisation (WHO) – was established in September 2020.

COVAX aims to ensure all countries have 'fair and equitable' access to the Covid-19 vaccine, and it hopes to have 2 billion doses for low-to-middle income countries (LMICs) and have 20 per cent of the world's population vaccinated by the end of 2021. Despite advancements in the development of vaccines and treatment protocols the pandemic remains a major threat to the world's population and economy.

It is expected that the vaccine will provide lasting protection against the virus, although there remains uncertainty surrounding the length of time protection is maintained from a vaccine. What appears certain however is the fact that vaccines will reduce transmission of the disease, reducing the need for future (wholesale) lockdown measures. However, downside risk exists if the virus mutates faster than the rate at which the world's population can be vaccinated.

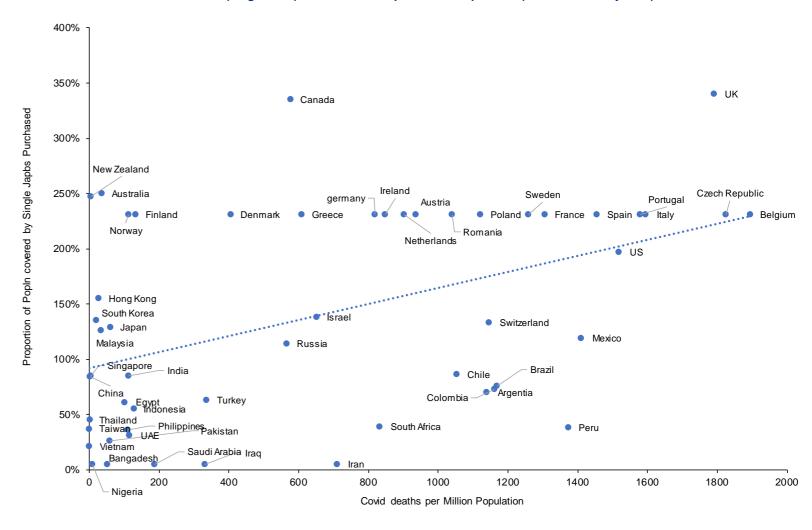
A number of mutant strains of Covid-19 have been detected in the United Kingdom (strain B.1.1.7), Brazil (strain P.1) and South Africa (strain B.1.351), all of which appear to be more infectious than the initial strain. The Brazilian P.1 strain has recently been shown to also have a reinfection rate of between 25 per cent and 60 per cent.



Introduction

Secured vaccine supply to date has not been aligned to country disease risk

Chart 1 - Access to Covid Vaccines (Single Jabs) v. Covid Deaths per Million Population (as at 26 February 2021)



Global Outlook

Impact of coronavirus dominating world economy

The world economy has been dominated by the impacts of coronavirus for the past 12 months; put simply, all economies will be poorer than they would have otherwise been if not for the pandemic.

The global economy rebounded from depths of the contraction in the middle of 2020, where world GDP had declined by 7 per cent in the June quarter 2020, with the recovery that commenced in the third quarter 2020 continuing into the final quarter of the year. This rebound has been stronger than initially contemplated, although there is a wide variability in the recovery paths of individual economies.

Despite the recovery during the second half of 2020 the IMF has estimated global GDP was about US\$4 trillion lower (in constant USD prices) than it was at the end of 2019, a fall of around 4.5 per cent, which is a materially larger fall than what occurred during the GFC, where global GDP fell by 2.0 per cent in 2009.

While the final quarter of 2020 saw a return to lockdowns in Northern hemisphere, industrial activity appeared to be returning to pre-pandemic levels. However, the personal services, travel, accommodation, food, and entertainment sectors, remains severely impacted by the government policy interventions aimed at limiting the spread of the coronavirus. Job losses have also tended to be concentrated in these sectors, and, given these sectors tend to employ low-wage workers, the coronavirus pandemic has exacerbated income and wealth distribution problems in society.

The economic performance of individual countries during 2020 was heavily influenced by consumption spending.

Household spending over the past year has necessarily focused on the purchase of goods (as opposed to services), which has meant those countries producing manufactured output have (generally) seen a sharper recovery than countries that have an industrial structure biased towards services.

Chart 2 - World GDP (US\$ Bn, 2011 PPP) - Pre & Post Covid-19

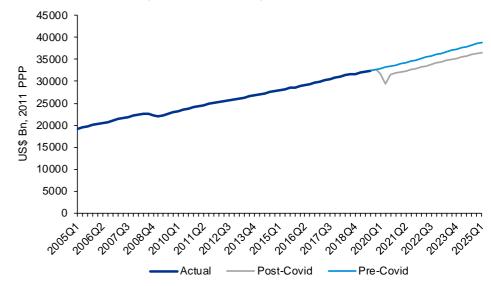
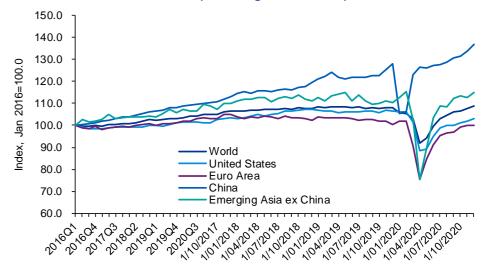


Chart 3 - Industrial Production (excluding Construction)





Goods trade recovering, services trade still struggling

Prospects of recovery look brighter each day as vaccines get rolled out and new vaccines come on-line, but return to full capacity will take some time. The global economic recovery is likely to be uneven, consistent with access to vaccines, but not inconsistent with the history of how the world economy has recovered from previous global events – where the maturity and robustness of industrial and institutional structures and policy responses are critically important.

Differing recovery periods reflect a mix of issues, including the interplay between country's industrial structure, pre-pandemic growth trajectories, and different economic policy responses.

The recovery is also going to be driven by how monetary and fiscal policy has been utilised by individual countries. That is, only some countries have taken their policy interest rates to the lower bound (or

beyond) and/or employed Quantitative Easing, while some countries have used government spending more sparingly than others. For example, some policy support has involved guaranteeing loans to businesses to maintain their viability; therefore the fiscal cost of responding to the coronavirus crisis will rise for those jurisdictions adopting this policy only if the supported businesses eventually fail.

Importantly, there is an understanding that the monetary and fiscal policy response associated with combating the economic fallout of the pandemic is not free. We have seen a rapid increase in deficits and government debt; so far the increase has been about 15 percentage points on pre-pandemic levels for advanced economies and around 10 percentage points for emerging economies. Such an increase would usually raise concerns for global institutions like the IMF and World Bank, however given the circumstances they appear to have tacitly endorsed the conclusion that "doing nothing" is not an acceptable option.

Chart 4 - WTO Trade Barometer (Trend Index)

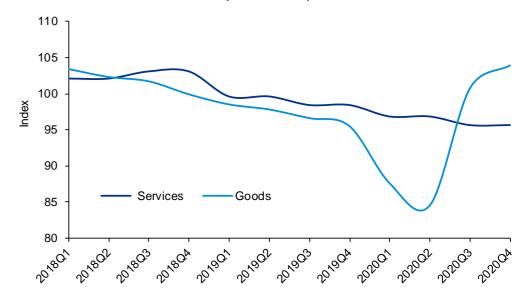
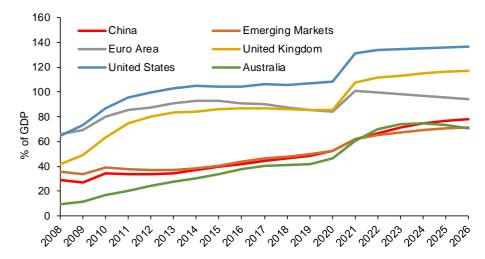


Chart 5 - Gross Debt, Percent of GDP





Monetary policy at highly accommodative settings

The adoption of very accommodative monetary policy, including moving policy rates towards (or beyond) the lower bound, has resulted in the cost of borrowing declining over the past year, although for many western economies the central bank policy rates were already at post-GFC levels that were considerably lower than historical average interest rates, so benefits to borrowers have been relatively muted.

The fact that many economies had little 'headroom' between the pre-pandemic policy rate and lower bound meant QE became part of the monetary policy response, even for countries who have had limited or no experience with it. Monetary policy remains accommodative, and in addition to lowering policy rates and implementing QE, other policy responses have included providing liquidity to the banking sector and direct lending to small business.

The impact of this highly accommodative stance to monetary policy is that it allows governments to

borrow at low rates (or even negative rates), however a precondition for the continuation of low borrowing costs is subdued inflation. The financial markets have started to price in a rise in inflation, which could occur due to a variety of reasons including a pick up in oil prices and/or an actual deterioration in the supply side of the global economy such that pent up demand in the recovery cannot be met by (now lower) production capabilities.

To date however the inflation genie appears to still be in its bottle, although it must be recognised inflation is difficult to measure properly when retail spending patterns have been as materially disrupted as they have been. Rather, the demand shocks experienced to date are more likely to result in deflationary pressures, particularly because of spare capacity in labour markets. The inflation risk at this point is more related to asset price inflation fuelled by expanding central bank balance sheets and policy rates at lower bound for the immediate future.

Chart 6 - Policy Interest Rates

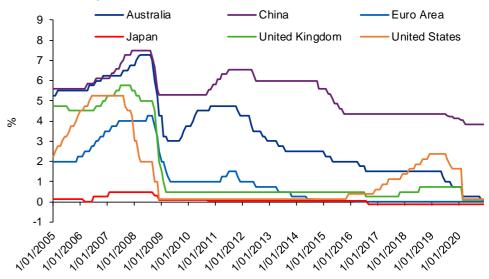
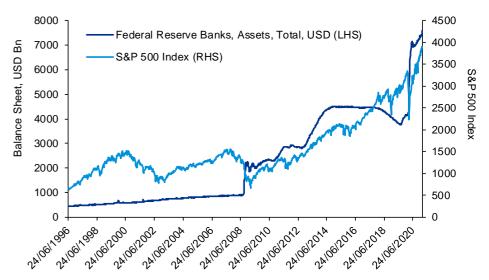


Chart 7 - US Federal Reserve Balance Sheet & S&P 500 Index





World trade was slow even prior to start of pandemic

While the pandemic has had a disastrous effect on the global economy during the past year, it must be recognised that world trade was slow at the commencement of pandemic due to rising protectionism and trade tensions. Global trade has however been relatively resilient during 2020; the reduction in the Trade-to-GDP ratio has been smaller than that experienced in the GFC.

This proportionate fall in world trade relative to GDP is due to a number of factors, including that: China recovered relatively early and met surging consumer demand in the US in Q2 through exports; the downturn in GDP has been skewed to services, which are traded less than goods; the trade restrictions on medicines and medical equipment that were in place at the start of 2020 declined as the pandemic expanded; and compared to the GFC, trade financing has remained relatively available.

The onset of the pandemic has also acted as a catalyst for individual countries questioning whether they should take this opportunity to on-shore (re-shore) some production of critical goods, such as medicines, medical equipment and food that had relocated to lower cost countries.

Vaccines are now being rolled out in 121 countries, and this is expected to result in higher economic output as 2021 progresses.

KPMG Australia estimates global GDP to grow at 4.4 per cent in 2021; but with considerable variability across countries. While Covid-19 is clearly the single largest risk to the wellbeing of the world's population and economy, it is not the only risk. Other risks to global economy include the escalation of trade tensions between China and US; increased risk from rising private and public sector debt levels; and with 2020 tying with 2016 as being the hottest year on record) climate change remains a fundamental risk.

Chart 8 - Annual Change in World GDP and World Trade

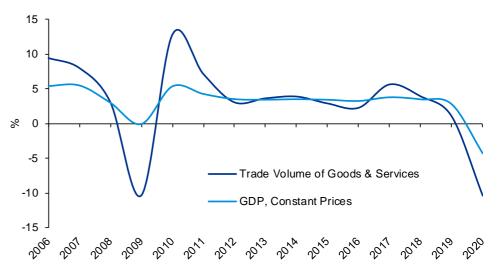
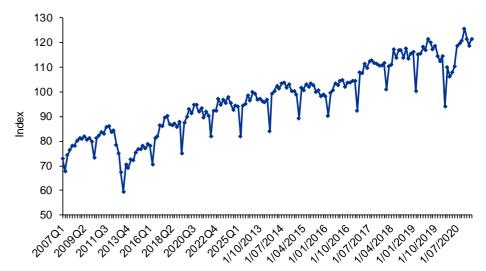


Chart 9 - RWI/ISL Container Throughput Index, World, Index





United States

US expected to recover fastest of G7 economies

Arguably the US has not managed the health response to the coronavirus pandemic as well as other countries. This may reflect an implicit trade-off between containing the economic damage associated with the pandemic and the negative health impacts of the virus on the population.

During 2020 US GDP fell by around 31 per cent in the June quarter, but then rebounded by 33 per cent in the September quarter. The second estimate of GDP for the December quarter revealed quarterly growth of 4.1 per cent, of which investment activity was the predominate driver of growth.

The beginning of 2021 saw the inauguration of the 46th US President, Joseph Biden, and with the with runoff Senate elections being won by the two Democratic candidates, the new Administration has a majority in both houses of the US Congress.

A US\$1.9 trillion support package (the *Consolidated Appropriations Act, 2021*), has just been committed by the US and incorporates a range of measures to support households and businesses, including a \$1,400 direct payments to individuals, a \$400-per-week federal unemployment benefit through to 29 August and help for those having difficulties paying rent and home mortgages. The Bill was passed following the decision to withdraw the proposal to increase the minimum wage for Federal Government employees between now and 2025 from the current rate of \$7.25 to \$15 an hour.

The US labour market experienced wild fluctuations in the number of people employed during 2020. Nonfarm payroll employees fell 3.2 million in March and a staggering 22.1 million the following month in April; but then rebounded with employment of around 2.0 million per month for the remainder of the year. At the end of February 2021 there were still about 8.5 million fewer people employed in the United States than at the end of 2019.

Chart 10 - US Real GDP, Percentage Change from Preceding Quarter, Seasonally Adjusted Annual Rate

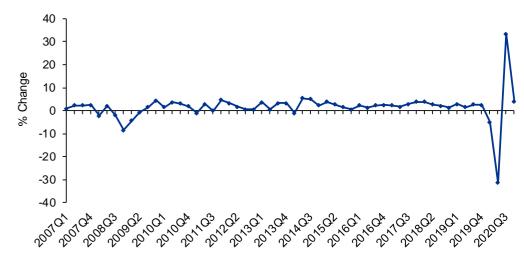
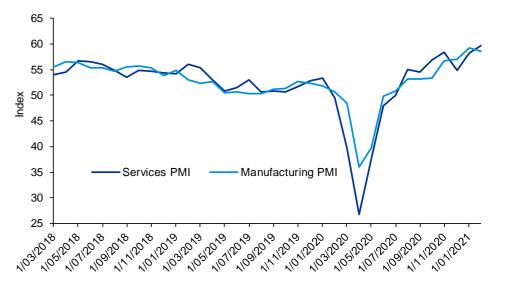


Chart 11 - US PMI Index, Services and Manufacturing





China

China economy strengthening from rising goods trade

The Chinese economy outperformed the rest of world during the pandemic crisis, achieving remarkable growth of nearly 2 per cent over 2020 after experiencing a 10 per cent contraction in 2020Q1.

The initial draft of China's 14th Five-Year-Plan was circulated at the end of October 2020, with key aspects of the new plan including a push towards technological self-reliance, 'dual circulation' and a move to a sustainable and resilient economy. The clear message of the new plan is to reduce reliance on other countries and focus on innovation, targeting areas like 5G, 'internet of things' and cloud computing.

The 5YP also noted China's need to adopt a gradual shift in economic structure away from export-orientated growth to domestic consumption driven growth. The concept of 'dual circulation' is about China improving the domestic circulation of demand and supply (thereby reducing the economy's exposure to

external shocks) while at the same time continuing to progress internal market-orientated reforms. Covid-19 already contributing to more domestic led growth, with China's economic recovery occurring in a period of weak external demand.

China has already experienced a partial decoupling with many strategic export markets over the past year or so; the US placed restrictions on the exports of high tech products to China and direct investments to and from China, the UK, Australia and several EU countries have blocked Huawei from having either a comprehensive or partial role in the development of their 5G networks, India has had a military skirmish with China at the Himalayan border between the two countries, with the Indian government applying investment restrictions as a consequence, and various countries and regions, including the EU and US, have sought to on-shore/reshore manufacturing activities associated with critical medical equipment and PPE where Chinese production was previously relied upon pre-pandemic.

Chart 12 - Annual Real GDP Growth and Real GDP Per Capita

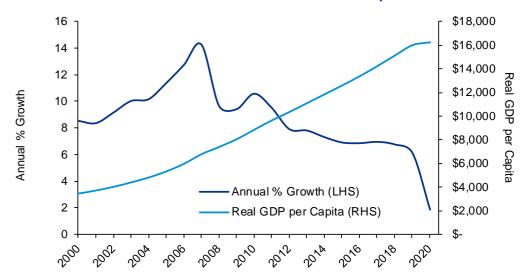
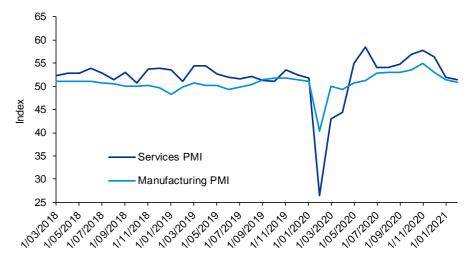


Chart 13 - China PMI Index, Services and Manufacturing







Furlough scheme extended as vaccine rollout accelerates

The United Kingdom has been hit particularly hard by the coronavirus pandemic, both in terms of the health outcomes on its population as well as the consequences on its economy. The most recent spike in coronavirus infections is reflective of a new highly transmissible variant spreading since December. The UK responded to this increased health threat with an aggressive rollout of a vaccination program, which has been highly successful with more than one-third of its population receiving a vaccination injection.

The economic fallout of this pandemic on the UK economy has been severe. GDP fell by 19 per cent during the June quarter 2020, with both household consumption and business investment declining by slightly more than 20 per cent each.

A key response by the UK Government to the economic fallout of the pandemic has been the introduction of the Job Retention and Self Employment

Income Support (SEISS) schemes. These schemes have enabled the UK unemployment rate to increase from 4 per cent at the start of 2020 to be 5.1 per cent, which is minor relative to other major global economies.

After more than nine months of arduous negotiations the United Kingdom (UK) and the European Union (EU) finally struck a deal on their post Brexit trade relationship. While obviously challenging to get across the line, the Brexit deal essentially establishes a free trade zone (FTZ) between the two jurisdictions.

Arguably the UK-EU FTZ is a much lesser outcome than a beneficial customs union would have been the 'best of a bad situation', but still less than the previous communal market arrangements. For example, the Brexit deal only provides tariff-free bilateral trade in goods and does not cover services, which represents 80 per cent of the UK's GDP and 45 per cent of its exports.

Chart 14 - Quarterly GDP (£ billion) and Quarterly Growth (%)

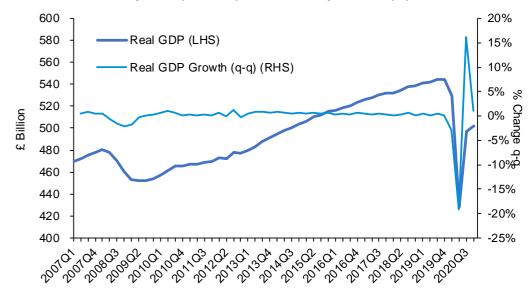


Chart 15 - Monthly Change in Hours Worked and Jobs, UK





Eurozone

ECB reignites 'whatever it takes' mantra to recovery

Despite a willingness to lockdown individual regions and cities across Europe, the transmission of Covid-19 across Europe has been exacerbated by the Schengen Agreement, which allows for the continuation of the free movement of people across the region.

The broad Eurozone area experienced a 12 per cent fall in GDP in the June quarter 2020, rebounding by 12½ per cent the following quarter. Preliminary data suggests GDP in the Eurozone fell again in the final quarter of 2020, declining just under 1 per cent.

This fluctuation in the economic recovery for the region is a key driver behind the European Central Bank (ECB) Governing Council in its December 2020 meeting increasing the funding available for its Pandemic Emergency Purchase Programme (PEPP) by €500 billion (taking it to €1850 billion) and extending its operation out until March 2022. The ECB also announced more favourable terms on its third series of Targeted Long term Refinancing Operations (TLTRO's) and an extension of collateral easing measures.

From an individual country perspective, Portugal, Spain, Greece, Italy and France have experienced a larger negative impact as a consequence of the pandemic primarily because of their relatively higher reliance on tourism. Until an effective vaccine is rolled out in large enough numbers restrictions on international travel will remain, curtailing global services trade (especially in tourism) and therefore economic growth. For Europe in particular this will mean a slow normalisation in transport and hospitality sectors.

At the start of 2021 there remains significant labour market slack across Europe, with unemployment rates varying significantly, with Spain at a 16 per cent unemployment rate, nearly double the Euro area average. The Corona-Schutzschild wage support programme implemented in Germany has contributed to limiting labour market losses, with the unemployment rate at the start of this year estimated to be 4.6 per cent.

Chart 16 - Quarterly Change in Real GDP by Eurozone Country

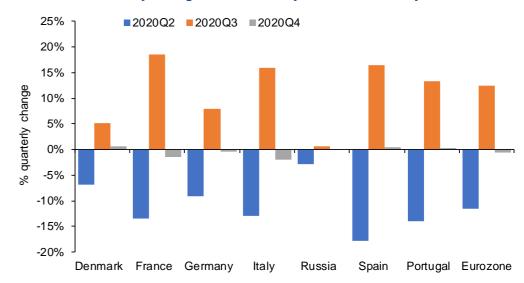
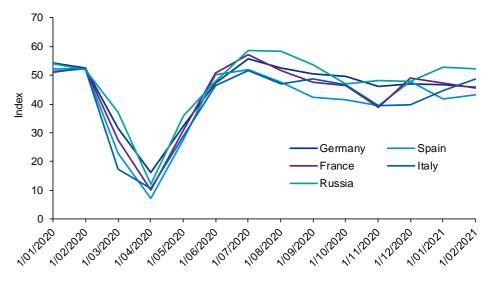


Chart 17 - PMI Services Index by Eurozone Country





Emerging Markets

EMs hurt by direct and indirect effects of Covid-19

Not only did many Emerging Market (EM) economies experience direct economic losses associated with pandemic, they also experienced negative spill-over effects through lower trade, investment outflows and adverse exchange rate outcomes (which exacerbates the financial challenges for those EM's holding US denominated debt). The IMF and World Bank have stepped up support by committing US\$250 billion and US\$160 billon respectively to EMs, while the G20 has suspended payments on official bilateral credit for the poorest countries.

The Indian economy shrank by nearly 30 per cent in 2020q2, led by a 45 per cent decline in capital spending. A widening trade deficit has re-emerged as the economy rallies back from the Covid-induced downturn. The risk of exacerbating inflation, which had been running at about 7 per cent during 2019, was a key reason why public sector economic support within India has been relatively limited during the pandemic.

The largest three countries in Latin America – Mexico, Argentina, Brazil – recorded nearly 15 million coronavirus cases (to the end of February 2021), which represents around 13 per cent of total cases, even though these countries only represent 5 per cent of the world's population.

The Russian economy has been negatively impacted by the domestic consequence of local lockdowns as well as the decline in the world oil price. However, the 3.1 per cent fall in GDP is likely to have been worse if the government had reimposed lockdown measures during the second half of the year.

Despite having a sharp downturn in GDP in 2020Q2 (-11 per cent), Turkey not only managed to avoid a recession but grew by nearly 2 per cent over the year.

Vietnam showed itself to be resilient to the pandemic; to date it has recorded only 2,500 cases and 35 deaths.

Chart 18 - Real GDP Change by Quarter

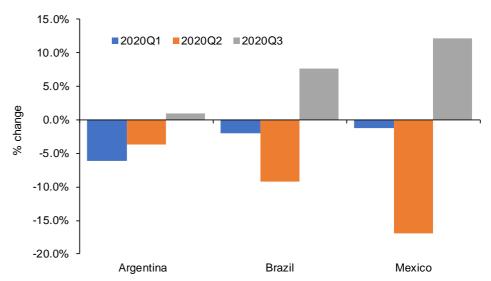
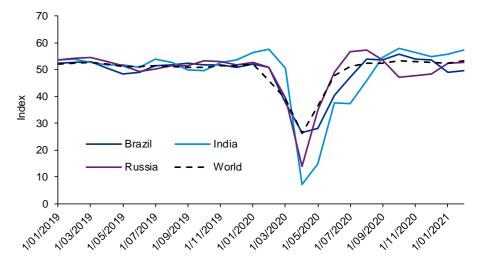


Chart 19 - PMI Composite Index





Forecasts (1/2)

			Annual GDP Growth ¹			Unemployment Rate ²			Av. Annual Inflation ³		
		2020	2021	2022	2020	2021	2022	2020	2021	2022	
World		-3.4%	4.7%	3.9%		·	·	2.6%	3.0%	2.3%	
Europe	France	-8.7%	5.5%	3.6%	8.7%	8.3%	8.2%	0.4%	1.2%	1.3%	
	Germany	-5.2%	3.4%	3.1%	4.5%	3.9%	3.4%	0.6%	0.8%	1.2%	
	Greece	-9.2%	1.4%	3.0%	16.6%	14.3%	13.2%	-1.5%	0.7%	0.8%	
	Euro Area	-7.2%	3.5%	3.4%	7.6%	7.3%	6.9%	0.4%	0.9%	1.1%	
	Italy	-9.0%	3.4%	2.9%	9.7%	8.2%	7.8%	0.0%	0.0%	0.5%	
	Russia	-4.0%	3.3%	2.3%	4.7%	4.3%	4.3%	3.4%	4.9%	5.1%	
	Spain	-11.3%	4.1%	4.6%	16.3%	17.5%	17.1%	0.2%	0.9%	1.4%	
	UK	-9.9%	4.6%	4.3%	5.5%	7.2%	6.6%	1.0%	0.5%	1.9%	
North America	Canada	-5.4%	4.6%	3.6%	8.7%	6.8%	7.4%	0.9%	1.4%	1.4%	
	US	-1.6%	4.8%	3.3%	6.7%	5.5%	4.8%	1.2%	2.0%	1.9%	
South and Latin America	Argentia	-10.3%	3.7%	2.5%	10.8%	13.7%	12.2%	41.4%	31.7%	24.6%	
	Brazil	-5.1%	3.6%	2.4%	14.4%	18.0%	17.4%	3.2%	4.3%	3.2%	
	Chile	-7.4%	2.5%	3.7%	10.9%	7.6%	7.6%	3.0%	4.1%	3.4%	
	Mexico	-9.3%	3.8%	2.5%	4.5%	3.7%	3.4%	3.3%	2.7%	2.3%	



^{1 -} GDP growth calculated as (GDP q1-q4 t / GDP q1-q4 t-1)

^{2 -} Estimated unemployment rate at end of year

^{3 -} Estimated average inflation through the year

Forecasts (2/2)

		Annual GDP Growth ¹		Unemployment Rate ²			Av. Annual Inflation ³			
		2020	2021	2022	2020	2021	2022	2020	2021	2022
Asia	China	2.3%	8.8%	5.4%	4.2%	3.8%	3.6%	2.5%	1.3%	2.0%
	India	-8.0%	11.5%	6.8%				6.7%	3.4%	3.2%
	Hong Kong	-6.1%	5.2%	4.6%	5.6%	5.0%	4.6%	0.3%	1.0%	1.5%
	Indonesia	-2.1%	4.2%	5.4%	6.0%	6.1%	6.1%	1.9%	2.1%	1.2%
	Japan	-5.6%	1.9%	1.5%	3.0%	3.2%	2.5%	0.6%	0.3%	0.2%
	Singapore	-6.2%	4.8%	4.0%	4.5%	2.0%	2.0%	-0.2%	1.1%	0.9%
	South Korea	-1.3%	2.9%	2.6%	4.3%	3.9%	3.9%	0.5%	0.9%	1.0%
	Taiwan	2.2%	3.6%	2.7%	3.7%	3.7%	3.7%	-0.4%	1.0%	0.8%
	Vietnam	5.4%	2.5%	3.7%	3.6%	3.8%	3.2%	3.2%	2.5%	2.5%
Oceania	Australia	-2.5%	3.5%	3.3%	6.5%	5.6%	5.2%	1.1%	1.3%	1.8%
	New Zealand	-2.1%	3.5%	2.3%	5.5%	5.1%	5.1%	1.7%	1.4%	1.4%
Africa	South Africa	-8.1%	2.8%	2.5%	31.6%	26.2%	25.7%	3.4%	4.5%	3.2%



^{1 -} GDP growth calculated as (GDP q1-q4 t / GDP q1-q4 t-1)

^{2 -} Estimated unemployment rate at end of year

^{3 -} Estimated average inflation through the year

Australian Outlook

Overview

Australia leading world in management of coronavirus

At the start of 2020 Australia was still responding to one of the worst natural disasters the country had ever experienced. These extreme weather conditions disrupted the Summer Holiday period, causing many households and businesses to delay or cancel planned activities in January and February.

This meant that the Australian economy entered the global pandemic in position of underlying weakness, which should be remembered in the context of considering how the economy has faired since that time. Also in this setting the scene for the impact of Covid-19 on Australia, unlike previous economic crises (which commenced with a fall in aggregate demand) the disruption caused by this crisis started in the production side of the economy, and then flowed through to demand side of the economy.

Australia has weathered the global coronavirus pandemic better than most other countries. A mix of good management and good luck has meant that the spread of Covid-19 within the Australian population has been limited, and as a consequence of that (and also due to the high quality health system that exists in Australia) the fatality rate associated with the disease has been very low.

Australia is ranked No.2 in the world behind New Zealand in Bloomberg's Covid Resilience Ranking, reflecting not only the strong health response that has been undertaken to date but also due to the fact we have secured enough doses of the AstraZeneca / Oxford University vaccine to inoculate the whole population.

The good luck Australia has comes from the fact that it is an island and therefore has the ability to limit the spread of the disease from foreign travellers. However, as we have seen in the United Kingdom this natural advantage is wasted if restrictions on inbound travellers are not put in place.

Chart 20 - Daily and Total Covid-19 Cases, Australia

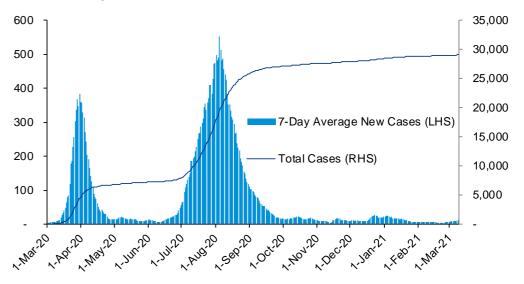
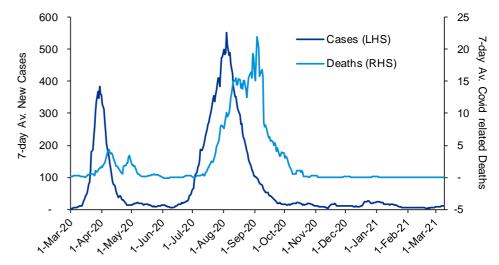


Chart 21 - Daily Cases and Deaths, 7-Day Av, Australia





Overview

Vaccine rollout to further strengthen domestic confidence

While the Australian government declared a human biosecurity emergency on 25 March 2020, which enabled restrictions to be put in place on all inbound and outbound travel, it had already implemented a ban on inbound travellers from mainland China from 1 February 2020.

In addition to the international borders being closed to non-residents from mid-March, other restrictions were then imposed across the nation including social distancing rules and the shut-down of non-essential services. These measures were effective in flattening the infection curve in April and saw restrictions slowly lifted across states in early May.

However, a second wave that broke out in Victoria in mid-June led the Victorian premier to re-impose stage three lockdowns across metropolitan Melbourne and the Mitchell Shire for a minimum of six weeks from 9 July 2020.

As the number of cases kept climbing, in early August, a state of disaster was declared in Victoria, with Melbourne moving to stage four restrictions, while regional Victoria moved to stage three restrictions until 13 September. The lockdowns were later extended for two more weeks, with some changes to the restriction rules. In some other states and territories such as New South Wales (NSW), Queensland and Western Australia, certain restrictions were also re-imposed as new cases emerged, although to date, new cases have remained under control.

A number of smaller outbreaks of Covid-19 have occurred in New South Wales, Victoria and Western Australia, resulting in a diverse series of measures being implemented by the respective State Governments, including short 'hard' lockdowns, reescalation of heath protocols and border closures. New daily cases in Australia has been on a decline since the beginning of the 2021, with the average daily case numbers halving in February compared to the first month of the new year.

Chart 22 - Av. Daily Cases and Av. Daily Tests, Australia

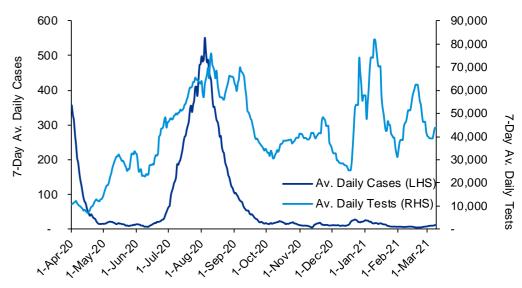
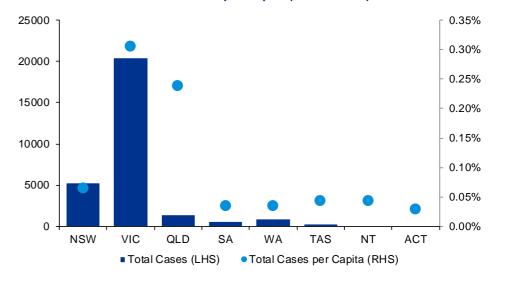


Chart 23 - Total Cases and Cases per Capita (as at 10/3/21)





Australian economy

Consumption activity rebounding, net exports surging

The Australian economy suffered the single largest quarterly decline of GDD on record during the June quarter last year falling 7.0 per cent. Consistent with the rest of the world the decline in GDP was primarily as a result of a significant contraction in consumer spending as households 'battened down the hatches', withdrawing their discretionary spending and correspondingly raising their savings.

The Commonwealth Government, in conjunction with State Governments, the RBA and financial regulators, developed a comprehensive response to deal with the economic fall-out of the necessary health actions undertaken to limit the spread of the coronavirus. The 'bridge to the other side of the pandemic' included a suite of policy responses that included a wages subsidy program (JobKeeper), additional welfare payments to the unemployed (JobSeeker), loans to businesses, quantitative easing, reduction in the cash rate to the 'effective' lower bound, changes to insolvency laws, and loan repayment holidays to mortgagees and businesses.

The monetary policy response by Australian authorities has been wide ranging, and arguably more comprehensive than what we saw occur during the GFC. For example, in March 2020 the RBA dropped the cash rate 50 bp to 0.25 per cent in response to the deteriorating economic conditions brought about by the coronavirus pandemic. This cash rate level equalled the rate the RBA had publicly acknowledged was Australia's effective lower bound (given corridor system costs). However, in the November 2020 RBA Board Meeting the cash rate was lowered further to 0.10 per cent in the recognition that inflation and employment were well below ideal levels.

This monetary policy flexibility also emerged in the use of unconventional tools, including asset purchases (by targeting the yield on three-year Australian Government bonds) and the introduction of the Term Funding Facility (which provides discounted funding to ADIs).

Chart 24 - Quarterly GDP Growth by Component, Australia

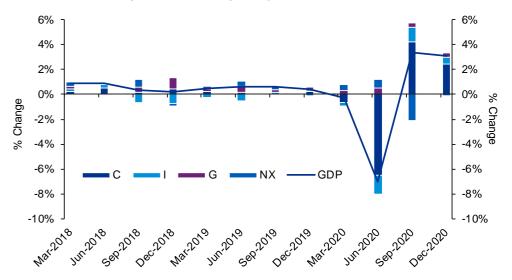
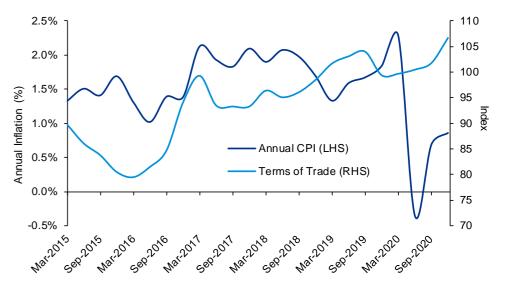


Chart 25 - Annual Inflation and Terms of Trade





Production

The pandemic hits Australia's service sectors the hardest

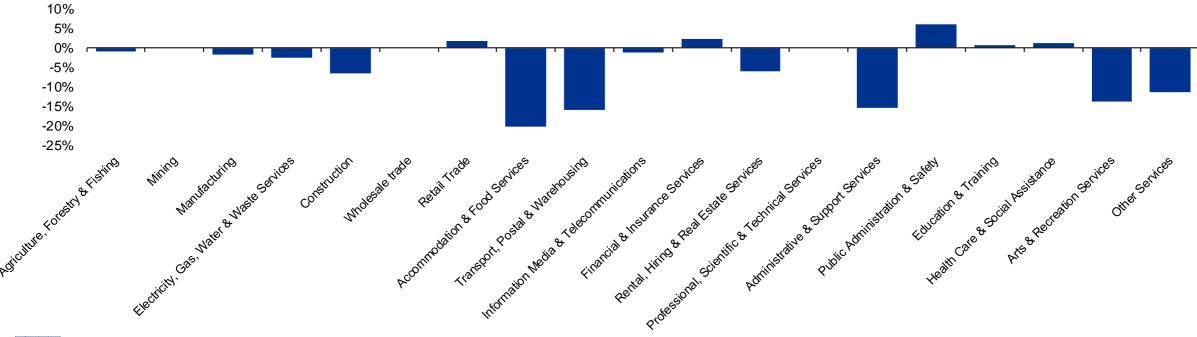
2020 proved itself to be a very challenging year for every industry in Australia, whether it be due to lower turnover, having to adopt different operating processes in order to be 'Covid-safe', or the impact of the deteriorating trading relationship with China.

Unsurprisingly the industries that experienced the largest deterioration in gross value added (IGVA) over 2020 have been front-

line service sectors, including air transportation, food services, accommodation and arts and recreation. Conversely, the industry sectors that experienced the strongest performance during the pandemic have been public administration and safety and healthcare, while the retail sector performed better than many expected.

Notably the contribution for the air transportation sector to Australia's gross value added in the December quarter 2020 was less than 15 per cent of what it was in the December quarter 2019; and its recovery will necessarily remain hindered until Australia's borders are reopened to international tourists. The recently announced Tourism Aviation Network Support (TANS) Program, which involves the Commonwealth Government subsidising 50 per cent of the cost of air travel to selected destinations in Australia, will provide some support to enable a faster recovery in the sector. However, the broader impact of the pandemic on the sector, especially in the context of changing business travel patterns (vis-àvis the use of video conferencing technologies), is likely to emerge over the coming few years.

Chart 25 - Change in Annual Real IGVA between 2019 and 2020





Consumption

Discretionary spending returning as confidence rises

The onset of the pandemic saw households materially alter their spending pattern, partially in response to their ability to access goods and services and also partially in response to their concerns about their personal short term financial security.

During the June quarter 2020 we witnessed consumer panic-buying, including the 'great toilet paper run' where supermarkets were unable to maintain supplies of certain goods as consumers responded to uncertainty surrounding lockdowns. Retail turnover in supermarkets, liquor stores and other food retailers spike by around 30 per cent between February and March of 2020, while discretionary spending on clothing and footwear fell by around 20 per cent during March and then a further 50 per cent in April.

As the easing of the initial lockdown period started to occur in May consumer spending started to rise, with particular focus on the purchase of household goods (including furniture, up 34 per cent between April and May, and electronics, up 16 per cent). It is likely some

of this spending reflected decisions by consumers to purchase some new, or replace existing, household goods to improve their living arrangements, especially in anticipation of further lockdowns.

Consumer sentiment fell during 2019/2020 Christmas period in response to the extensive bushfires, and just as communities began to feel a sense of optimism the full extent of the coronavirus was starting to become apparent. This caused consumer sentiment to plunge to levels of pessimism not seen in Australia since the last recession in the early 1990s. The easing of the first lockdown in May saw sentiment rise only to plunge again with the commencement of the second lockdown in Victoria. This decline in sentiment flowed through into reduced discretionary spending and conversely a rise in household savings. Since October 2020 consumer sentiment has turned more optimistic for the current outlook as well as for the short (12month outlook) and medium term (five-year outlook) horizon.

Chart 26 - Retail Sales, Australia

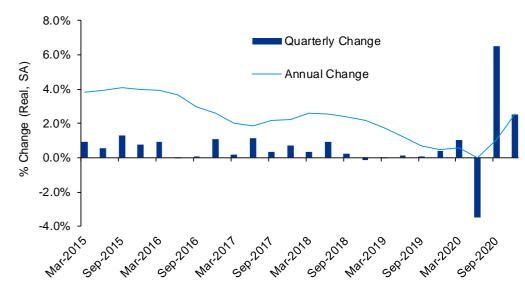
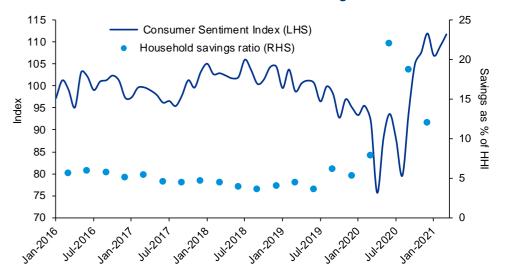


Chart 27 - Consumer Sentiment and Household Savings





Business Investment

Capex remains weak, but tax incentives helping

Business investment fell nearly 10 per cent during 2020 compared to the year before, with investment in buildings and structures falling marginally more than investment in plant and equipment. Due to its lumpy nature and lead times the trough in business investment occurred in the September quarter 2020.

The drop in non-dwelling property investment was the primary driver of source of the contraction in business investment during the past 12 months. The final quarter of 2020 saw a large investment in plant and equipment by the transport, postal and warehousing sector, most likely reflecting a rebuilding of Australia's aged distribution fleets (which was also facilitated by the instant asset write off allowed under the most recent Commonwealth Budget).

Private business investment as a proportion of domestic demand and GDP has been declining since the end of the investment boom associated with the "commodity super-cycle". There was a sharp contraction as investment in new mines and mining

capacity was finalised and those assets became operational, and since the middle of the past decade business investment as a proportion of domestic final demand has hovered around the 11 to 12 per cent mark, before slipping to around 10 per cent towards the end of last year.

Clearly this trend needs to be reversed if increases in national productivity and living standards are to be achieved. Policies such as accelerated depreciation, including instant asset write offs, provide a strong incentive for businesses to invest, especially in an environment where the headline company income tax rate is higher compared to other jurisdictions with similarly attractive investment opportunities.

The IHS Markit Business Surveys show business activity, as measured by Purchasing Manager Index, has experienced a roller-coaster ride over the course of 2020, with the largest dips and rises coming in the Services PMI.

Chart 28 - Private New Capex, Rolling Annual by Type

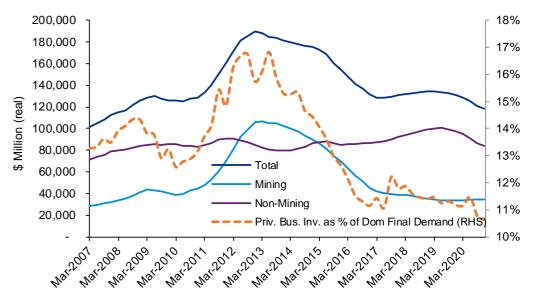
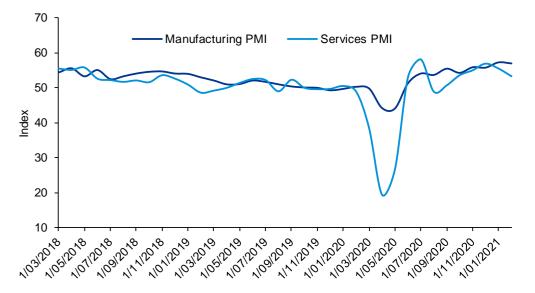


Chart 29 - PMI Surveys, Australia





Housing Investment

HomeBuilder drives turnaround in housing approvals

Even prior to the onset of the Covid-19 pandemic investment in Australia's housing sector was falling. Private dwelling investment peaked in the June quarter 2018, while new private dwelling approvals continued to decline until it reached an eight-year low in June 2020.

The turnaround in housing approvals coincided with the rollout of the Commonwealth Government HomeBuilder stimulus package, which was introduced to boost residential construction activity by providing grants of up to \$25,000 to owner-occupiers signing contracts for new builds or substantial renovations. The HomeBuilder program was initially in place for a 6-month period until the end of December 2020, although the Commonwealth Government extended the program (at a lower funding level) until the end of March 2021.

At the start of the program it was anticipated that about 27,000 applications would be received by the government at a total program cost of around \$680

million. However, by the end of February 2020 nearly 90,000 applications for the HomeBuilder grant had been received, with 80 per cent of these associated with the construction of a new building.

Established house prices appear to be on an upswing. Pent up demand, a balloon in savings, limited growth in housing supply and ultra-low interest rates are all factors likely to be driving the short term upward price pressure within (some) housing markets in Australia. Other factors that would generally have a moderating impact on house prices, include declining foreign migration and lower foreign investment, are unlikely to be large enough to offset the factors influencing upward price pressure.

A 'new' element in the macroeconomic landscape in Australia that is expected to also place additional upwards pressure on house prices is the impact of QE. Experience overseas suggests there is a strong correlation between the price of real assets and the movement of central bank balance sheets.

Chart 30 - No. of Private Dwellings Completed and Approved

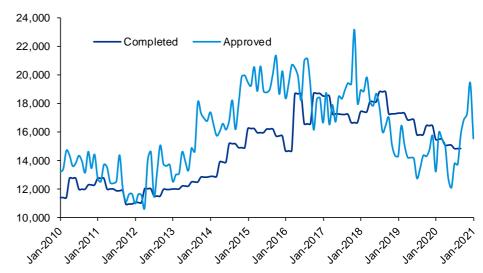
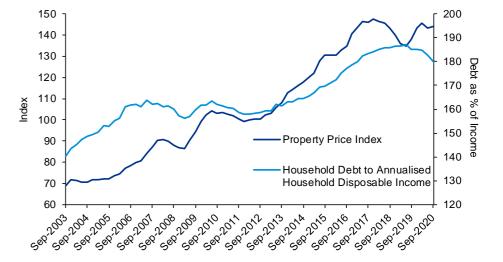


Chart 31 - House Prices and Household Debt, Australia





Government

Company income tax returning to pre-Covid levels

All levels of government in this country have faced enormous pressure during the coronavirus pandemic; not only to safeguard against the negative health risk confronting the Australian population, but also to ensure the structure of the domestic economy remains as intact as possible such that once this pandemic is over individuals and businesses will be able to return to something as close as possible to a 'business as usual' environment.

Lessons learned from previous economic downturns, including the most recent GFC, have clearly flavoured the social and economic policy settings adopted by Government during the pandemic. Recognising the need to keep employers-and-employees connected so as minimise unemployment (especially the potential for a significant rise in long term unemployment) was the fundamental driver behind the JobKeeper program.

The cost of JobKeeper program, estimated to be just about \$100 billion over 2019-2020 and 2020-2021, needs to be considered in the light of a counter-factual

scenario of where no such program is implemented. In that scenario Australia would have seen a rise in welfare payments to the newly unemployed, a destruction in economic capital through business closures, and a trailing reduction in company tax receipts. Instead of that outcome the Commonwealth Government is now expected to see marginally higher company income tax receipts (reflecting higher marginal business profitability given wage subsidies), higher GST payments (reflecting higher consumption expenditure by individuals who earned greater income than what they would have if they had received JobSeeker payments).

Clearly the cost of all the government support programs has been enormous, with funding sourced exclusively from the issuance of additional government bonds. The RBA has also played a significant role in this funding equation, with QE allowing short term funding costs to the government to be pulled downwards substantially than where they were even at the start of 2020.

Chart 32 - Commonwealth Government Tax Receipts by Type

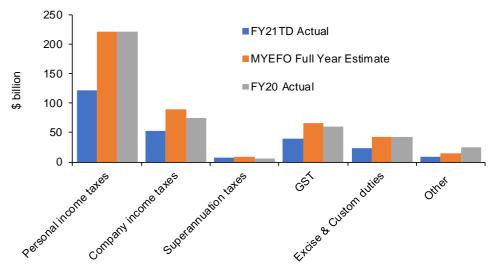
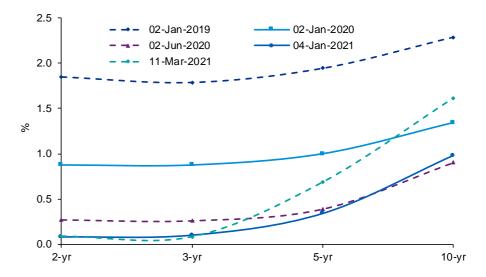


Chart 33 - Yield Curve on Commonwealth Government Bonds





Net exports

Iron ore exports to China driving current account surplus

Australia's worsening bilateral relationship with China is the most pressing issue facing the nation outside of the coronavirus pandemic.

While there are clearly tensions in the geopolitical relationship between China and Australia, the value of our exports to China has been underpinned by sales of iron ore, and to a lesser extent, metallurgical coal. In 2020 the sale of iron ore (worth \$93.1 billion) to China represented nearly two-thirds of the total value of Australian exports to China (\$145.0 billion); an amount that is more than twice the value of Australia's total exports to Japan, our second largest trading partner.

Some analysts have suggested there is a risk that Australia's iron ore exports may be targeted if trade tensions between the two countries continue to escalate. KPMG consider this risk to be remote. This is because Australia accounts for about 40 per cent of total global iron ore production, and about 50 percent total global iron ore exports. Brazil is the second largest producer of iron ore in the world, and theoretically

could be an substitute supplier of Australia's iron ore to China . However, the combination of the fallout from the Brumadinho mine dam accident in 2018 and wide-spread impact of Covid-19 on Brazil has meant the country continues achieve lower-than-expected iron ore production levels.

This year while iron ore production is expected to reach 330 million tonnes (an increase of 25 million tonnes over 2020 production levels) market analysts have suggested it is still about 20 million tonnes lower than what China was anticipating to have supplied by Brazil¹. This supply pressure in the global iron ore market is therefore not only assisting Australia maintain its supply relationship with China, but it is also causing iron ore prices to rise and stay elevated. This price effect resulted in incremental growth in iron ore sales to China in 2020 of \$14.1 billion; which is nearly twice as large as the drop in value of exports to China of thermal coal, beef, barley, rock lobster, wine, and timber that occurred over the same period.

1. https://stockhead.com.au/resources/iron-ore-in-2021-is-looking-like-iron-ore-in-2020/

Chart 34 - Net Exports by Type, Australia

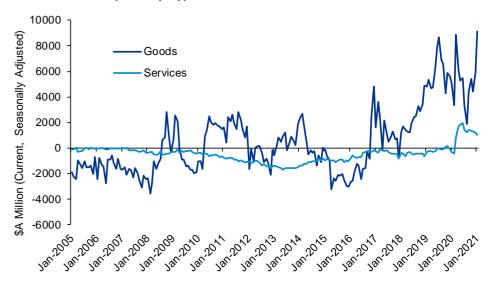
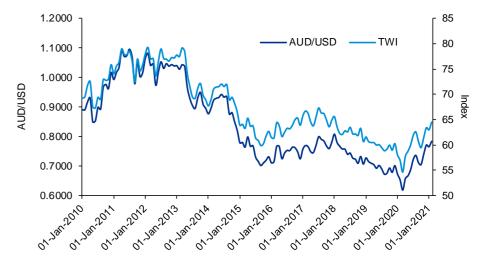


Chart 35 - AUD/USD and TWI





Labour market

Effective unemployment converging to actual unemployment

The headline unemployment rate in Australia peaked at 7.5 per cent in July 2020, and by January 2021 it had fallen to 6.4 per cent. However, the 'normal' dynamics of Australia's labour market have been interrupted through the adoption of the JobKeeper program which has resulted in businesses being able to keep staff employed even under circumstances where reduced turnover would usually result in labour shedding.

When an adjustment is made for higher than usual numbers of employees working zero-hours and dropouts from the labour force, Australia's unemployment rate is likely to have reached a peak of around 12.3 per cent in May 2020. Since then the number of people actively employed in Australia's labour force has steadily risen, resulting in both the headline and adjusted unemployment rates declining (and converging).

Governor Lowe has recently noted the RBA has lowered its estimate of 'full employment' down to an unemployment rate from 5 per cent to now something

in the low 4 per cent range. Further, when questioned whether full employment could be consistent with an unemployment rate of just three-point-something per cent, Governor Lowe indicated that "it's not inconceivable, that we could sustain an unemployment rate in Australia starting with a three"². This suggests the RBA will continue with its expansionary monetary policy settings until Australia's labour market becomes much tighter, and wages growth re-emerges and returns to (something like) long term trend.

Wage growth remains low and is expected to stay low over the near term. The annual pace of wages growth continued at a record low, achieving just 1.4 per cent by the end of 2020. The latest business survey by the RBA also found that the proportion of businesses indicating they had wage freezes in place or intended to implement wage freezes this year increased further in the December quarter to be now more than 60 per cent of reporting firms.

2. https://www.afr.com/policy/economy/rba-brutally-bashes-bond-bandits-20210312-p57a3a

Chart 36 - Unemployment Rate, Australia

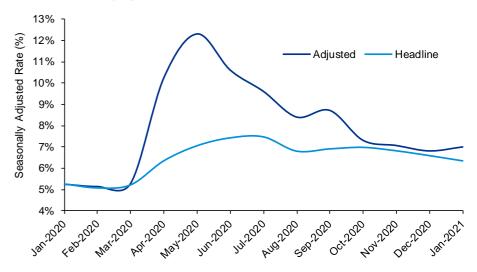
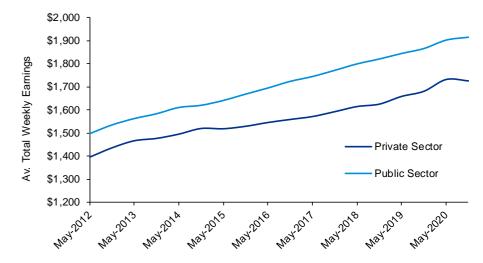


Chart 37 - Average Weekly Earnings by Sector, Australia





Population

Population in 2030 now expected to be lower by 1 million

Australia's population growth has declined markedly during the Covid-19 pandemic, with growth in 2020-21 expected to be the slowest rate since World War I. Net overseas migration (NOM) this year and next is also forecast to be negative for the first time in 75 years.

The Commonwealth Government now anticipate that Australia's population, in the absence of any other policy intervention(s), will be about 1.1 million lower than by 2031 than previously forecast prior to the onset of the pandemic.

The impact on population comes at a time when Australia will have a huge debt to pay back post-Covid-19, assuming we do reach a time we can say 'post' Covid-19. Growing the economy will be critical if we are to chart a course back to recovery.

In responding to the economic crisis inflicted on Australia by the Covid-19 pandemic, KPMG proposed in its <u>Pathways to Recovery</u> report that the Australian government should seek to increase Net Overseas Migration (NOM) by attracting more higher education students.

International students are younger than the Australian population as a whole and can be expected to be highly skilled as a result of their educational attainment before and after arriving here. To retain and attract international students in a highly competitive global marketplace, the Australian government could consider making post-study work rights easier to obtain and last longer, add further permanent residency points to these post-study work rights and increase permanent residency points for students who undertake study in areas of skill shortage or in regional areas.

These measures combined would help solve the economic growth and living standards challenge facing policy makers as we seek to emerge and recover from the COVID-19 pandemic.

Chart 38 - Natural Increase in Pop. and Net Overseas Migration

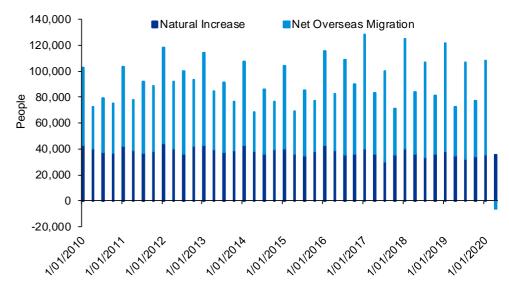
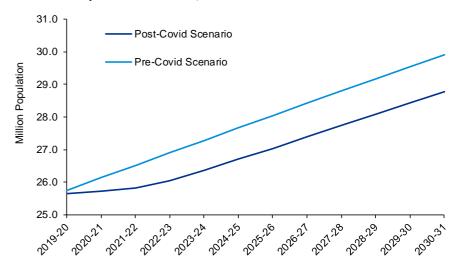


Chart 39 - Population Forecasts, Pre- and Post-Covid





Forecasts

Year Ended	2019/20	2020/21	2021/22	2020	2021	2022
Consumption	-3.0%	1.5%	6.4%	-5.8%	8.1%	4.4%
Business Investment	-2.1%	-3.2%	4.1%	-5.6%	3.5%	1.9%
Housing Investment	-6.5%	5.1%	12.5%	-2.9%	12.3%	10.0%
Government	5.6%	4.5%	0.7%	6.0%	1.6%	1.7%
Exports	-1.8%	-10.0%	3.5%	-10.3%	-2.0%	4.7%
Imports	-7.4%	-2.7%	8.6%	-12.9%	9.0%	6.8%
GDP	-0.2%	0.5%	4.0%	-2.5%	4.0%	3.4%
Inflation	0.9%	1.5%	1.7%	0.9%	1.3%	2.0%
Current Account Balance	3.5%	-1.7%	-2.4%	0.3%	-2.1%	-2.5%
AUD/USD	0.66	0.78	0.78	0.73	0.78	0.78
Terms of Trade	100.50	104.38	102.17	106.70	102.85	102.03
Unemployment Rate	7.0%	6.0%	5.4%	6.5%	5.8%	5.2%
Real Wage Growth	3.1%	0.5%	0.7%	3.0%	0.6%	0.7%



Considerable upside benefits to world economy from faster, wider vaccine rollout than current supply trajectory

While vaccination programmes are now being rolled out in many countries, the pace at which they are occurring is highly variable. Combined with the fact that the new strains of the virus are even more infectious, and possibly more receptible to reinfection, countries are maintaining border closures and continuing to limit the international movement of residents.

To understand the potential variation in the speed of the economic recovery KPMG, in conjunction with NIESR³, have constructed two scenarios that allow for a faster and slower rollout of the global vaccination program that is captured in our central forecasts. That is, in the central forecast the vaccine roll-out is expected to allow a gradual reopening over the course of the year, with international travel initially returning in the second quarter of 2021 and recovering pre-Covid levels by the end of the year.

In the Upside Scenario the global vaccination program is accelerated both in terms of coverage and speed of vaccinations, which enables all countries to fully open their international borders to travellers from the beginning of 2022.

In the Downside Scenario we look at the impact associated with a failure to deliver a comprehensive and timely vaccine program to low- and lower-middle-income countries, which prevents a widespread opening of the global economy before 2022. In this scenario LMICs maintaining current level of restrictions on international travel, and restrictions on mobility remain in place in countries with limited access to vaccine until the end of 2021, rather than easing over the course of the year.

Country-specific shocks are calibrated for both scenarios. The size of shocks applied to each country is proportional to: services trade as a share of total trade, the average degree of lockdown stringency in January and February 2021, and a global benchmark relationship between this stringency and services trade.

Because service imports are heavily absorbed by households, we apply the shock directly to consumption spending.

The results of the Upside Scenario suggests that world trade this year could be about 2.8 per cent higher if restrictions on international mobility are relaxed. In this scenario GDP growth is higher in all major countries and regions, with the biggest positive impacts in those countries where services account for a relatively high share of trade (such as the UK, Denmark, Greece, India and Singapore) and in countries where the level of restrictions to protect public health are high in the central case (such as Germany, the Netherlands and Austria).

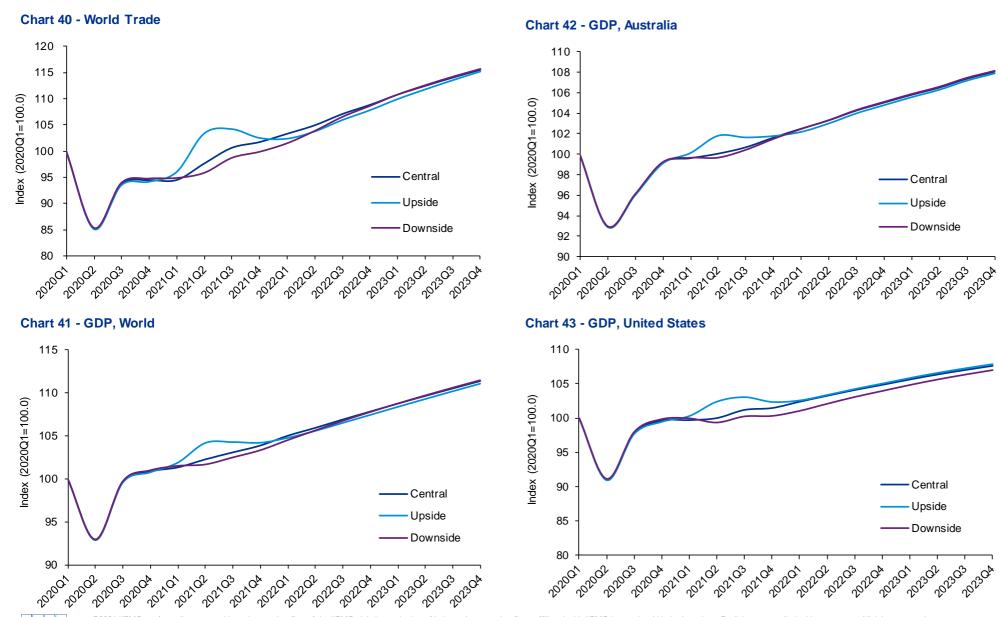
The profile of the Upside Scenario GDP suggests the faster rollout of the vaccine generates a 'sugar-hit' for most economies, with consumption activity temporarily boosted by pent up demand, while in some cases this temporary boost includes consumption expenditure brought forward from future periods. Ultimately however this scenario reflects the same policy outcome as the Central Case, albeit the health outcomes for the population being more effectively achieved and in a more timely manner.

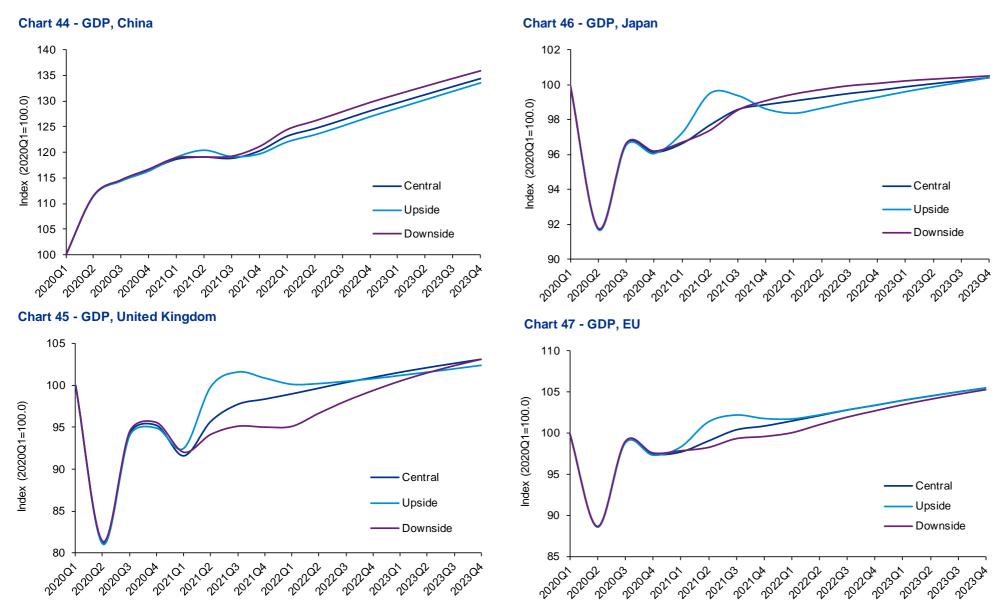
In the Downside Scenario about 25 per cent of international travel remains restricted until the end of 2021, which results in global services trade remaining depressed and world trade growth declining by 1.2 per cent relative to the baseline. GDP growth would be weaker in all countries, especially in countries that have not secured access to sufficient doses of vaccine. This includes large parts of Africa and Latin America.

3. KPMG acknowledge the technical support provided by Dr Ian Hurst and Dawn Holland from NIESR in understanding how to treat potential economic effects of different vaccination roll-out scenarios.



KPMG







About KPMG

At KPMG Australia, we help our clients not just grow, but grow meaningfully – consciously, collaboratively, transparently and empathetically. It's our deep belief that how you grow matters.

Nationally, over 9,000 people are dedicated to this belief across our network, while providing audit, assurance and risk consulting, deals, tax and legal, management consulting and innovation and digital solutions to entities and organisations that span the nation's industrial, governmental and not-for-profit landscapes. Our global network and deep expertise has seen us work with renowned companies to help them solve complex challenges, steer change, disrupt sectors and grow. Collaboration and innovation are ingrained in our approach, with our people aiming to provide genuine, sustainable value for our clients. Beyond our clients we contribute in voluntary and honorary capacities to assist the wellbeing of the communities in which we live and operate, with a core focus on reconciliation with Indigenous Australia, diversity and inclusion.

In everything we do, our aim is that our clients' growth not only enhances Australia's economic prosperity, but builds trust while benefiting society, people and the environment. Because how you grow matters.



Contacts:

Dr Brendan Rynne

Partner & Chief Economist KPMG Australia

E: bjrynne@kpmg.com.au

Dr Michael Malakellis

Principal Director **KPMG** Australia

E: mmalakellis@kpmq.com.au

KPMG does not make any statement in this report as to whether any forecasts or projections included in this report will be achieved, or whether the assumptions and data underlying any prospective economic forecasts or projections are accurate, complete or reasonable. KPMG does not warrant or quarantee the achievement of any such forecasts or projections. Any economic projections or forecasts in this report rely on economic inputs that are subject to unavoidable statistical variation. They also rely on economic parameters that are subject to unavoidable statistical variation. While all care has been taken to account for statistical variation, care should be taken whenever considering or using this information. There will usually be differences between forecast or projected and actual results, because events and circumstances frequently do not occur as expected or predicted, and those differences may be material. Any estimates or projections will only take into account information available to KPMG up to the date of this report and so findings may be affected by new information. Events may have occurred since this report was prepared, which may impact on it and its findings. The information contained herein is of a general nature and is not intended to address the specific circumstances of any particular individual or entity.

KPMG.com.au













©2021 KPMG, an Australian partnership and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organisation.

The information contained in this document is of a general nature and is not intended to address the objectives, financial situation or needs of any particular individual or entity. It is provided for information purposes only and does not constitute, nor should it be regarded in any manner whatsoever, as advice and is not intended to influence a person in making a decision, including, if applicable, in relation to any financial product. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

To the extent permissible by law, KPMG and its associated entities shall not be liable for any errors, omissions, defects or misrepresentation or for any loss or damage suffered by persons who use or rely on such information (including for reasons). of negligence, negligent misstatement or otherwise).

Liability limited by a scheme approved under Professional Standards Legislation.