



JULY 2021

THOUGHT LEADERSHIP: PUSHING ON A STRING  
– REVISITING THE JAPANESE RATE EXPERIENCE



**WHITEHELM**  
ADVISERS



# INTRODUCTION

Following a period of accommodative monetary policy settings in the late 1980s, the Japanese property bubble burst in 1989, sending house and share prices plummeting. Since then, Japan has been plagued by low growth and low inflation. Despite extraordinarily accommodative policy measures, neither the Japanese government nor its central bank has been able to make much headway in reversing these economic conditions.

For a while now, economists and investment advisers have warned that much of the developed world, including the US and Europe, could face its own 'Japanification' scenario. Given the differences between the developed world and Japan outweighed the similarities, these warnings were often dismissed. In some ways, COVID-19 has brought many nations closer to the realities of Japanification. Central banks have resorted to extreme monetary policy forms since March 2020, slashing cash rates to close to 0% or below, and relying on expansive and seemingly limitless QE programs to provide liquidity to financial markets and keep bond yields low. Governments have opened their pocketbooks, with debt to GDP ratios soaring. Normalising policy settings is becoming an increasingly daunting task.

Japanification eventuates if this extraordinary level of stimulus does not spur on an economic recovery that includes sustained economic growth and inflation. In particular, huge debt levels, ageing demographics and enhanced productivity through technology are large deflationary forces. These lead to lower inflation, economic potential and interest rates – all key hallmarks of Japanification.

So far, 2021 is characterised by stronger economic growth in the developed world in light of

successful vaccination rollouts and resumed economic activity. Inflation measures have ticked up, including 4.2% and 5.0% year-on-year inflation prints in the US for the months of April and May. While many believe sustained and problematic inflation pressures are upon us, there is a growing number of relevant investment professionals that consider that as stimulus fades and supply side problems are resolved, growth and inflation will dissipate. Indeed, in the last six to eight weeks, this has been somewhat playing out, with the long end of the yield curve falling and key economic data surprising to the downside.

That said, it is too early to say if these more positive indicators of an economic recovery are a sign that a Japanification scenario will be avoided, or if they are a flash in the pan and instead a temporary symptom of the post-pandemic period. However, we consider it both useful and very relevant to look at the Japanification scenario.

Given the uncertain future outlook, it is important to examine implications of a scenario where bountiful stimulus does not propel the developed world forward, but rather leads it down a Japanification rabbit hole. In this month's article, we discuss Japanification in the midst and aftermath of the COVID-19 era. We begin by providing a refresher on Japan's economic experience since the early 1990s. We then turn to the unconventional monetary policy settings that have become conventional across the developed world, and how, when paired with structural issues, the likelihood of a Japanification scenario increases. Finally, we delve into the financial market implications, including why it is important to factor the scenario into portfolio positioning considerations even if it feels remote today.



# A REFRESHER ON JAPANIFICATION

In the late 1980s, fuelled by a low interest rate environment, Japanese property prices were booming. Local banks had a limitless appetite for real estate investors who continued to borrow against the increasing value of their property portfolios. But then a sharp increase in interest rates – intended to take some of the heat out of the boom – burst the housing bubble. The Japanese share market peaked on 29 December 1989 and has never since come close to its 1989 high. In the 30 years since the Japanese property bubble burst, the Japanese economy has been characterised by low growth and low inflation (averaging 1.1% p.a. and 0.5% p.a., respectively).

The low growth and low inflation environment persisted despite reasonable strength in the country's labour market. Unemployment has been very low over much of the past three decades and participation has been on the rise, spurred on by policy initiatives to encourage labour market participation. However, productivity and wage growth, and in turn, inflation, continue to be extremely low.

One of the contributing factors of Japan's situation has been its deteriorating demographics. It has the oldest population in the world – 28% of Japanese people are 65 or over – driven by the combination of having the world's highest life expectancy, one of the lowest fertility rates and extraordinarily low migration. The elderly population dominates government spending and does little to contribute to aggregate demand. The smaller labour force leads to lower productivity levels, all else equal. When layered with the effects of technological change, rising competition and globalisation, it is no wonder inflation and growth have languished.

Chart 1: Japan Stock Market Index



Chart 2: Japan GDP Growth

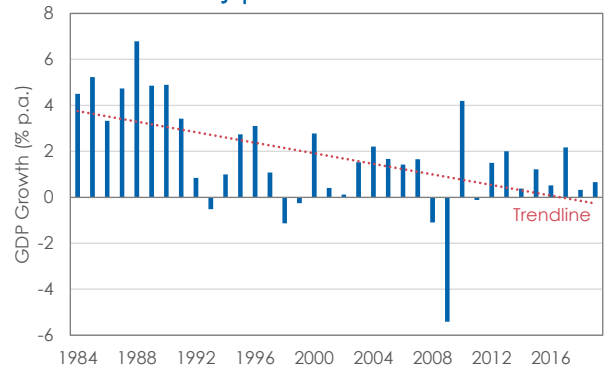
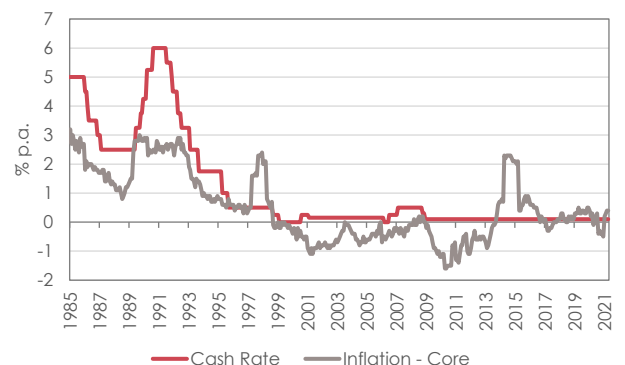


Chart 3: Japan Inflation and Growth Rates



Sources: World Bank, Bloomberg, Whitehelm Advisers

Note: The notable increase in inflation in 2014 coincided with a one-off increase to the consumption tax rate from 5% to 8%.

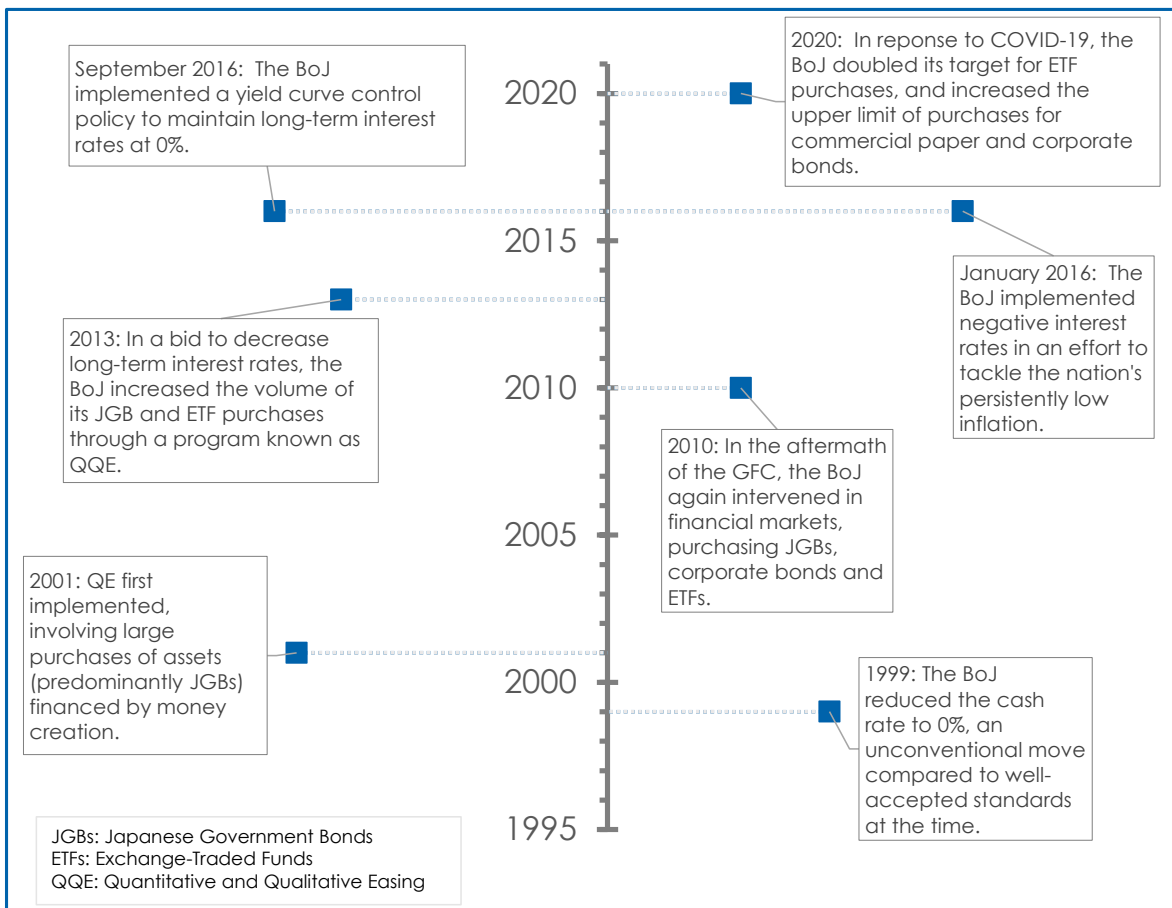
In an effort to stimulate the economy in the aftermath of 1989's bursting housing bubble, the Bank of Japan (BoJ) slashed the cash rate from 6% in 1991 to 0.5% by 1995. The cuts did not have the desired effect of stimulating economic growth and inflation, rather it left Japan plagued with a liquidity trap. When conventional monetary policy tools were deemed ineffective, it resorted to 'unconventional' tools, such as negative interest rates and quantitative easing (QE). Figure 1 provides a timeline of BoJ's key events.

The QE program had the desired effect of reducing long-term interest rates and acting as a market neutraliser, however, it has not radically transformed growth or inflation profiles. Adding insult to injury, the BoJ has very little ammunition left to respond to future economic and/or financial market downturns. Nevertheless, the BoJ is fundamentally embedded in Japan's financial

markets. It currently owns almost half of JGBs on issue. Furthermore, in December 2020, it became the largest owner of Japanese stocks due to its significant purchase of ETFs, accounting for 5% of the Tokyo Stock Exchange's total market capitalisation.

Japan has not relied solely on monetary policy in its efforts to stimulate growth and inflation. In the face of the bursting real estate and share market bubbles in the early 1990s, the government implemented a variety of stimulus measures. Its demographics, specifically the healthcare and social security costs associated with an ageing population, have also pushed up government expenditure. Japan's government debt to GDP ratio has increased dramatically over the past three decades and is the highest in the developed world at circa 250% at end-2020.

Figure 1: Timeline of Key BoJ Actions



### What is a Liquidity Trap?

In normal market conditions, consumers make a trade-off between liquidity and yield. The cost of liquidity is lost earnings, so a rational consumer allocates savings between cash (for liquidity) and short-term government bonds (for yield).

A liquidity trap occurs when nominal interest rates are low or at zero. If interest rates are zero, there is no penalty for liquidity – in effect, cash and bonds become perfect substitutes. Consumers are incentivised to invest savings in cash rather than bonds, because any increase in interest rates would see bond prices fall, a clear disincentive for investing in debt. Therefore, no matter what central banks do to monetary supply, consumers will not switch from cash to debt. In addition, liquidity traps usually occur during periods of recession or uncertain economic environments, where consumers prefer to increase precautionary savings rather than borrow despite low interest rates. In this scenario, monetary policy is rendered ineffective, unable to kickstart demand or increase prices.

Chart 4: Holders of JGBs

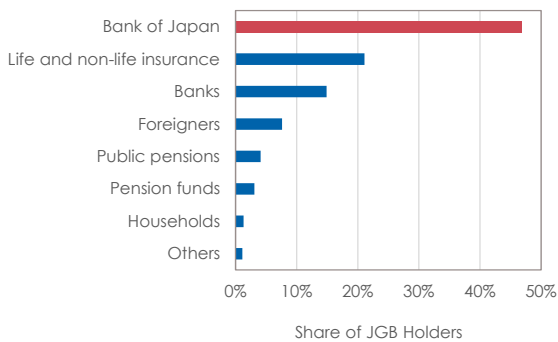
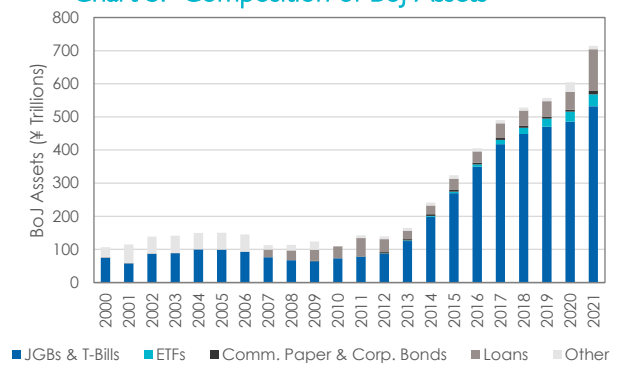


Chart 5: Composition of BoJ Assets



Sources: Statista, BoJ, Whitehelm Advisers

So Japanification summarised: weak growth rates and persistently low rates of inflation despite massive amounts of policy support, particularly from central banks.



# UNCONVENTIONAL BECOMING CONVENTIONAL

Up until the GFC, Japan was a case study, an outlier whose condition was not considered contagious. The BoJ was breaking new ground, using unconventional monetary policy to shift the malaise of persistent stagflation and low growth that characterised its economy since the property bubble burst. But then the GFC took hold and other central banks, most notably the Fed and the ECB, waded into these unconventional policy waters. While the objective was short-term market support and liquidity to soften the effects of the worst credit crisis since the Great Depression, at the end of the decade, developed market central banks were fundamentally embedded in global financial markets.

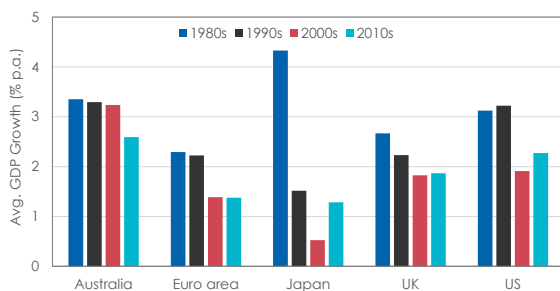
Despite extraordinarily accommodative monetary policy conditions, low growth and low inflation in most developed nations characterised the decade. Importantly, monetary policy was the main game, as central banks carried more than their fair share of the burden in stimulating economies. Broadly speaking, governments were reluctant to implement accommodative fiscal policy.

Easing markets off the incredible monetary policy support proved to be incredibly challenging. In 2013, the Fed signalled the beginning of the end of QE, saying it would reduce its purchase of debt

securities. In response, markets had a so-called 'taper tantrum' with global bond yields jumping in fear at the prospect of lower central bank support. When Jerome Powell was appointed as Fed Chairman in 2018, he pledged a 'consistent, substantial roll-off this year and next year', signalling the Fed would normalise its balance sheet after almost a decade of QE. While the Fed and ECB managed to reduce balance sheets moderately between 2018 and early 2020, the tapering was marginal given what 2020 had in store.

In the face of COVID-19, central banks again resorted to QE, but with breadth and depth far outstripping the GFC era. Developed market cash rates were slashed to 0% or below (if they were not already there) and asset purchase programs increased dramatically in size. The Fed continues to run its open-ended US\$120 billion in monthly asset purchases to stimulate the economy. The ECB's asset purchase program is targeting a total of €1.35 trillion, with a current end date slated for March 2022. The RBA was forced to embark on its first foray into QE, by purchasing short-dated Commonwealth and semi-government bonds. While different in quantum and design, each of these programs intends to ensure that interest rates across the yield curve are very low.

Chart 6: Average GDP Growth



Source: IMF, Whitehelm Advisers

Chart 7: Average Inflation

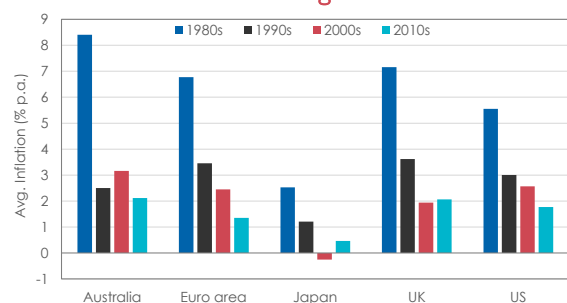
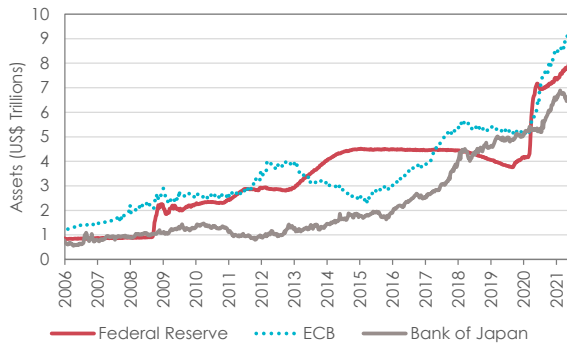




Chart 8: Federal Reserve, ECB and BoJ Assets



Source: Bloomberg, Whitehelm Advisers

What differs in the response to COVID-19 versus that in the preceding decade is the extensive use of fiscal stimulus. At the onset of the crisis in March 2020, governments spent with little to no restraint. The quantum of fiscal spending has been unprecedented, far outstripping the fiscal response to the GFC. Governments' financial positioning before COVID-19 has seemingly had little to no impact on their ability to unleash enormous fiscal support packages. Government debt to GDP ratios have surged as a result.

It has so far appeared as though the concoction of fiscal and monetary policy has been effective in supporting the global economy and financial markets through the pandemic-induced recession. The IMF's global outlook for the next couple of

years is reasonably robust, albeit uncertain amidst the ongoing pandemic. Its forecasts suggest higher growth in the next two years than was the case in the years leading up to the pandemic, with a similar outlook for inflation.

Central banks had little choice but to resort to unconventional monetary policy tools when COVID-19 presented itself. Broadly speaking, cash rates were already ultra-low, so reducing them had marginal impact. The extent of QE programs makes what was once considered unconventional seem pretty mainstream. Reliance on extraordinary measures to support markets and stimulate growth has been a defining feature of Japanification.

Chart 9: RBA Assets

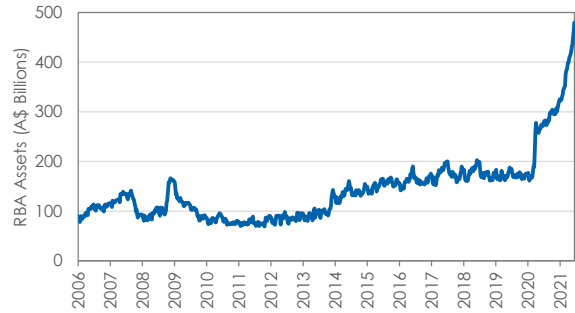
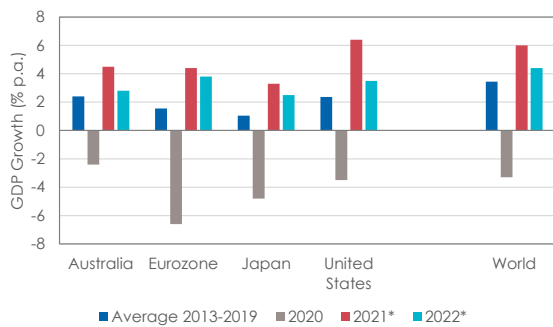
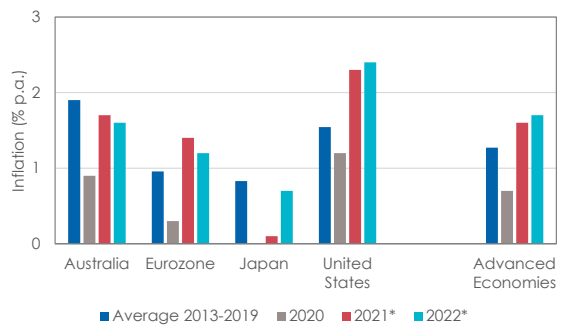


Chart 10: Historical and Projected GDP Growth



Source: IMF, Whitehelm Advisers

Chart 11: Historical and Projected Inflation Rates





# LOOKING FORWARD

The discussion of Japanification across much of the developed world is not new – it has been occurring for several years. In the past, the differences between the rest of the developed world and Japan were enough to justify that it was unlikely to be an imminent scenario. For example, we wrote about Japanification in mid-2019 from an Australian perspective where we argued that the RBA's reluctance to embark on unconventional monetary policy (such as negative interest rates and QE) and the government's tentative willingness to use fiscal stimulus meant that Australia may be able to avoid a stagnantly low inflation and low growth environment.

But the COVID-19 pandemic, specifically the policy response to it, may be the catalyst for the similarities outweighing the differences. We discuss this and other structural factors at play next.

## Monetary Policy Settings

Over the course of 2021, we have seen periods of volatility in financial markets related to concerns of if and when central banks will start to taper monetary policy settings. Concerns have been most prominent for the US, where fiscal policy has been incredibly abundant (26% of GDP so far implemented with more proposed by President Biden) and measures of inflation have ticked up in recent months. However, the Fed has continued to reiterate that tapering will not occur until there is substantial and sustained progress towards achieving full employment, while allowing inflation to run above its 2% target, in line with the Fed's 2020 adoption of an average inflation target.

The Fed's decision on when to taper is a balancing act to say the least. The Fed will want to avoid a repeat of the 'taper tantrum' it caused in 2013, but

it may need to act decisively if inflation does appear to be sustained. However, central banks, including the Fed, have typically been reasonably asymmetrical in their monetary policy settings. They tend to ease aggressively during crises, but because these measures are difficult to unwind, they are often slower to tighten policy when they should.

US fiscal policy plays an important role here too. While we saw incredibly abundant fiscal measures over the first 12 months of the crisis, the volume is expected to moderate. President Biden has committed to a bipartisan approach to his presidency, and that is already playing out as he tries to get Republican support for his infrastructure package. The original size of the package was close to US\$2.7 trillion, but through negotiations with members of his own party and the Republican party, the package has so far been reduced to US\$1 trillion. Without the heavy lifting of fiscal stimulus, the Fed may be even more reluctant to tighten monetary policy settings.

The outlook for Europe is even more problematic. While COVID-19 caused European governments to work together to implement a coordinated fiscal policy response, it pales in comparison to the size of fiscal policies implemented by other developed market countries, such as the US and Australia. The ECB is even more heavily relied on to support financial markets and the economy as a result. This was evident even before COVID-19, when the ECB made virtually no headway in normalising monetary policy settings in the decade following the GFC and the European debt crisis, leaving it with little ammunition for the next crisis.



While extraordinarily accommodative monetary and fiscal policy settings were justified in response to the pandemic, if left in place for too long, a Japanification scenario may be more imminent than previously believed. This is especially true if recent increases in inflation and economic growth prove to be transitory and related to economies reopening at the pandemic's end, rather than sustained. Central banks will be encouraged to maintain accommodative settings for even longer.

### Demographics

A key structural issue affecting economic growth and inflation has been the changing demographics of the developed world, caused by falling fertility rates and increasing life expectancy. Lower fertility rates reduce the size of the labour force relative to the overall population, which can have major impacts on productivity and economic growth. Alternatively, living longer means people spend a greater proportion of their lives retired, or economically inactive. The burgeoning old age population increases the burden on government programs targeted at supporting the elderly. Furthermore, the reduction in income most retired people earn leads to lower levels of demand.

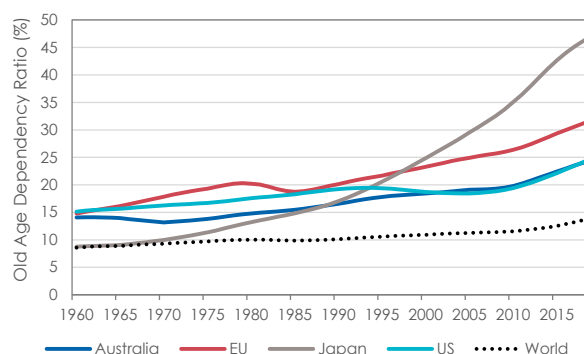
Japan is the poster child (or perhaps poster senior) for an ageing population, with the world's highest life expectancy and one of the lowest fertility rates. While Japan is arguably the first developed economy forced to grapple with deteriorating demographics, much of the developed world is facing a similar fate. A measure of changing

demographics is the old age dependency ratio, which is the ratio of the number of people at an age when they generally become economically inactive (65 years and above) compared to the number of working age people (15-64). The countries discussed within this article all have an ageing demographic profile, however none are currently nearly as dire as Japan's.

Compared to many other developed nations, the US has a benign demographic profile due to significant immigration boosting the working age population. Australia has seen its retirement age population increase significantly since 2011 when the oldest segment of the baby boomer generation turned 65, however Australia is heavily supported by very robust immigration (albeit reduced during COVID-19), with more than a quarter of Australians born overseas. This compares to Japan's very strict immigration policies that have resulted in just 2% of its population being migrants.

The most problematic outlook is Europe's one. Population growth in Europe is relatively stagnant, so the already reasonably high old age dependency ratio will increase absent a significant increase in immigration. The pension replacement rate (the percentage of a worker's pre-retirement income paid out by a pension program) is relatively high for the eurozone at 64% compared to 37% for Japan. While the increasing proportion of retired people will reduce labour force participation and demand for goods and services through lower spending power, the impact is expected to be less pronounced in Europe than in other regions

Chart 12: Old Age Dependency Ratio



Source: World Bank, Whitehelm Advisers

## Technological Change

Technological change is a notable disruptor to inflation, through a variety of channels. First, technology allows an economy to produce more with its finite resources. This makes the price of goods and services less sensitive to demand, as production can scale efficiently and cost-effectively to meet higher or lower levels of demand.

Second, technology has the potential to significantly improve productivity, through automation's ability to replace labour. Technological advances can significantly curb employee bargaining power in wage negotiations. If an employee is genuinely concerned that their job could be automated, they are less likely to ask for a raise. As such, the amount companies spend on wages stays stagnant, putting them under less pressure to raise prices. This impact is casting an increasingly wide net, as there are now growing fears of the automation of more technical jobs, such those in law, banking and journalism.

## Increased Globalisation and Competition

It is well-accepted that the rise in globalisation and competition has brought about deflationary pressures. As companies offshore production to more cost-efficient places, it creates a drag on salaries in countries where workers are more expensive. Furthermore, companies are able to reduce (or at least, maintain) prices because of the lower input costs.

Online competition is also an inflation dampener. Advances in e-commerce and computing power have unleashed a new wave of competition, driven by the increase in price transparency available through online platforms. The risk of being undercut on price prevents producers from raising prices.

During the past year, the COVID-19 pandemic and increases in geopolitical and trade tensions between China and other countries have resulted in slowing trade growth and globalisation. This has resulted in a slight reversal of the previous offshore

production trends towards more onshoring, despite the higher cost of establishing new supply chains. This has impacted a range of goods including technology related products. These changes have contributed to higher inflation in the short term, however it remains to be seen if these changes and effects are transitory or lead to higher sustained inflation rates.

## Summary

Over the course of the past few months, much of the discussion in financial markets has been dominated by the higher inflation prints being seen in the United States, and to a much lesser extent, Europe. The risk of a Japanification scenario seems muted, given that the current fear is that the abundant fiscal stimulus may lead to higher inflation than has been seen since well before the GFC. Economic growth has also been resurgent. An environment characterised by low inflation and low growth is not necessarily front and centre of most investors' minds at the moment.

However, the structural issues we have discussed in this section mean that the risk cannot be ruled out, especially for certain regions and over the medium term. These are only expected to worsen from this point, so if the inflation and economic growth we have seen over recent months turns out to be transitory, the Japanification risk increases.



# INVESTMENT IMPLICATIONS

An environment of persistently low inflation (or worse, deflation) is bad for economies because it means low demand for goods and services. This leads to slower GDP growth and lower wages and ultimately an increased possibility of recession. Cash and bond rates will be lower for even longer, and those getting closer to retirement need to save even more for their retirement (as future returns will be lower) while others and particularly those involved in the property market are incentivised to borrow larger and larger amounts, rendering monetary policy virtually ineffective at stimulating growth. To illustrate this point, Westpac recently came out with a forecast neutral cash rate in Australia of 1.25% per annum. An exceptionally low number and unprecedented in Australia, the reason is that households are so indebted that even such a modest increase in interest rates will start to depress economic activity.

As the marginal impact of central banks' current QE programs reduces, central banks will be incentivised to resort to other means, such as equity purchases, to support and stimulate the economy. This will have implications for a variety of investment markets.

Broadly speaking, Japanification involves ultra-low interest rates remaining. On paper, this sounds bullish for equity markets, as lower rates equate to lower refinancing costs, stronger earnings and higher valuations through lower discount rates, higher profitability and a lower likelihood of defaults and downgrades. As we have seen in the past decade or so, low bond yields also make stocks even more compelling as investors hunt for yield.

However, the ultimate impact of ultra-low interest rates is dependent on the reason why the low rates are in place. An environment of sluggish growth and low inflation is an environment where corporates may struggle to generate revenues. This is evidenced in Japan's stock markets – companies have been faced with low profit margins given that executives have been unable to raise prices or cut costs in the anaemic growth environment.

If other developed market central banks adopt the BoJ's approach of purchasing equity based ETFs, downside risks for equity markets would be reduced, and there is less likely to be a harsh risk-off response in markets. However, developed market equity returns would be unexciting in light of the earnings outlook. Furthermore, while central bank purchases of ETFs would be clearly supportive of share prices, it provides false incentives for weak companies to carry on when they would have failed in a tighter monetary policy environment.

Looking forward, countries most at risk of facing a Japanification scenario, particularly in Europe and to a lesser extent the US, will likely see their share markets underperform countries that are further away from a Japanification scenario. Emerging markets equity would be expected to outperform developed overseas equity as growth in emerging market economies remains higher and is less affected by the structural issues we previously discussed.

A Japanification scenario, and the continuation and even acceleration of central bank support of markets, would likely provide a tailwind for global bonds in the short to medium term. A fall in bond

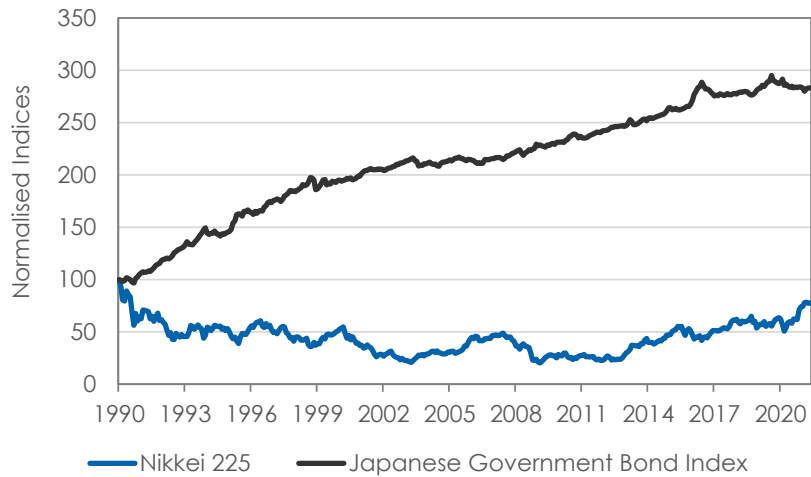
yields, reflective of both the low inflation environment and the yield targeting by central banks, has an initial positive return impact. As such, global bonds will play an important role in investors' portfolios over this timeframe. However, after the initial fall in yields, global bonds will provide low returns, given the limited room for further yield compression. This can be seen in the experience of Japan's bond market over the past several years – Japanese bonds have outperformed Japanese equities, however the returns moderated in the latter years as much of the compression of

yields had already occurred (bonds returned 6.6% p.a. on average from 1990-2000, but have only averaged 1.8% p.a. since 2000).

Within alternative asset classes, bond proxies would be expected to do well on a relative basis in an environment of lower bond rates.

Infrastructure assets are typically valued using the discounted cash flow method, and therefore any changes in future cash flows or discount rates applied by valuers will directly impact their valuation and investment performance.

Chart 13: Nikkei 225 and JGB Indices



Source: Bloomberg, Whitehelm Advisers



## CONCLUSION

With an unprecedented shuttering of global economies throughout 2020, the huge fiscal and monetary policy response was the necessary concoction to support people and businesses through a once-in-a-century pandemic. The risk now is that if these policies are too accommodative for too long, or do not have the desired effect over the medium term, the policies aimed at avoiding a sustained low growth and low inflation environment have the potential to bring much of the developed world to that exact scenario.

The discussion of whether the developed world will end up facing Japanification was initiated well before the onset of the COVID-19 pandemic. However, its imminence was largely dismissed given country differences (such as America's demographic profile and the RBA's reluctance to embark on QE). However, COVID-19 has narrowed the differences, reducing the ability to dismiss Japanification as an impossibility. Europe appears to be at the most imminent risk.

Our central case investment environment outlook for the short to medium term does not involve the Japanification of the developed world. Our central case forecast remains for a strong global economic recovery during 2021 following 2020's global recession. This is supported by continued global fiscal and monetary policy support and the progress of vaccination rollouts.

However, this assumes the stimulus measures will be successful in returning inflation and growth back to pre-GFC levels. We view the Japanification scenario an important one to not overlook given the significant risk the measures are unsuccessful.

A Japanification scenario is an unexciting yet not necessarily horrible outcome for the global economy and financial markets, although there will be clear winners and losers. While equity markets, especially developed markets, would likely languish in such an environment, downside risks are reduced, making a harsh risk-off period in markets less likely (reduced revenues and subsequent earnings offset by permanently lower discount rates). Defensive assets, including global bonds, would initially perform well as they respond to a low inflation environment, but would provide lower returns thereafter. And alternative assets would be expected to outperform. Considering portfolio positioning while this scenario is still a risk and not a reality increases investor preparedness

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