

A note on the macro economic projections – Short and long-term issues

Introduction

This note is intended for reading in conjunction with the LGA projections to the fourth quarter 2024 issued in June 2021. By design these projections are short-term projections. However it is important to recognise the context of the projections in the longer term setting. The reason for this is because the terminal date of the projections, that is fourth-quarter 2024, is hopefully near the low point of the economic outlook over the next 10 to 20 years for the reasons outlined in the text below. Therefore, this note has been designed to place the short-term outlook in the context of the long-term outlook for the Australian and world economy. It would have been unsatisfactory to end discussion at the terminal date of the short-term projections without some insight or assessment of what will happen after that date.

The short-term macroeconomic outlook

Before delving into the core drivers of the projection it is useful to consider the sorts of trends that may be expected at the LGA level. This is best illustrated by state-based projections for population and gross state product (GSP) presented in Figure 1 and Figure 3. Figure 2 and Figure 4 shows the relationship between post-COVID and pre-COVID population and GSP in percentage and difference from the fourth quarter 2024 for the GSP indicator. A rapid short-term recovery is followed by a lengthy period of declining growth rates to the beginning of 2024. In terms of population, there is a loss of population by the end of 2024 of just under 700,000 compared what would have prevailed in a pre-COVID world if the growth trends over the 2014 to 2019 period had been maintained. By itself this would have a significant negative impact on economic growth, significantly greater than the percentage decline population given that at the margin expected population growth has been a key driver of many Australian expenditure decisions.

The impact on GSP post-2022 with the significant falloff in growth is determined by drivers well beyond simply population growth. The two additional key drivers here are the decline in world GDP growth and the rise in interest rates. The reasons for this are outlined below.

The world and Australian COVID-19 recovery profile and the world interest rate cycle

The key drivers which will determine the outcome for the national and state economies over the next two decades will be:

- (1) the COVID-19 recovery profile and the world interest rate cycle;
- (2) Australia's net foreign immigration rate and population growth rate;
- (3) the expansion of the mining sector and the Australian exchange rate;
- (4) security and defence expenditure;
- (5) ZNET and related expenditures.

Unfortunately, consideration of these issues indicates that they will be major headwinds for the national economy, although there is likely to be considerable opportunities in the national security and climate change expenditure dimensions over the longer term. However, this will require a coordinated action across industries and states to exploit these opportunities. At this stage, given past outcomes, it is assumed in these projections that only relatively modest offsets are achieved. That is, import propensities remain close to current levels.

There is in relative terms at least, a differential impact on the states and territories. Northern Australia and Western Australia increase their share of national economic activity and population while the southern states, and in particular New South Wales and Victoria, experience a decline in their share of population and economic activity. The reasons for this are outlined below.

The best place to start in understanding the logic underpinning the child projections is the world GDP profile given in Figure 5. Please note that the data is in terms of the Australian fiscal year ending. After the recovery over the short-term (at least to 2023) when world economic growth rate is in excess of 3% as an effective vaccine rollout continues which proves effective to mutations of the virus (maybe an optimistic assumption) and reinforced by the impact of current and projected stimulus measures.

Figure 1(a): Population – Four quarter span growth rate (%)

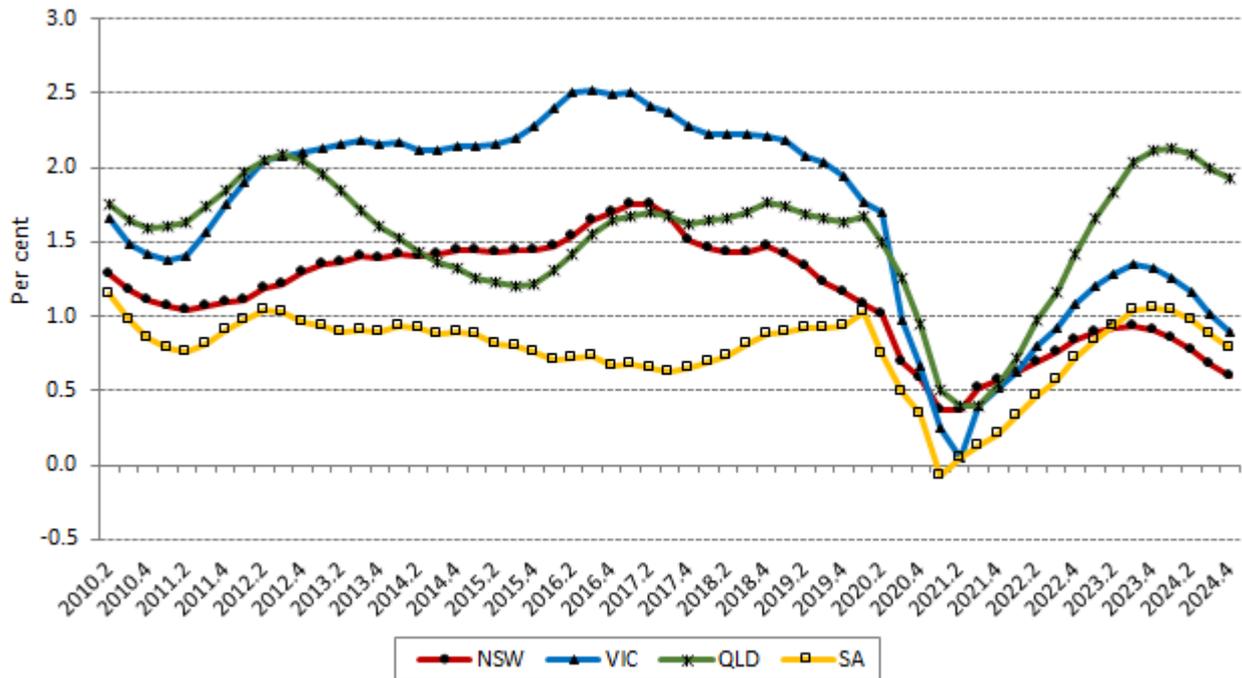


Figure 1(b): Population – Four quarter span growth rate (%)

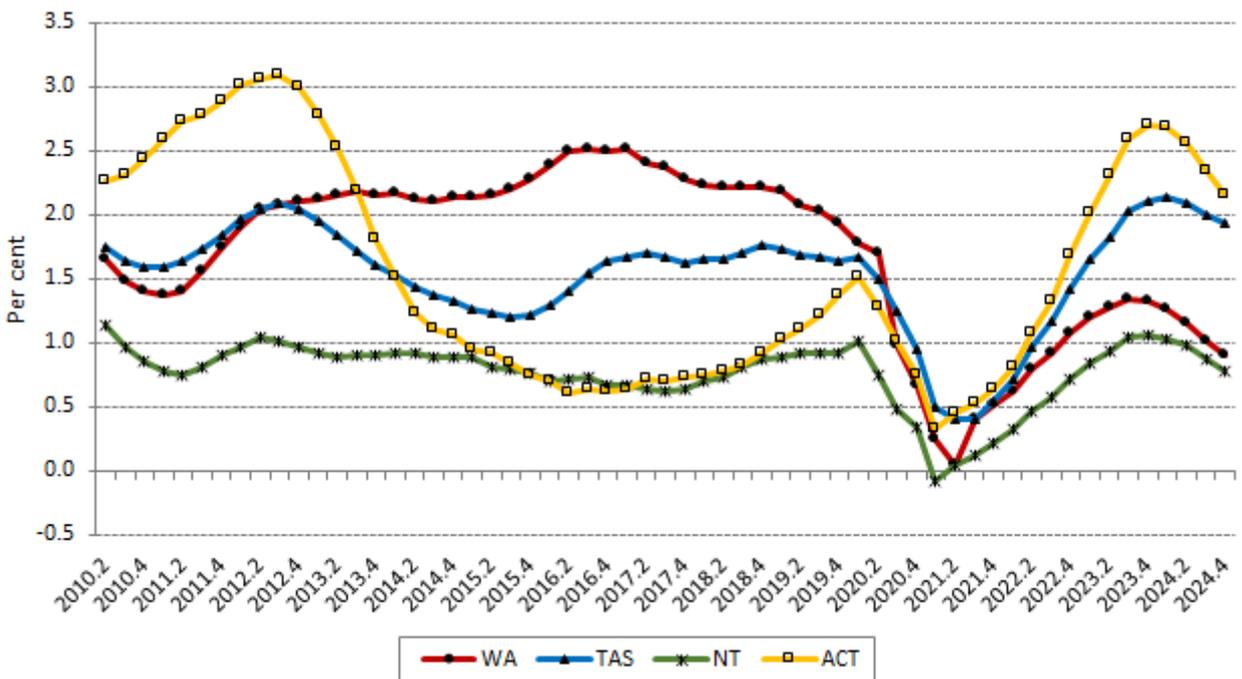


Figure 2: Australia – Post and pre-COVID population (percentage and difference from fourth quarter 2024)

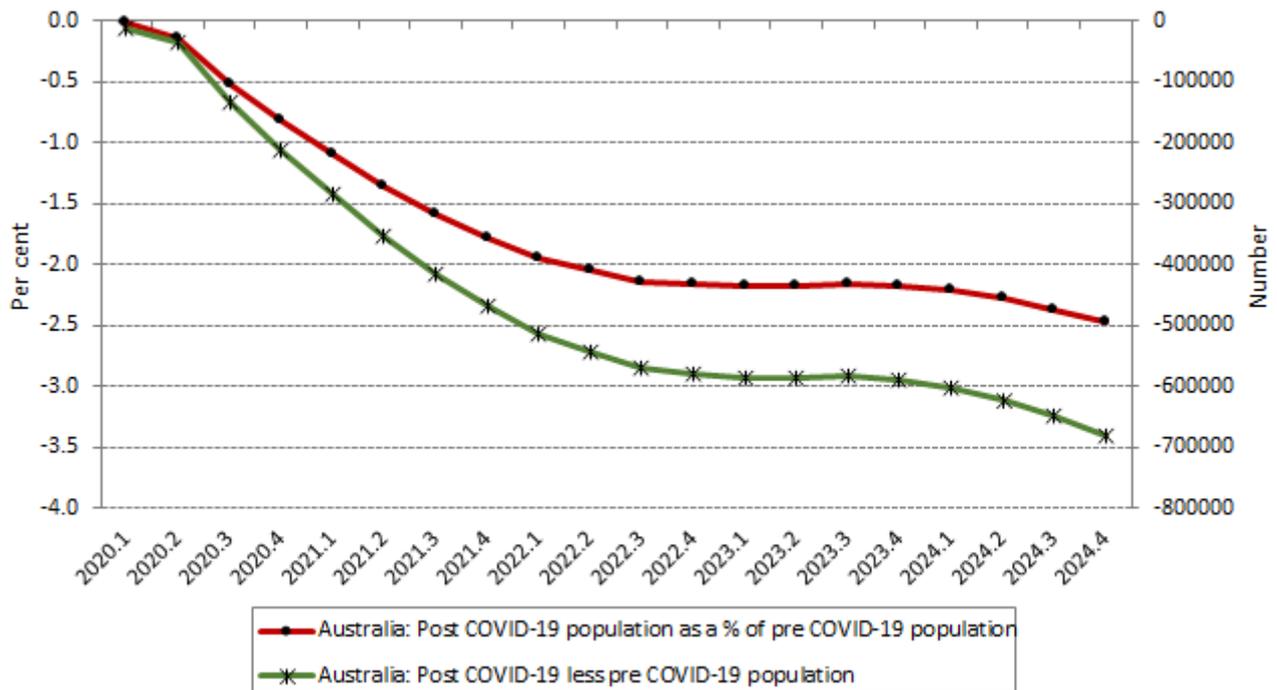
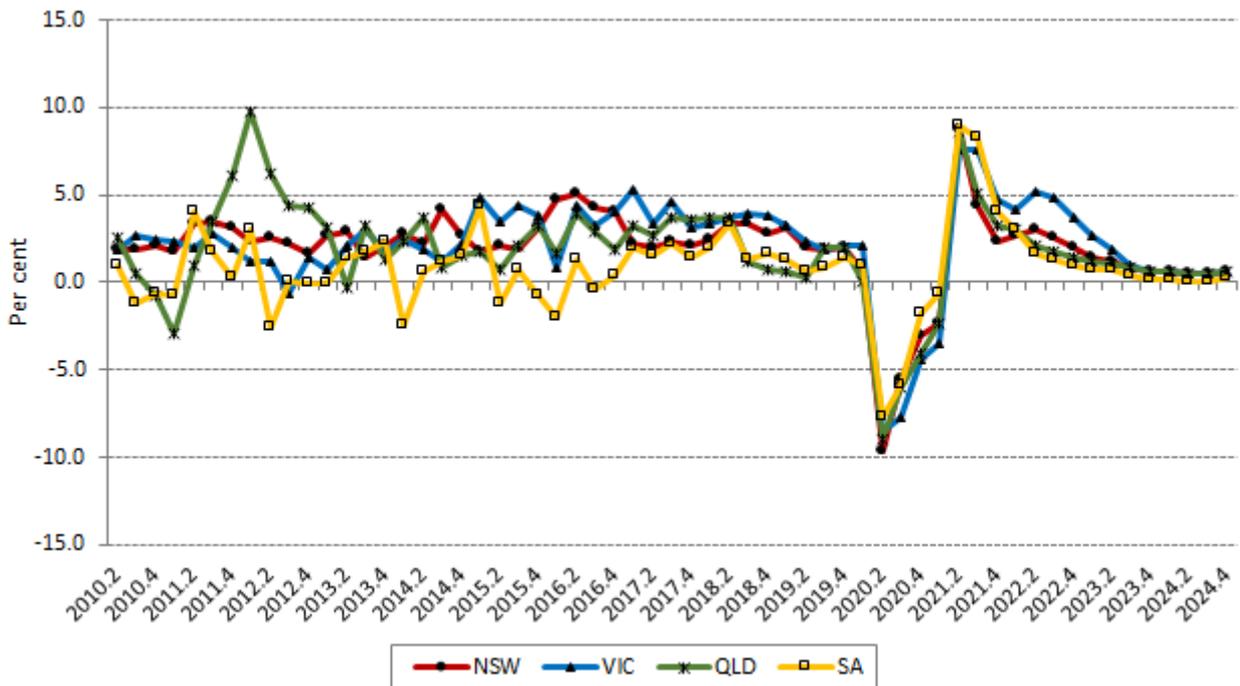
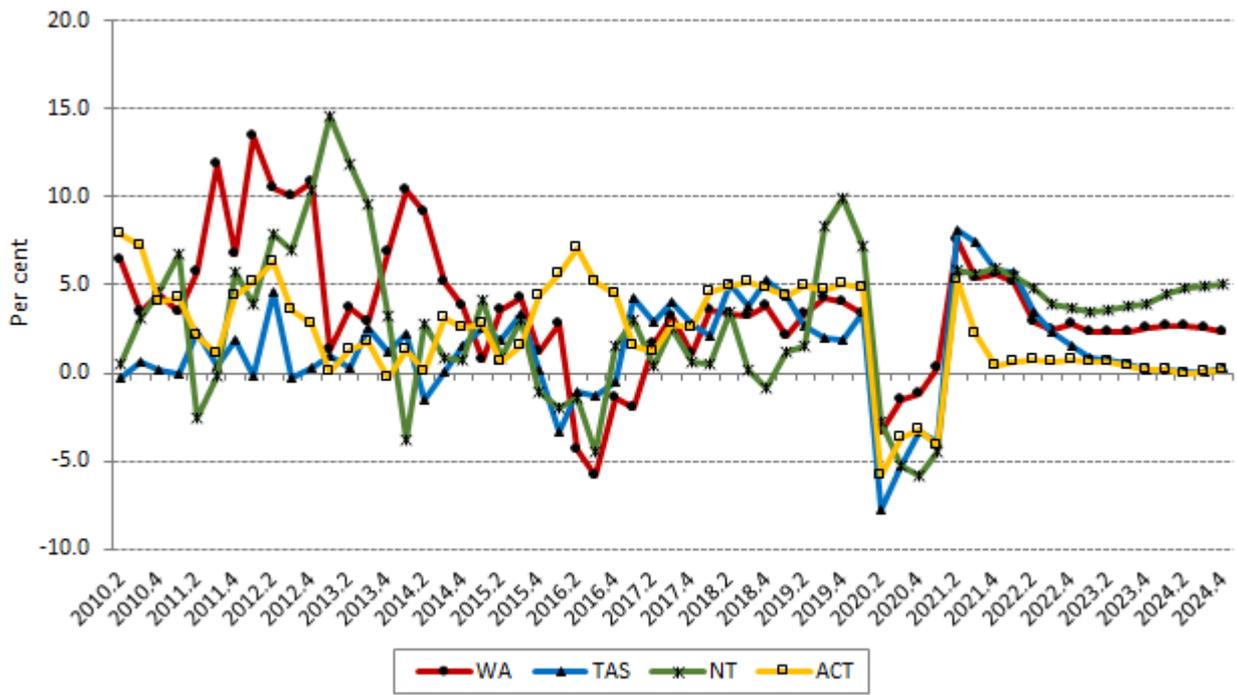


Figure 3(a): Gross state product (\$bcm million) Four quarter span growth rate (%)



**Figure 3(b): Gross state product (\$bcm million)
Four quarter span growth rate (%)**



**Figure 4: Australia – Post and pre-COVID gross state product
(percentage and difference from fourth quarter 2024)**

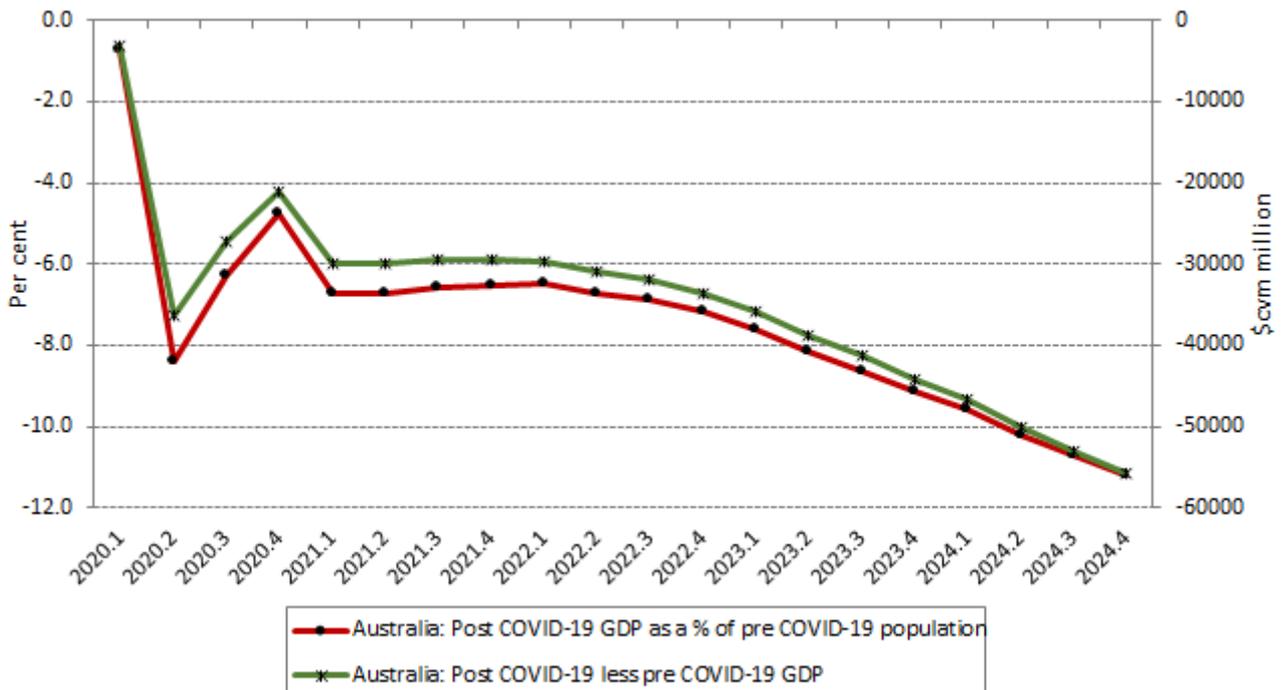
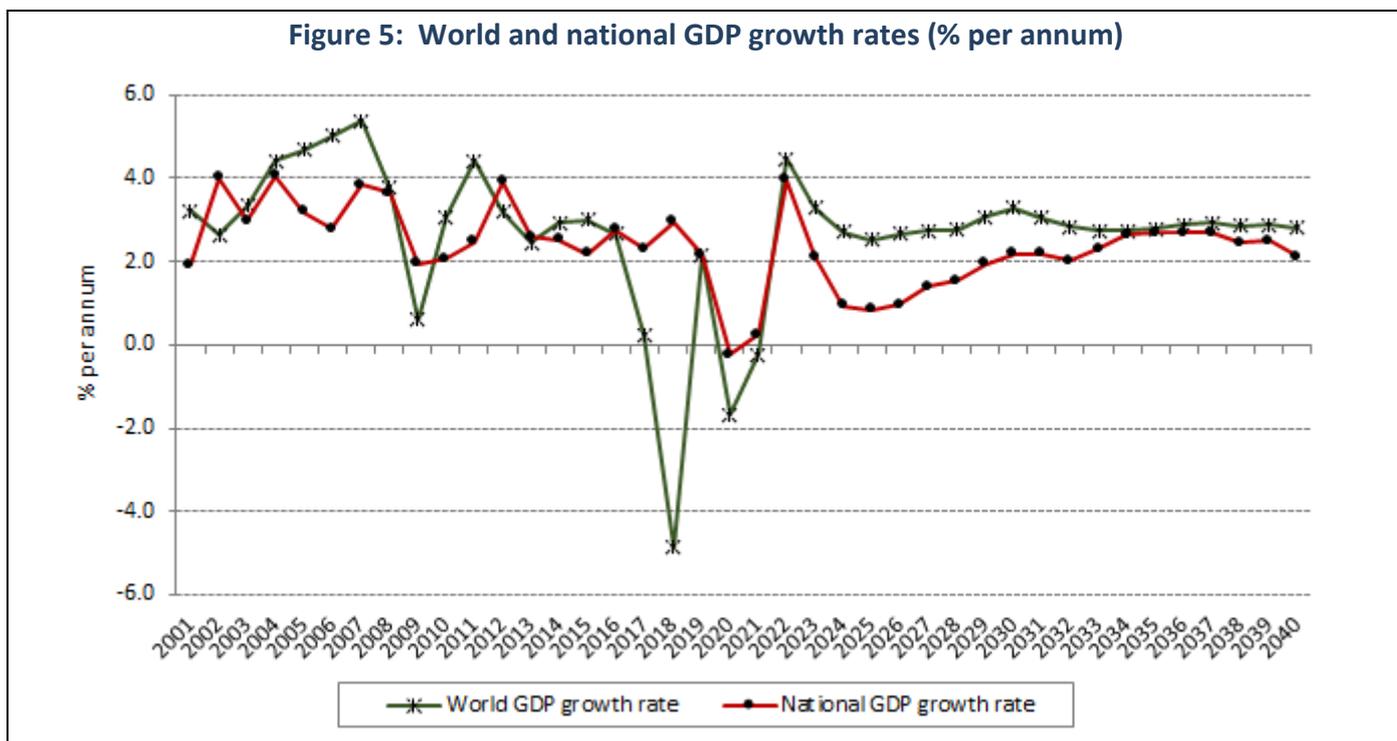


Figure 5: World and national GDP growth rates (% per annum)



From middle 2023 onwards the world economy, at least advanced economies like Australia, are likely to face strong headwinds. Partly this will be the consequence from the long run scarring from the COVID-19 epidemic. The most important scarring element will be that overhang of large excess liquidity resulting from the very large public sector deficits created by the need to offset the damage from COVID-19 which eventually will force significant upward pressure on real interest rates. Interest rates will rise irrespective of whether or not there is an unacceptable rise in underlying inflation.

The epicentre will be the United States where fiscal and monetary stimulus measures will be strong and substantially larger than what was required to return to pre-COVID economic activity. In addition there are additional expenditure programs that are currently before Congress. It is clear that some point over the next 2 to 3 years United States will experience a strong “risk-off” shock where the private sector will be unwilling to hold public and indeed private-sector debt at current interest rates. That is interest rates will rise significantly irrespective of the underlying inflation outlook. However, the risk-off shock is likely to also be reinforced by steady increases in the inflation rate, thereby applying additional upward pressure on interest rates. The key indicator in this regard is the US 10 year bond rate and from Figure 6 is projected to recover to the near 6% level by 2024. In the United States the rise in nominal interest rates is therefore likely to be also reinforced by a recovery in the rate of inflation to the 3% to 4% range by the middle of 2023. This will be due to the likelihood that the current round of stimulus and future planned expenditure programs in physical and social infrastructure together with

expansionary monetary policy will reduce capacity utilisation rates and unemployment rates below the levels required for non-accelerating inflation.

As at June 2021 there is considerable speculation in the media about the issues raised above stimulated by the fact that in April 2021 US inflation rate return to near 5% on a year on year basis. It is true that this as many have pointed out reflects the recovery in margins over the recent year from the economic shock imposed by lockdowns in March 2020. It is true that in the inflation rate can be expected to decline from the current level. However, what is being forgotten is that the current economic growth drivers have been largely based on the assumption of current low interest rates being maintained for years given current central bank directives. Thus even if inflation returns to longer term more normal levels of between 2% and 3%, which seems a minimum expectation given the current economic environment, then nominal interest rates will be approaching the 4% threshold which by itself, given current expectations will impose substantial negative constraints on growth. Add in the additional interest rate margins from “risk-off” shocks the potential for a more subdued economic outlook after the immediate short-term recovery would appear to be very high.

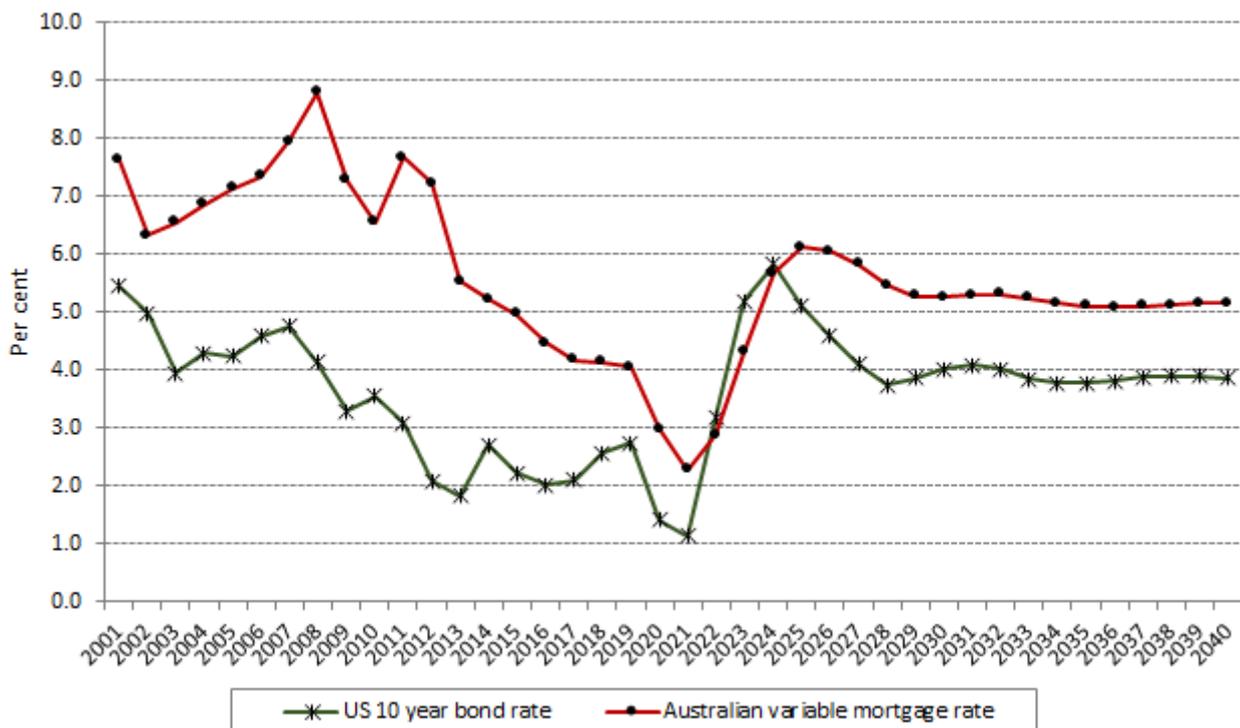
Currently, given Australia’s strong balance of payments position and high levels of local funding of the banking system from high domestic savings and low-cost sources of funding from the RBA, Australia has some short-term capacity to set interest rates below world and in particular US benchmarks. However as the iron ore price declines over the next couple of years and impact of the world recovery declines it is likely that Australia’s high foreign

debt and reliance on the banking system from foreign sources of funding will return as a constraint with the outcome for domestic interest rates being that they will be largely determined by the US long-term rates irrespective of what the RBA may wish to do in regard to short-term rates. However it is likely that because of the re-emergence of inflationary domestic pressures the RBA will acquiesced to increasing short-term rates. This will also be due to the likelihood, not dissimilar to the case of United States, with over expansionary monetary and fiscal policies. The main reason for this will be that the monetary and fiscal policy measures now being implemented have been designed on the assumption that the economy underlying population growth will be somewhere in the vicinity of 1.5% per annum whereas this will not be the case for the next 2 to 3 years at least. As a result skill shortages are likely to emerge quickly as the capacity of the domestic economy to generate workforce increases in line with past employment growth is limited. In the immediate past, that is, over the last 10 years, domestic workforce growth in the absence of international immigration would have supplied only about 25% of the employment increase. These lessons will have to be relearned over the next two years.

This has the core outcome that domestic interest rates will rise although from Figure 6 it is likely that the domestic policy authorities will attempt to be relatively less contractionary in policy settings since in this Figure the differential between US long-term bond rates and the domestic housing lending rate will be very low compared to historical outcomes. This does not change the fact that there will be a substantial rise in interest rates over the next 2 to 3 years from current levels.

With the increase in public sector debt over the last 15 months in most economies the upswing in the world interest rate cycle will impose significant cost pressures imposed on public-sector budgets from the interest rate increases which will force a regime of fiscal austerity irrespective of the political colours of the governments of the day. In short it is likely to be a rerun of the economic environment of the Australian and world economy over the next 4 to 6 years which will not be dissimilar to the environment that prevailed over the second half of the 1970s and into the early 1980s. The years in the mid-2020 decade are likely to be very difficult economic years for both the Australian and the world economy.

Figure 6: US 10 year bond rate and Australian variable mortgage rate (%)



The trend world GDP growth rate after the recovery growth rates in the early 2020s over the middle part of the decade will be considerably lower than what occurred in the decade to the GFC in 2008 and in the more immediate past as per Figure 5. Again as shown in Figure 5, over the middle part of this decade Australia's economic growth rate is likely to be below the world economic growth through. The reason for this is that two factors that in the immediate past were important for driving local growth rates will not be available in the short-term future. The two factors are Australia's dependence on high foreign immigration intakes to drive its growth rate and that Australian household debt levels will have reached saturation point and no longer will be able to drive consumption expenditure growth especially when the interest rates cycle turns upwards.

It should also be noted that underlying Figure 5 over the mid-2020s the advanced economies have a growth profile similar to Australia. That is more likely with a zero or 1% in front of the decimal point as a result of the world interest rate cycle and impact on this forcing austerity or contractionary policy responses to provide financial markets with medium-term security that the level of injection of liquidity in the economy will be stabilised and then reduced in order to place a ceiling on the rise in interest rates. Politically this will be largely marketed as measures to reduce the impact of rapidly rising interest costs on public-sector budget deficits. Over the mid-2020s the main source of World growth will come from emerging economies which will reflect the delayed recovery due to delayed vaccine responses and therefore the continued short-term impact of the virus long after it is controlled in advanced economies.

In the longer term, the geopolitical tensions between China and the rest of Asia and the United States in particular which seem unresolvable given China's past and future superior performance will force fragmentation of world supply chains will be a negative for world growth. There will also be a general focus on increasing general defence expenditures as well as expenditures necessary for decarbonise economies which will be negative for underlying productivity growth as they will force the diversion of general capital expenditures that otherwise would have been allocated for productivity growth. Of course this has to be done. If Australia cannot reduce its carbon footprint quickly many Australian industries will face the highest carbon tariffs in the World and Australia will be seen as not to be the place to invest.

As a result, from the driver profile the world GDP growth rate over the next 20 years is more likely to have a two in front of it rather than a three where the latter was the common outcome for the past.

Australia's net foreign immigration rate and population growth rate

As noted above, a major negative factor for reducing Australia's will be the reduction in national population growth. This will be caused by the fall off in immigration intakes in the three years since 2019 stemming directly from the pandemic given the likelihood that at best the World and not eradicate COVID-19 and successor mutations until 2023 or beyond. The net foreign immigration rate by fiscal year is given in Figure 7 and implies that the Australian population by the second half of the 2020s will be reduced by between 700,000 and 900,000 compared to the case if net immigration that prevailed between 2014 and 2019 and continued on over the next half dozen years.

It can be seen from the driver table that over the 2023 and 2024 fiscal years there is an attempt to restore net immigration levels to pre-COVID levels. However it will fail as the weakening Australian economy from the factors noted above with the upswing in the world interest rate cycle and the re-emergence of inflationary pressures will force up the unemployment rate forcing governments to restrict net foreign migration. As a result of this, from Figure 7, for the remainder of the 2020s net foreign immigration into Australia remains near its minimum (that is for family reunion and education inflows) level of 150,000.

Therefore, it is not surprising given the outcomes for world economy growth and national population growth that the Australian GDP growth rate over the mid-2020s, on a trend basis, will be significantly below the recent historical trends. Further the impact on some state economy such as Victoria being disproportionate. Although the national population growth rate will be in excess of 1% the Victorian population growth rate will fall to between 0.6% and 0.8% per annum. New South Wales will experience a similar growth rate.

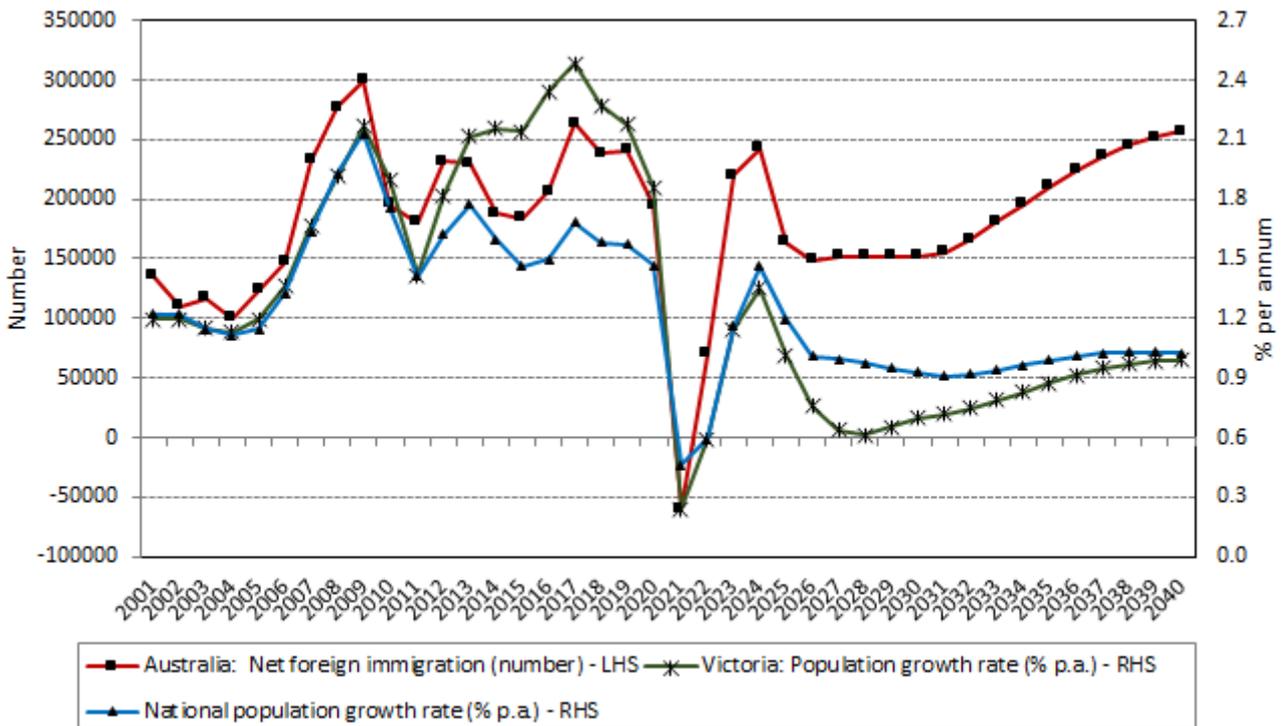
One reason for this is that of all Australian states the Victorian economy will be the most adversely impacted by the interest rate cycle. This is because if Victoria was a separate country it would have the highest was recognised household debt to income ratio in the world.

Secondly, as will be noted below, the national growth drivers will be more focused in northern Australia than in southern Australia. This will have the impact of both pushing out migration from Victoria in search of employment and reducing immigration into Victoria because of relatively high mortgage costs on new or established dwellings. Western Australia, Northern Territory and Queensland each have an average annual population growth rate over the next 20 years of approximately 1.4% per.

It will not be until the late 2020s that economic conditions will have stabilised to allow for return to more normal

levels of immigration and for example Victoria's immigration levels returning towards those of the more recent past.

Figure 7: Net foreign immigration (no.) and Victorian and national population growth rates (%)



The expansion of the mining sector and the Australian exchange rate

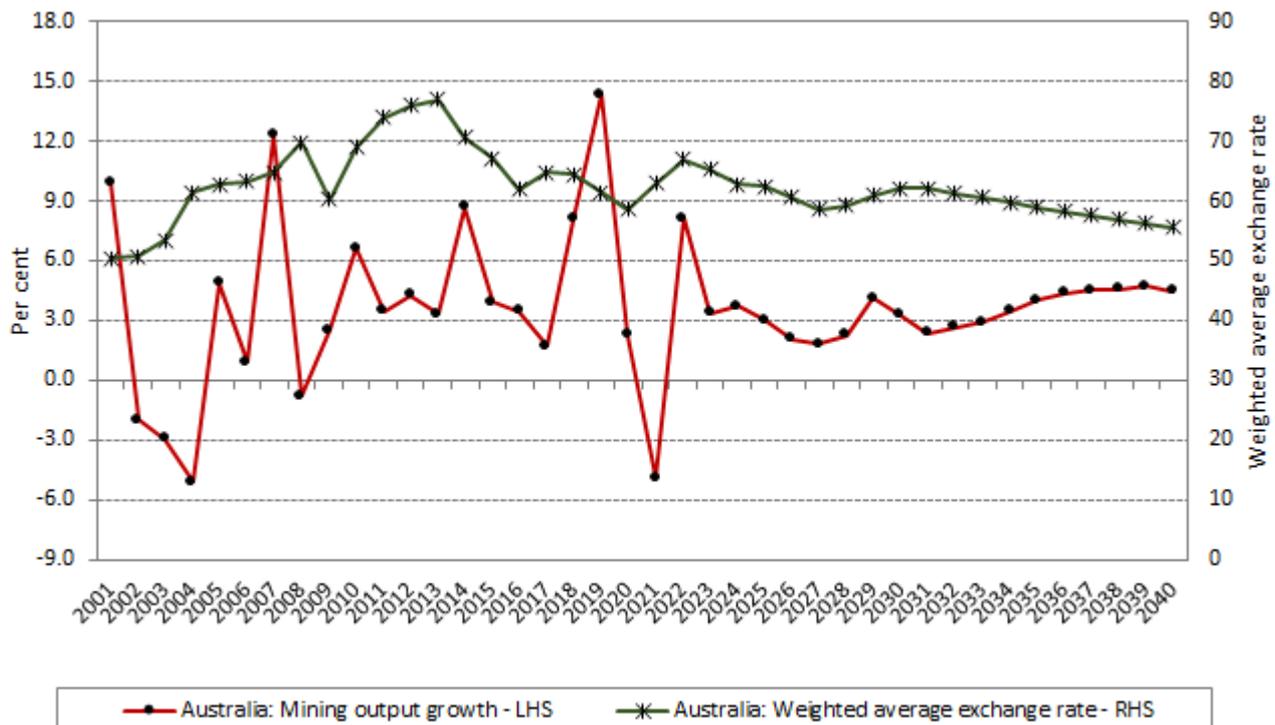
The non-mining states and territories did not have a good mining boom at least until 2015 as it led to the demise of the motor vehicle industry in Australia and other manufacturing and tertiary capacity as a result of the high exchange rate. One would've thought that with the decline of the coal industry, stabilisation of iron ore exports over the next 20 years along with limited growth in natural gas exports that there would be a greater focus on manufacturing export growth and a lower currency. Unfortunately for the southern Australian states, it is likely that mining output will continue to show growth rates in excess of the underlying national GDP growth as a result of the expansion in the minerals necessary for the ZNET economy of the future where rare earths, nickel, zinc, and copper all be in high demand to produce the capital equipment required for the ZNET target. This in conjunction with the prospects for substantial hydrogen production linked to the same drivers and the fact that a large part of this activity will be in Western or Northern Australia means that economic activity will shift in relative terms away from Southern Australia.

The Australian exchange rate is likely to decline on a long-term basis as noted in Figure 8 which will be of some help to the southern state economies but it won't be sufficient for new opportunities to be exploited per se with additional effort required in terms of strengthening their industrial base.

Security and defence expenditure

East and southern Asia is currently in the early stages of a significant build-up in an arms race given the rapid expansion of Chinese military assets and its assertive behaviour in terms of territorial claims. Accordingly the projection allows for an increase in defence expenditures and the share of national GDP devoted to defence increasing from the current 2% to 3% by 2040. In terms of boots on the ground expenditures most of the increase will be in northern Australia which it is combined with the other factors noted above explains why in this current projection the population of northern Australia grows at 1.4% per annum over the projection period. Therefore the growth prospects for the southern state economies are going to depend on their ability to capture a share of the equipment and maintenance expenditures associated with the defence build-up.

Figure 8: Australian mining output growth and Australia's weighted average exchange rate



ZNET and related expenditures

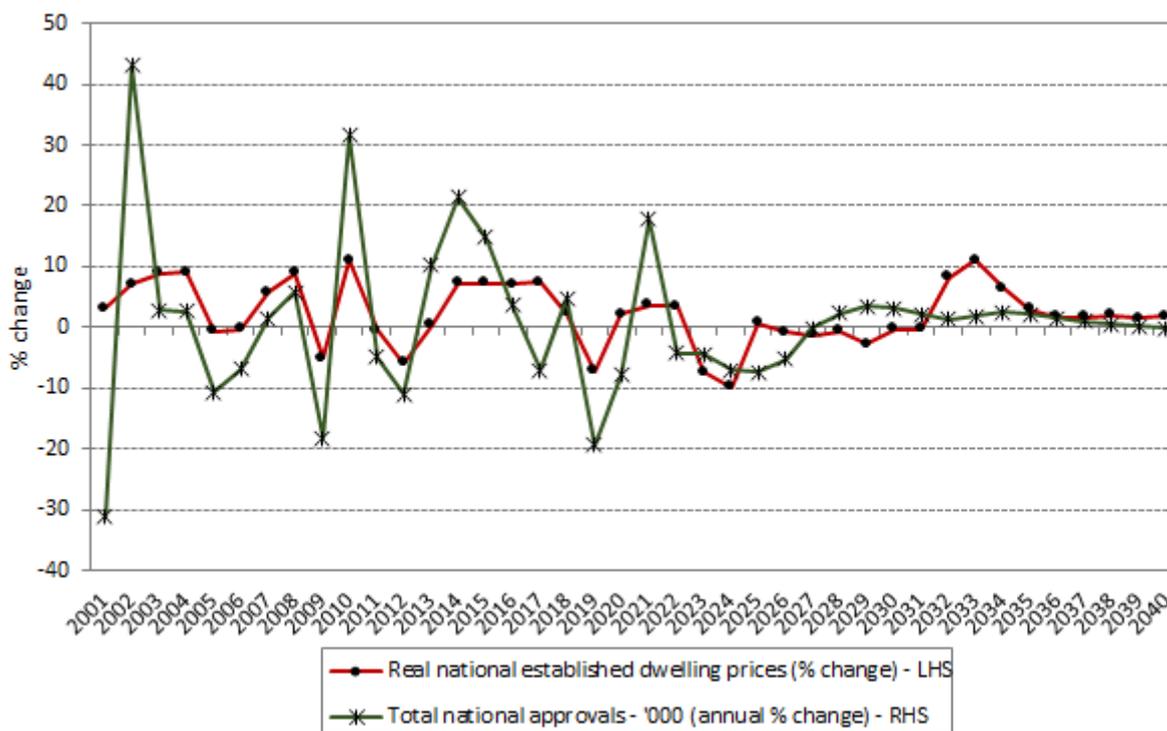
In the current projection of approximately \$400 billion on the estimated net \$1 trillion that has to be spent on electricity infrastructure in order to achieve ZNET by 2050 is spent by 2040. Currently a significant proportion of this expenditure is met by from imports. The ability of the southern states to capture a share of these expenditures will also be important in determining its overall economic outlook. Overall the strength of political will and the correct vision of what has to be done will determine whether or not Australia's economic performance over the second half of 2020s and into the 2030s is greater than what is being projected here.

The housing cycle

Given the reduction in population growth over 2020 to 2023 it would be expected if one was considering approval projections from the perspective of demographic driven household formation than annual approvals would fall to the range of 130,000 to 140,000. With some normality being restored to economic conditions it is clear now that this will not be the case with the current very low interest rates and government first home buyer incentive schemes providing substantially increased housing affordability which means as long as this lasts there will be a substantial and permanent reduction in what up until now has been the excess demand for housing of around 350,000 to 400,000. The permanent reduction in long-term unmet demand for housing will be of the order of 100,000 to 150,000 with the result that dwelling approvals will be running at the annual rate of 200,000 or more for a little while yet. Further as Figure 9 makes clear when real established home prices are increasing significantly as is currently the case, given adjustment for leads and lags, dwelling construction activity moves in parallel. One of the mechanisms driving this is the increase in land values held

by developers gives them the financial platform to expand supply.

Figure 9: Real national established dwelling prices (% change) and national approvals ('000)



Construction and public sector budgets

There has been no new state or federal budgets since the last projection. The new state and federal budgets will be rolled out over the next couple of months. However there is nothing at this stage to suggest there will be fundamental changes to the four-year outlook embedded in the budgets over the over the second half 2020. However the budgets of 2022 and in particular 2023 are likely to contain fundamentally different sets of objectives.