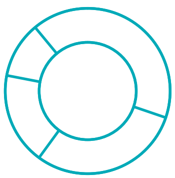
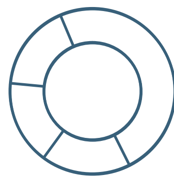
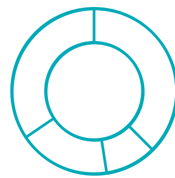
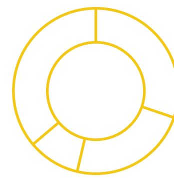
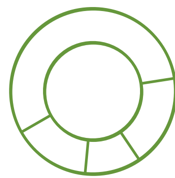
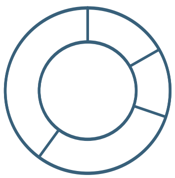
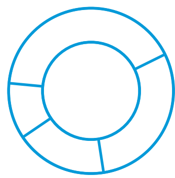
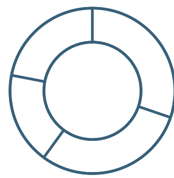
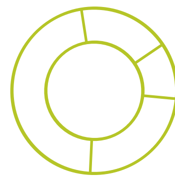
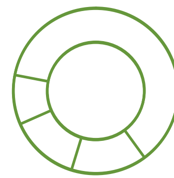
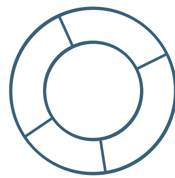
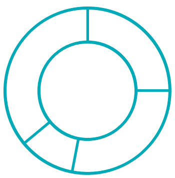
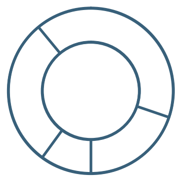
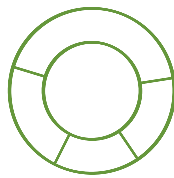
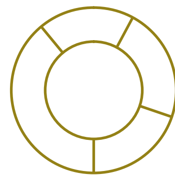
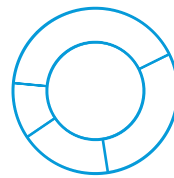
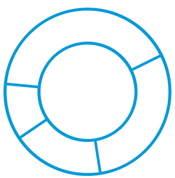
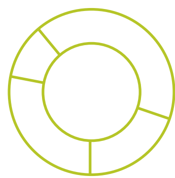
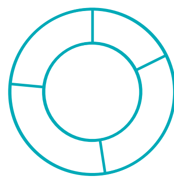
Vanguard®

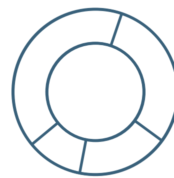
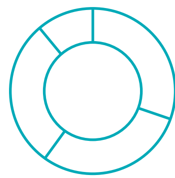
Asset allocation report

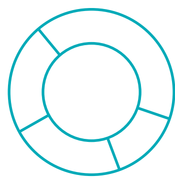
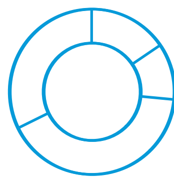
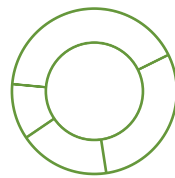
March quarter 2021

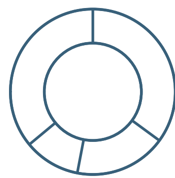




Contents

Rising rates don’t negate benefits of bonds 1

Improving conditions, but challenges remain 4

Asset allocation 14

COVID crash: one year on 17

Rising rates don't negate benefits of bonds

Roger Aliaga-Diaz, Ph.D.

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The yield of the 10-year U.S. Treasury note rose more than 100 basis points (1 percentage point) from August 2020 through late March 2021. Rates also climbed for other government bonds, including those issued by the United Kingdom and Australia. Because bond prices fall as rates rise, and vice versa, some investors are feeling jittery about the near-term risks of bonds.

Bond investors should hold, not fold

In such market cycles, it's particularly important to keep in mind the role bonds play in a diversified investment portfolio—to be a shock absorber at times when equity prices head downward.

Vanguard research found that when stocks worldwide sank an average of roughly 34% during the global financial crisis, the market for investment-grade bonds returned more than 8%. Similarly, from January through March 2020—the period encompassing the height of volatility in equities due to the COVID–19 pandemic—bonds worldwide returned just over 1% while equities fell by almost 16%. And if we look at the markets over several full business cycles, from January 1988 through November 2020, whenever monthly equity returns were down, monthly bond returns remained positive about 71% of the time[1].

Such uncorrelated returns demonstrate the diversification benefits that a balanced portfolio of stocks and bonds offers investors.

Figure 1. Rising bond yields mean lower bond prices

Daily yield of the 10-year U.S. Treasury note, January 2, 2020–March 22, 2021
Source: U.S. Department of the Treasury.

In short, don't let changes in interest rates drive a strategic shift in your bond allocation. Myths and misconceptions regarding bond investing abound during periods of rising rates, often coupled with calls for drastic changes to your portfolio. Here are three common myths that investors should avoid:

1 Renzi-Ricci, Giulio, and Lucas Baynes, 2021. *Edging Equity Downside Risk With Bonds in the Low-Yield Environment.* Valley Forge, P.A.: The Vanguard Group.

- **Myth #1: "Bonds are a bad idea—abandon the 60/40 portfolio."** This oft-heard recommendation contradicts the overriding importance of maintaining a balanced allocation that suits your investment objectives, plus it may be too late to gain any benefit from a tactical shift in your asset allocation. Selling bonds after the recent increase in rates, which has driven down prices and total returns, is simply chasing past performance. Investors should stay forward-looking: At current higher yields, the outlook for bonds is actually better than before yields went up. Bear in mind that the upside of higher yields—greater interest income—is coming. Also, the odds of future capital losses decline as yields increase. So now is not the time to abandon bond allocations. On the contrary, the more that bond yields rise (and prices fall), the more important it is for long-term investors to maintain a strategic allocation to bonds, which could require rebalancing into bonds, not the other way around.
- **Myth #2: "Go to cash, avoid duration risk."** Rising rates have hit long-term bonds the hardest. But the recommendation to avoid duration or interest rate risk is backward-looking and probably comes too late. Again, shift your mindset to a forward-looking view of the bond market. The market consensus is that rates will rise, and the prices of short-, intermediate-, and long-term issues already reflect that belief. Today's market prices for longer-term bonds already factor in investors' expectations for rising rates, which is why prices are cheaper. If that consensus view were to play out, there would be no advantage in shifting to shorter-term bonds or going to cash. Such moves would pay off only if longer-term yields were to rise more than expected. However, it's equally likely that yields will rise less than expected, in which case long-term bonds would do better.
- **Myth #3: "When interest rates are rising, don't just stand there—do something!"** The past stretch of rising rates was a surprise to the markets, but now markets expect continued increases. That rates are rising is not really news anymore. While yields indeed seem likely to rise, they may do so by either more or less than the market consensus. Control what you can: With a 50/50 chance of rates rising more or less than consensus, a better approach than trying to pick which market segments will fare best in the near term is to stay well-diversified for the long term across the maturity spectrum and across asset classes.

Keep your eyes on the road ahead

It's good advice in both driving and investing. Vanguard recommends that investors stay focused on long-term, forward-looking return expectations, not on recent trailing-return performance.

Let your investment goals shape decisions about your strategic asset allocation. Calibrate the risk–return trade-off in your portfolio accordingly, including setting the right mix of bonds and stocks to meet those goals. And generally ignore market-timing advice, which is mostly based on public consensus information that is already priced into the markets.

Even if rates keep rising, long-term total returns on broadly diversified bond portfolios are likely to remain positive. That would be the natural outcome of reinvesting bond dividends at higher yields, a process that's easily managed by owning mutual funds or ETFs.

The elephant in the room—inflation

Inflation is often seen as the enemy of the fixed income investor—in particular, unexpected inflation that the market hasn't priced in. Inflation-indexed securities provide a limited hedge against unexpected inflation.

Vanguard research suggests that significant inflation hedging through inflation-linked securities requires large positions, which could reduce the other diversification benefits of a bond allocation in a portfolio. Over long time horizons, equities historically have provided the strongest safeguard against inflation[2].

2 Bosse, Paul, 2019. *Commodities and Short-Term TIPS: How Each Combats Unexpected Inflation.* Valley Forge, P.A: The Vanguard Group.

Where active can shine

A rising rate environment also accentuates what skilled active managers may be able to bring to a bond portfolio. When yields are falling, outperforming fund managers pile their excess returns on top of the market's generally rising prices. But amid the headwinds of rising rates and prevailing price declines, successful active fund managers may make the difference between positive and negative total returns.

Investors who are inclined to seek outperformance—and are cognisant of the risk of underperformance—should leave decisions about tactical shifts and security selection to professional active managers. Those managers who have shown skill in executing repeatable investment processes, subject to strict investment risk controls—like my colleagues in Vanguard Fixed Income Group—can guide portfolios successfully through market waters, tranquil and choppy alike[3].

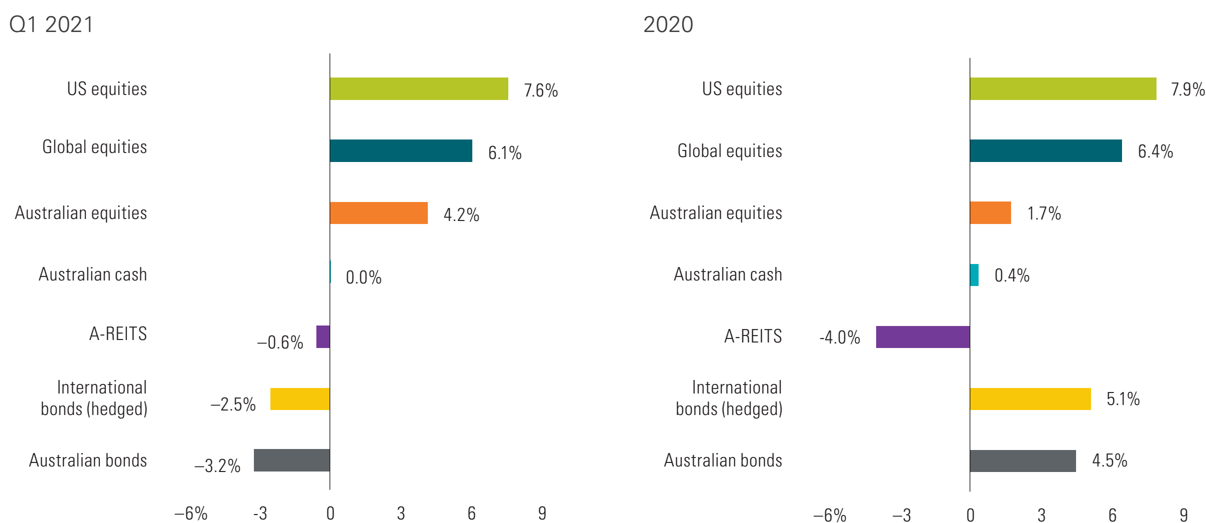
3 For the 10-year period ended December 31, 2020, 38 of 44 actively managed Vanguard bond funds outperformed their peer-group averages. Results will vary for other time periods. Only funds with a minimum 10-year history were included in the comparison. (Source: Lipper, a Thomson Reuters Company.) Note that the competitive performance data shown represent past performance, which is not a guarantee of future results, and that all investments are subject to risks.

Improving conditions, but challenges remain

Quarter in review

Global investment markets continued to build momentum from the 2020 year over the first quarter of 2021. U.S. Treasury yields rose 86 basis points over the quarter to 1.7%, a level not seen since January 2020, and global equity indices closed 17% above their pre-COVID highs. Within equities, the U.S. market outperformed its peers, coming in at 8% year-to-date compared to the global return of 6% (**Figure 2**), after the passing of a larger-than-expected USD 1.9 trillion fiscal stimulus package and with the aid of accelerated COVID–19 vaccine rollout program. The Australian share market lagged behind the global market, but nonetheless closed off the quarter 2.5% above its return in 2020 as value stocks recovered and as investors welcomed a return to relatively normal conditions. Fixed income, on the other hand, suffered as yields rose across the world on concerns around a potentially overheated economy and inflation scares.

Figure 2. Market review



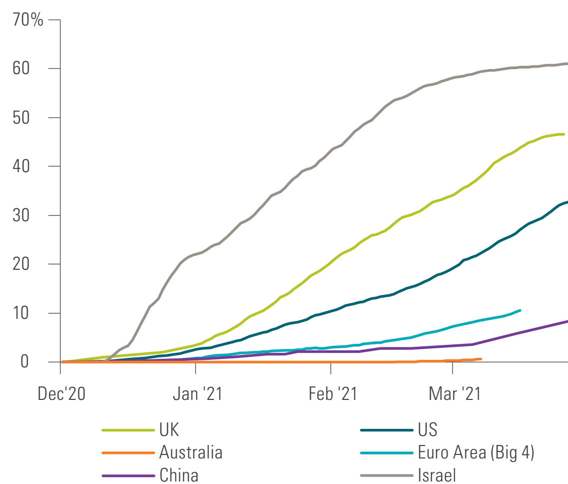
Notes: All returns except Q4 2020 are annualised. Global equity represented by MSCI AC World in AUD, US equity represented by S&P 500 in AUD, Australian equity represented by S&P/ASX 300 Index, Australian property represented by S&P/ASX 300 A-REIT Index, Australian bonds by the Bloomberg Ausbond composite 0+ Yr Index, International bonds by Bloomberg Barclays Global Aggregate Index Hedged in AUD, and Australian cash by the Bloomberg Ausbond Bank Bill Index. Data through March 2021.

Source: Thomson Reuters Datastream and Bloomberg.

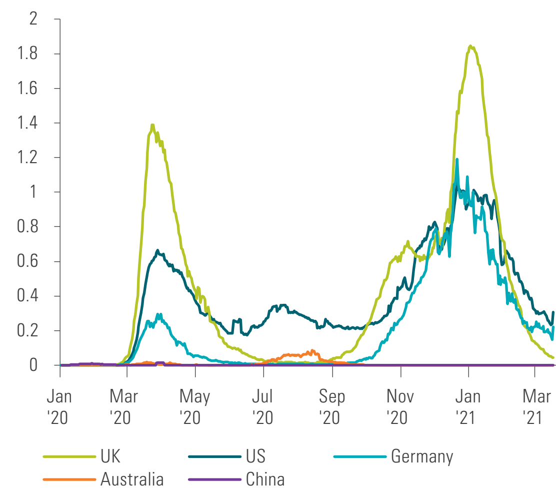
With vaccinations underway, the number of COVID–19 cases, hospitalisations and deaths in developed economies have been much lower than at the start of the year, paving the way for a significant pickup in economic activity in the second half of the year. This is especially the case for countries like the U.S. and U.K., which have accelerated the number of vaccinations over recent months. As **Figure 3** illustrates, over 30% of the U.S. and 50% of the British populations have now received at least one dose of vaccine, compared to only 1% and 2% respectively at the start of the year. Closer to home, vaccination progress in Australia and China has proved to be much slower, though the effective containment of the virus to date has meant the pace of economic normalisation is less sensitive to vaccine developments.

Figure 3. Vaccine prospects remain key to closing the immunity gap

Vaccination progress (% of population vaccinated with first dose)



Daily deaths per 100,000

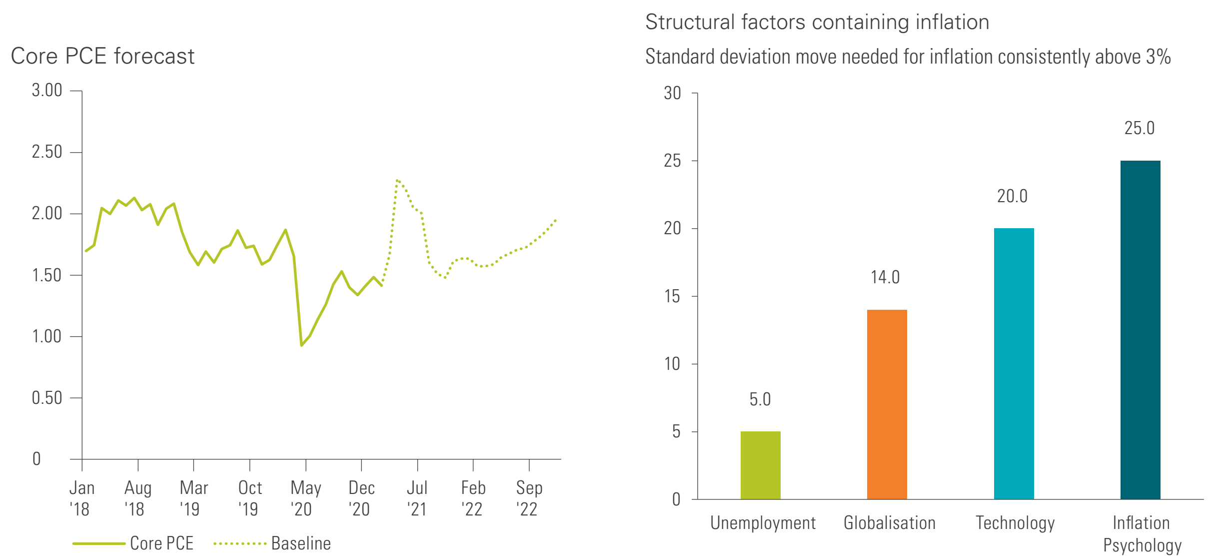


Source: Vanguard, using data from Refinitiv and John Hopkins University.

Economic outlook

Looking ahead, we expect economic normalisation to pick up across the world, particularly in the U.S. and U.K. In the U.S., the passage of the USD 1.9 trillion fiscal stimulus package has led us to upgrade our growth forecast by around 2–2.5 percentage points to a range of 7–7.5% for 2021. Some investors have worried that the size of the U.S. stimulus, combined with pent-up savings, could lead to an excessive pickup in inflation, and trigger a tightening of policy to an extent that could be damaging for equity markets. However, despite the upgrade to our growth forecast for this year, we expect the direct effect on inflation of the U.S. government's recently enacted stimulus package to be relatively modest, at around 7–10 basis points for all of 2021 (**Figure 4a**). Additionally, the long-term structural trends that have kept inflation low for more than a decade will continue to limit price rises. As **Figure 4b** illustrates, these structural forces will have to experience a significant move of around 15–20 standard deviation on average in order for inflation to be sustainably higher, a situation we think is quite unlikely in the near term. Modest, rather than high inflation, alongside the Fed's increased tolerance for inflation risks is why we only foresee a potential third-quarter 2023 lift-off for the Fed's rate target.

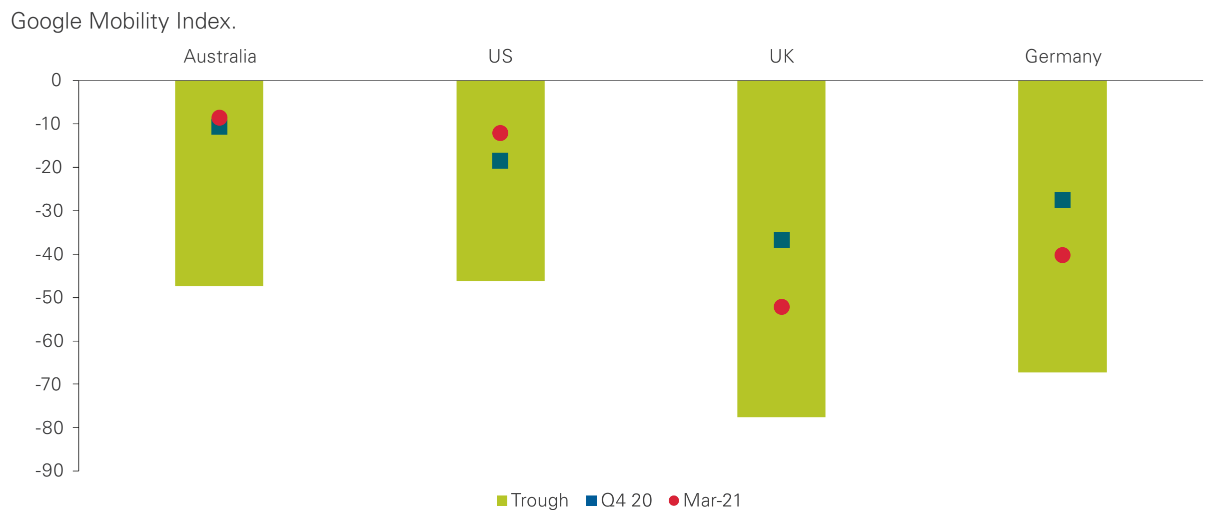
Figure 4a & 4b. Modest U.S. reflation "yes"; High inflation "no"



Notes: The globalisation factor is proxied using the ratio of import price deflator to overall GDP deflator, while technology is represented by a technology price input factor. Inflation psychology reflects 10 year inflation expectations.
Source: Vanguard, using data from Data Buffet.

In Australia, the economic recovery is well underway thanks to more effective virus containment measures. Mobility indicators for retail and recreational activities, for example, are much closer to their pre-COVID levels than in countries such as the U.K. or Germany (**Figure 5**). Against this backdrop, we expect output to reach its pre-virus level by the end of the first half of this year, compared to later in 2021/ 2022 for most of its developed peers.

Figure 5. Mobility indicators suggest uneven recovery across countries

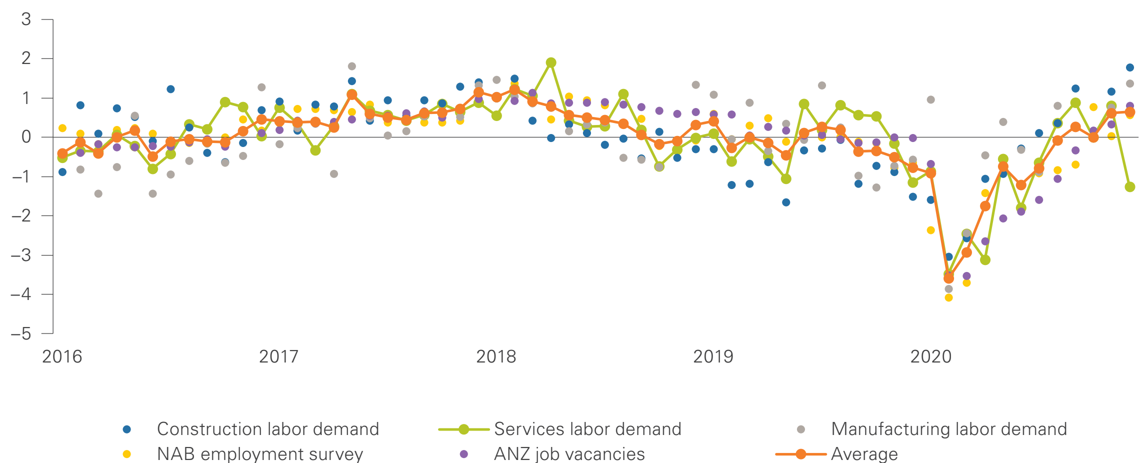


Source: Vanguard, using data from Googl

A key risk to the Australian outlook lies with the roll-off of the JobKeeper Payment scheme at the end of March, which to date has benefitted millions of Australians. Without the JobKeeper scheme, we estimate job losses in Australia could have been 700,000 higher and the unemployment rate at its peak would have been around 12% instead of 7.5% last year. The key challenge ahead is how the labour market situation will fare now that the 1.1 million people that were participating in JobKeeper have rolled off the scheme. Should all of these people lose their jobs, the unemployment rate could rise to around 13.8% in April/May (assuming labour force participation rates remain unchanged).

However, this assumption vastly overstates the workers "at risk" because those benefitting from JobKeeper in the last quarter of 2020 or the first quarter of 2021 will not necessarily lose their jobs. Given Australia's minimal COVID–19 restrictions, many companies that qualified for JobKeeper in 2020—particularly those in Victoria—won't feel the need to lay-off employees in the second quarter. In fact, forward looking indicators of aggregate labour demand are showing signs of strength. at the moment (**Figure 6**), especially in sectors such as construction and manufacturing. Thus, even if some people in the service sector do lose their jobs, we think this will be partially offset by people getting jobs in other sectors that are doing well.

Figure 6. Aggregate labor demand remains strong

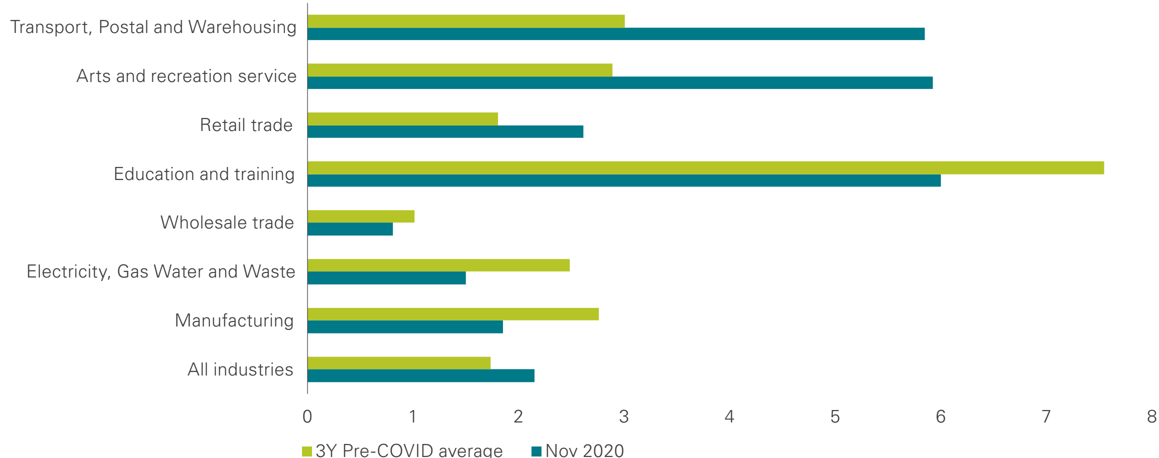


Source: Vanguard, using data from Refinitiv.

Within the more vulnerable service industry, we estimate that there are around 300,000 workers in high-risk sectors. These include the Aviation industry, Hotels and Accommodation, and in Arts and Recreation given ongoing international border closures and restrictions on large-scale public gatherings in some locations. As **Figure 7** illustrates, many of the more vulnerable sectors have not yet experienced a meaningful reduction in the unemployment/job vacancy ratio, which remains much higher than pre-COVID levels and more elevated than heavy industries such as manufacturing and utilities.

Figure 7. Unemployment still outweighs job vacancies in the most virus-sensitive sectors

Unemployment to job vacancies



Source: Vanguard, using data from the Australian Bureau of Statistics.

One way to estimate the number of job losses in these sectors post JobKeeper is to look at the number of employees currently working zero hours for economic reasons, as this group is most vulnerable to layoffs once the scheme rolls-off.

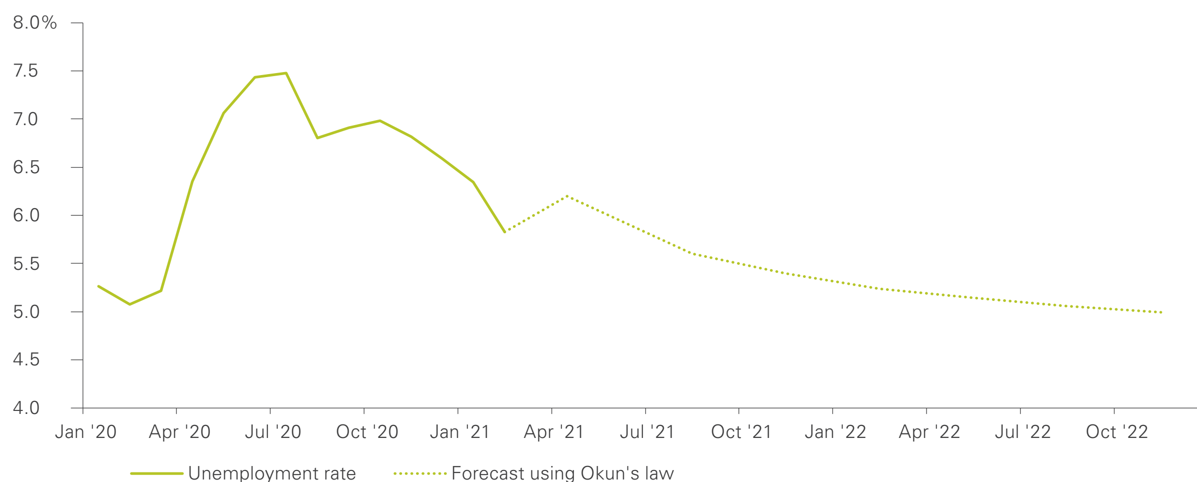
In our baseline scenario, we assume around 90% of this group of workers within the Arts and Recreation as well as the Accommodation sector will likely lose their jobs in April/May. The Aviation industry, on the other hand, faces a lower risk given the government's recent announcement of the extension of the wage subsidy scheme[1] for workers in this industry. Meanwhile, we assume the other less vulnerable sectors will recover at least 50% of jobs given the ongoing reopening and normalisation of activity nationally, with a lower risk of the "fear factor" deterring activities. Under these baseline assumptions, unemployment will likely rise by about 60,000–80,000 in April/May, and the unemployment rate by around 0.4–0.6 percentage points.

On the downside, however, if all employed workers currently working zero hours for economic reasons across industries were to lose their jobs, then the unemployment rate could rise by close to 1 percentage point. However, this seems less likely given the ongoing loosening of restrictions nationwide and the normalisation of activities.

Beyond the second quarter, the labour market situation is slated to improve given the effective control of the virus in Australia as well as positive jobs growth expected in May and June. Using Okun's law[2], which captures the relationship between unemployment and economic growth, we estimate the unemployment rate should end 2021 at around 5.3% and 4.9% at the end of 2022 given the ongoing economic recovery (**Figure 8**). While this is still slightly above the Reserve Bank's estimate of full employment (4–4.5%), it nonetheless marks a significant improvement in labour market conditions since the peak of the crisis last year.

In summary, temporary volatility in the unemployment numbers over the second quarter of 2021 can be expected, but this will not completely reverse the downward unemployment trend over this year.

Figure 8. Unemployment forecasted to resume downward trend post Q2 volatility



Source: Vanguard

Market outlook

Global equity markets continued their climb in Q1, navigating a bout of bond market volatility to end at near all-time highs. Despite a repricing of inflation expectations that jostled equities, markets found comfort in the prospects of stronger economic growth, stimulus, and central banks' expectations for continued easy policy, although tail-risks still remain.

1 https://australianaviation.com.au/2021/03/international-aviation-wage-subsidy-will-be-same-as-jobkeeper/

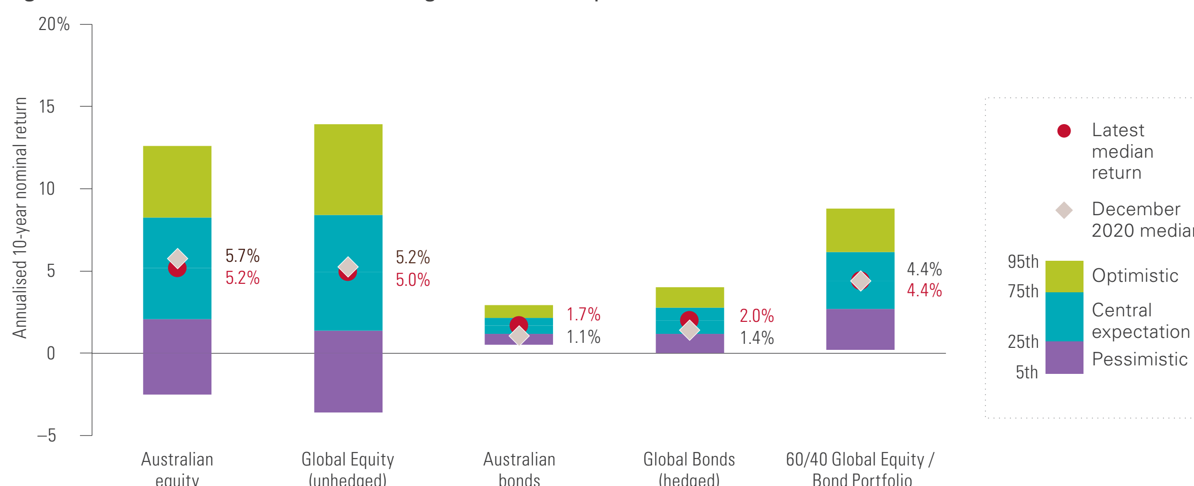
2 In Australia, Okun's law suggests that a percentage point increase in the output gap is estimated to decrease the unemployment rate by about a quarter of a percentage point.

Rising yields combined with the strong gain in equities year-to-date contribute to a view on valuations that is broadly more elevated and less attractive than before, despite the support of near-term economic optimism. These movements are reflected in a decline in our 10-year annualised outlook for equities, with Australian and international equities expected to be in the range of 4–6% as of March 2021, modestly downgraded from December 2020 (**Figure 9**).

For some investors, elevated valuations have given reason for pause. As economies recover and return to trend, our equity return outlooks remain guarded and begin to resemble those from 2019 and 2020. Nevertheless, equities as part of a well-diversified portfolio are likely to continue outperforming most other investments and the rate of inflation over the long term.

Once again investors would be well advised to temper their expectations for returns over the coming decade, to ensure portfolios align with their investment objectives, and to focus on the factors within their control. Rebalancing can help to ensure that a portfolio aligns with its intended risk exposure, by responding to relative under and overvaluations within its asset allocation. However, we caution against excessive concentration risk and market timing, where downside risks may be magnified and investment objectives compromised.

Figure 9. 10Y annualised outlook: setting reasonable expectations



Source: Vanguard, Interim 31 March 2021 and 31 December 2020 VCMM Simulations

On the fixed income front, recent rises in interest rates and inflation risks have left left many investors questioning the appeal of bonds.. However, a decomposition of fixed income returns suggest that rising rates are actually good news for long-term investors. While most have tended to focus on the price return (which falls as rates rise), many forget that a bond return consists of two other components – yield distribution and reinvestment income. Higher rates will not only result in a higher yield distribution, but investors reinvesting these distributions will also be able to reinvest at higher yields, thereby allowing them to benefit from the virtuous cycle of compounding interest at a higher rate.

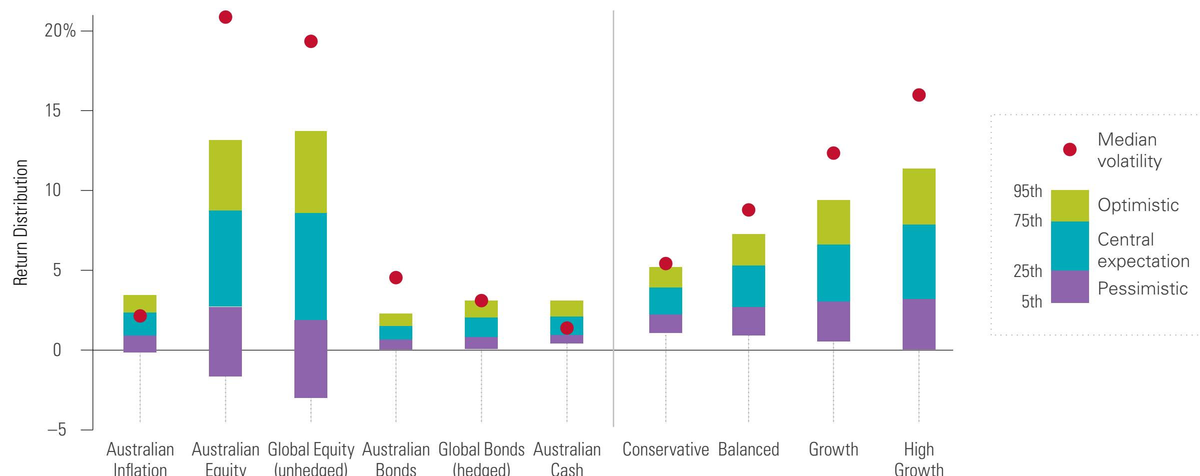
While this concept is probably not top-of-mind when rates are rising and bond returns are depressed, it's a classic case of enduring short-term pain for long-term gain. As a rule of thumb, investors with time horizons longer than the durations of their bond holdings may be better off in the long term with a rise in rates today. In fact, as **Figure 9** illustrates, our long-term fixed income return outlook have actually improved since December 2020 given the rise in yields.

The mantras of discipline and long-term investing are never more important than when market volatility jumps. Instead of allowing emotions to drive your asset allocation, it is more prudent to let your investment goals shape decisions about your strategic asset allocation.

Long-term market outlook

The chart below shows the Vanguard Capital Markets Model (VCMM) return forecasts over the next 10 years for a range of asset classes and Vanguard's Diversified Funds.

Figure 10a. Projected 10-year nominal return outlook



Source: Vanguard, 31 December 2020 VCMM Simulation.

It shows two concepts: the range of annualised 10-year nominal returns and the median volatility experienced.

The bars show the range of return outcomes over a 10-year period. The central return expectations for the asset class or portfolio are shown in the middle of the bars. Observations in the optimistic or pessimistic regions should not come as a surprise though; goals and portfolios should always be positioned with these possibilities in mind.

The red circles show the median volatility forecasts. This represents the volatility of the asset classes that can be expected over the 10-year period. The chart shows that equities are expected to produce a higher return over a 10-year period than bonds, however the trade-off is that an investor can expect a more volatile experience and greater uncertainty over the end point, which could be a much wider range of outcomes.

An important point to remember is that asset returns are not perfectly correlated, which means that if an Australian equity return over 10 years is in the optimistic range, this does not necessarily mean that Australian bond returns will also be in the optimistic range. Combining assets can therefore present strong diversification benefits.

Figure 10b. Projected 10-year nominal return outlook

	Return percentile					
	5th	25th	Median	75th	95th	Median Vol.
Australian Inflation	–0.2%	0.9%	1.7%	2.4%	3.4%	2.2%
Australian Equity	–1.7%	2.7%	5.7%	8.8%	13.2%	20.9%
Global Equity (unhedged)	–3.0%	1.9%	5.2%	8.6%	13.7%	19.4%
Australian Bonds	0.0%	0.7%	1.1%	1.5%	2.3%	4.6%
Global Agg Bonds (hedged)	0.1%	0.8%	1.4%	2.0%	3.1%	3.1%
Australian Cash	0.4%	1.0%	1.5%	2.1%	3.1%	1.4%
Conservative	1.1%	2.2%	3.1%	3.9%	5.2%	5.4%
Balanced	0.9%	2.7%	4.0%	5.3%	7.3%	8.8%
Growth	0.6%	3.1%	4.8%	6.7%	9.4%	12.4%
High Growth	0.0%	3.2%	5.5%	7.9%	11.4%	16.0%

Source: Vanguard, 31 December 2020 VCMM Simulation

The next two charts show the trade-off between targeting a CPI+ return target and the risk of a loss along the way.

Figure 11. Probability of achieving real return target

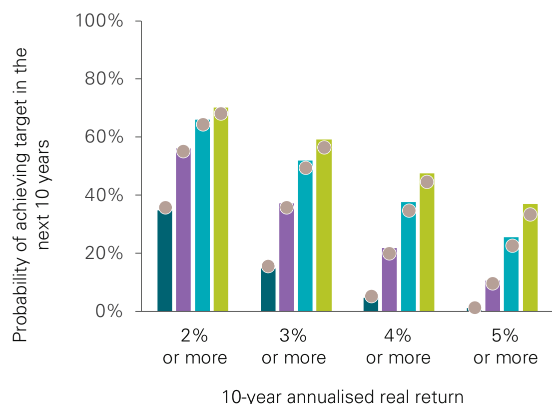
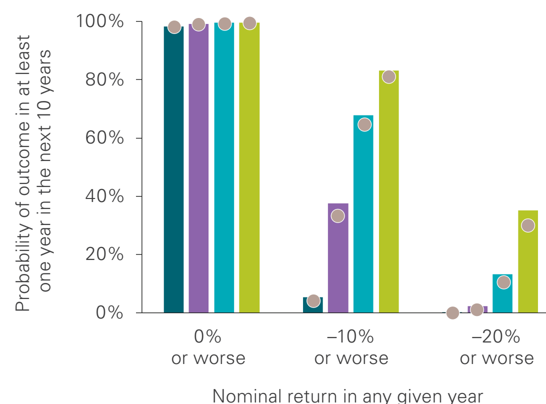


Figure 12. Downside risks



Conservative | Balanced | Growth | High Growth | December 2019

Note: The projections or other information generated by the VCMM regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Distribution of return outcomes from the VCMM are derived from 10,000 simulations for each modelled asset class in AUD. Results from the model may vary with each use and over time.

Source: Vanguard, 31 December 2020 and 31 December 2019 VCMM Simulations.

Taking more risk means that an investor increases the probability that they will achieve their target over 10 years.

Highlighting the importance of managing expectations, it also means there is the increased probability of experiencing a negative return or a large annual loss in at least one year over the 10 year period.

About Vanguard's Investment Strategy Group

Vanguard's Investment Strategy Group is a global team of economists and investment and portfolio construction strategists with a wide variety of specialties, ranging from monetary policy to index construction to market trends. Their research serves as the basis for Vanguard's investment principles and methodology, guides Vanguard's global leadership and influences decisions about our investment offerings and portfolio construction.

Research-based investment approach

As part of Vanguard's broader Investment Management Group, ISG plays an essential role in developing Vanguard's investment methodology, which is carried through in the implicit and explicit advice solutions available to our clients. Our global chief economist and head of ISG reports directly to Vanguard's global chief investment officer. We work closely with Vanguard's in-house portfolio managers. Notably, our global chief economist is integrated into Vanguard Fixed Income Group through our portfolio management process. Through that process, ISG advises our fixed income investment managers on the macroeconomic outlook, expected monetary policy and other factors to support day-today portfolio management. Vanguard's investors around the world benefit from our collaborative approach to investment management, research and thought leadership.

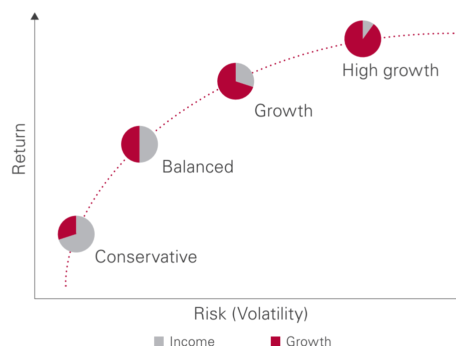
Vanguard Capital Markets Model

The VCMM projections are based on a statistical analysis of historical data. Future returns may behave differently from the historical patterns captured in the VCMM. More important, the VCMM may be underestimating extreme negative scenarios unobserved in the historical period on which the model estimation is based. The Vanguard Capital Markets Model® (VCMM) is a proprietary financial simulator developed and maintained by Vanguard's Investment Strategy Group. It is a long-term tool that takes into account current macroeconomic conditions and equity and bond valuations to forecasts distributions of future returns for a wide range of asset classes and portfolios. The primary value of the VCMM is in its application to analysing potential client portfolios. VCMM asset-class forecasts – comprising distributions of expected returns, volatilities, and correlations — are key to the evaluation of potential downside risks, various risk-return trade-offs, and diversification benefits of various asset classes.

Asset allocation

Vanguard's approach to asset allocation is to provide long-term returns that match investors' desired level of risk. The broad allocations to defensive (fixed income) and growth (equities) are the main factors influencing the risk/return profiles of our asset allocation strategies.

Our asset allocation approach is designed with a medium to long-term investor in mind (a time horizon of at least five years), reflecting the reality that the majority of Australian investors need to accept some market risk in order to reach their investment goals.



Why diversification matters

We believe that a successful investment strategy starts with an asset allocation suitable for its objective. In practice, diversification is a rigorously tested application of common sense: Markets will often behave differently from each other—sometimes marginally, sometimes greatly—at any given time.

Owning a portfolio with at least some exposure to many or all key market components ensures the investor of some participation in stronger areas while also mitigating the impact of weaker areas.

Many investors lack the time, interest, or skills, and can become overwhelmed by the choice of investment options, asset classes, and other implementation hurdles such as choosing between index and active management. Investors also face behavioural risks in adhering to their investment plan over time due to the temptation of performance chasing or overreacting to market events.

Vanguard Diversified Funds provide professionally managed portfolio solutions designed to help medium to long-term investors achieve their goals and overcome these challenges.

Understanding Vanguard's SAA process

For multi-asset funds, such as Vanguard Australia's Diversified Funds, Vanguard's Investment Strategy Group (ISG) conducts an annual review of the strategic asset allocation (SAA) of the funds. The team considers new asset classes, currency exposure, home bias, regulatory and tax impact, investment costs, investor behaviours, and implementation factors amongst others. The ISG team presents a recommendation to maintain or change the SAA to Vanguard's global Strategic Asset Allocation Committee (SAAC), which oversees all of Vanguard's multi-asset funds. The SAAC is comprised of senior leaders from the Investment Management Group and Vanguard's advice businesses and is co-chaired by Vanguard's global global chief economist. Upon approval of a change to the SAA, Vanguard assesses the feasibility, tax impact, and costs of the recommended changes and presents to the Board of Vanguard Australia for approval prior to implementing the changes.

Risk and return overview

Vanguard diversified funds peer group comparison

31 March 2021

The shaded boxes display the total return percentile rank of the Vanguard fund within its peer group*, as shown by the colour code, with the number reflecting the Vanguard fund return in excess of the peer group median return (%). The numbers below the shaded boxes indicate the number of funds in the peer groups across each time period.

Vanguard fund Asset weighted peer group MER (% p.a.)	3 mths	6 mths	1 yr	3 yrs	5 yrs	7 yrs	10 yrs
Conservative	–0.65	–0.73	0.59	1.73	1.40	1.65	1.43
0.66	81	81	80	75	70	66	58
Balanced	–1.14	–1.60	–0.69	1.53	1.17	1.42	1.18
0.80	56	55	54	50	44	40	33
Growth	–0.28	–0.28	1.26	1.96	1.56	1.47	1.28
0.79	76	76	75	69	65	62	54
High Growth	–0.27	–0.69	2.03	1.97	1.28	1.26	1.19
0.84	55	54	53	50	44	42	39

Peer group percentile
- Top 5%
- 1st quartile
- 2nd quartile
- 3rd quartile
- 4th quartile

Sources: Vanguard calculations using data from Morningstar Inc. Past performance is not an indication of future performance. All returns are net of fees and assume reinvestment of income distributions. Returns greater than 12 months are annualised. There has been no adjustment for survivorship bias.

* The peer groups were constructed by first sourcing a universe of funds from Morningstar having the same category as the Vanguard Funds, but excluding Vanguard strategies.
An automated filter was then applied to these original peer groups with the aim of removing identified duplicate investment strategies and retain unique strategies.

Figure 13. Vanguard diversified funds return contributions for the quarter

31 March 2021

Fund	3 Month Gross Return (%)	3 Month Return Contribution (%)			
		VCIF	VBIF	VGIF	VHIF
Vanguard Cash Reserve Fund	0.01	0.0	0.0	0.0	0.0
Vanguard Australian Fixed Interest Index Fund	–3.23	–0.6	–0.5	–0.3	–0.1
Vanguard Australian Shares Index Fund	4.19	0.5	0.8	1.2	1.5
Vanguard International Shares Index Fund	6.40	0.5	0.9	1.3	1.7
Vanguard International Small Companies Index Fund	11.27	0.2	0.4	0.5	0.7
Vanguard Emerging Markets Shares Index Fund	3.64	0.1	0.1	0.1	0.2
Vanguard International Shares Index Fund (Hedged) – AU Class	6.22	0.3	0.5	0.8	1.0
Vanguard Global Aggregate Bond Index Fund (Hedged)	–2.90	–1.2	–1.0	–0.6	–0.2
Total Return Contribution (%)		**–0.2**	**1.3**	**3.0**	**4.8**

*Figures in the return contribution table are calculated as the product of the monthly gross return and the corresponding actual asset allocation.

Underlying fund asset allocation

The strategic asset allocation (SAA) is provided in the table below. The diversified funds leverage Vanguard's international expertise in investment research and utilise a global investment methodology. This approach starts with market capitalisation weightings. Local market factors are then also considered.

Figure 14. Target asset allocations effective from July 2017

	Asset Allocation (%)			
Fund	Conservative	Balanced	Growth	High Growth
Asset Classes				
Vanguard Cash Reserve Fund	10.0	0.0	0.0	0.0
Vanguard Australian Fixed Interest Index Fund	18.0	15.0	9.0	3.0
Vanguard Global Aggregate Bond Index Fund (Hedged)	42.0	35.0	21.0	7.0
Total income	**70.0**	**50.0**	**30.0**	**10.0**
Asset Classes				
Vanguard Australian Shares Index Fund	12.0	20.0	28.0	36.0
Vanguard International Shares Index Fund	8.5	14.5	20.5	26.5
Vanguard International Shares Index Fund (Hedged)	5.5	9.0	12.0	16.0
Vanguard International Small Companies Index Fund	2.0	3.5	5.0	6.5
Vanguard Emerging Markets Shares Index Fund	2.0	3.0	4.0	5.0
Total growth	**30.0**	**50.0**	**70.0**	**90.0**

Effective 7 October 2020, the Fund used to achieve the cash allocation of the Vanguard Diversified Conservative Funds has changed from the Vanguard Short Term Fixed Interest Fund (formerly the Vanguard Cash Plus Fund) to the Vanguard Cash Reserve Fund.

COVID crash: one year on

Tony Kaye
Senior Personal Finance Writer, Vanguard Australia

Hungarian-born illusionist Harry Houdini was famous for his great escapes. So was American actor Steve McQueen, at least in his onscreen role in the 1963 film classic *The Great Escape*.

And it's somewhat fitting that both men were born on March 24, because that's also the date in 2020 when global share markets began what could arguably be described as one of the greatest escapes in history.

The scene had been set over the previous few weeks as the rapid spread of COVID–19 fuelled panic on international share markets. Like they usually do, markets moved very quickly.

In the space of just a few weeks, after having hit an all-time record high in late February 2020, markets went into freefall.

The Australian share market, caught up in the maelstrom, dropped more than 35% over about 20 trading sessions to reach its lowest level in more than a decade on March 23.

But, almost as quickly as it all started, markets suddenly began to rebound.

The turning point was March 24 last year with the endorsement of a US$2.2 trillion coronavirus economic rescue package announced by the former Trump government—the largest in U.S. history.

Share markets have been steadily moving higher ever since and, one year later, the Australian share market is more than 50% above its 2020 low point. The U.S. market is also trading at new record highs.

The accelerating rollout of COVID–19 vaccines, the huge monetary stimulus programs launched by many countries to offset the economic impacts of the virus, and record low interest rates, have acted as a safety net for financial markets.

Markets remain unpredictable

If there's one key investment lesson to be learned from the events of the last year, it's that financial markets are unpredictable.

Few would have seen last year's sudden share market downturn coming, let alone the start of the market's rebound just a few weeks later.

Picking the 4,359.60 S&P/ASX 300 Index low point of the Australian market on March 23 last year would have been pure luck.

Even more unpredictable has been the market's growth trajectory, to a level where the Australian market is now very close to having recovered all of its losses from early last year. The U.S. market has already achieved that.

Record capital inflows into exchange traded funds (ETFs) and unlisted managed equity funds are a strong indicator that investor confidence in the prospects for equity markets is very strong.

In reality, trying to time markets is virtually impossible.

For long-term investors, the events of the last year have only reinforced the fact that market downturns, no matter how long they last, are invariably followed by market upturns.

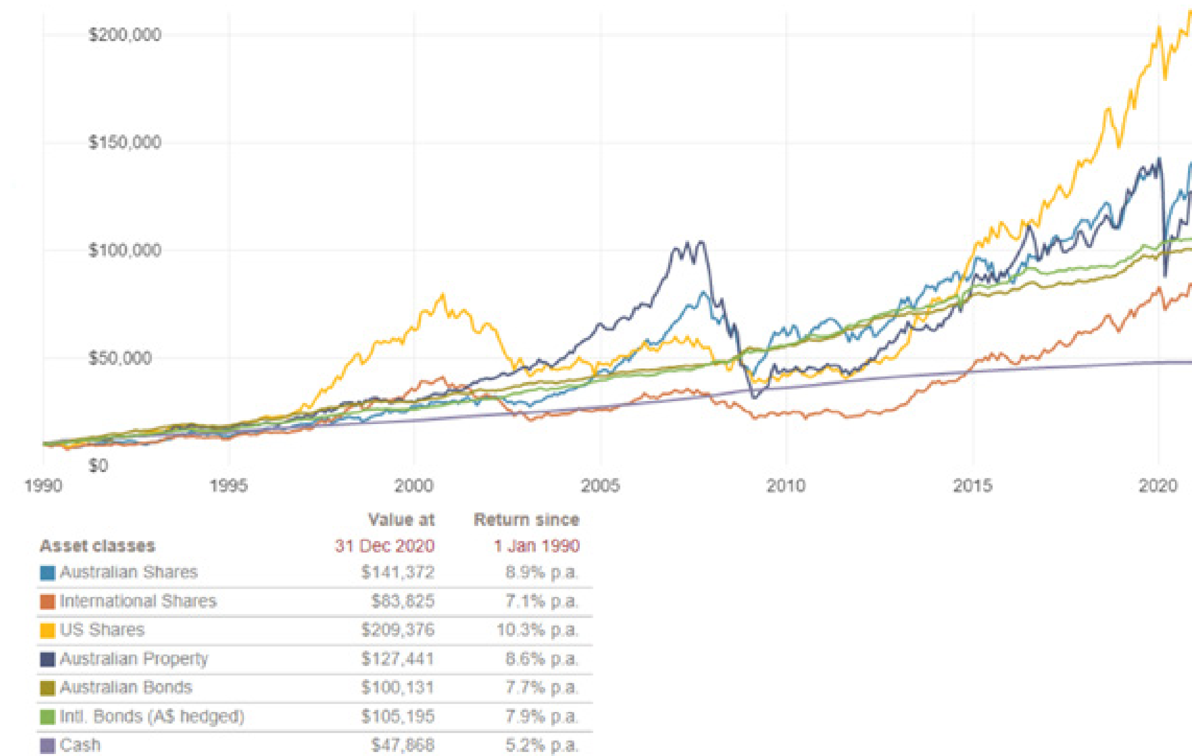
Just being invested in the market, and making ongoing contributions, will ensure you never miss a beat.

Time in the markets is what counts

If we look back on investment returns over the past 30 years going back to 1990, what emerges is a very clear picture of growth across all major asset classes.

The volatility in markets over time is also clearly evident, with the period including major downturns such as the sharp market correction that led to the prolonged Global Financial Crisis between 2007 and 2009.

Figure 15. Vanguard Index Chart



Asset classes	Value at 31 Dec 2020	Return since 1 Jan 1990
Australian Shares	$141,372	8.9% p.a.
International Shares	$83,825	7.1% p.a.
US Shares	$209,376	10.3% p.a.
Australian Property	$127,441	8.6% p.a.
Australian Bonds	$100,131	7.7% p.a.
Intl. Bonds (A$ hedged)	$105,195	7.9% p.a.
Cash	$47,868	5.2% p.a.

Source: Australian Bureau of Statistics, Bank of England, Bloomberg Finance L.P., Commonwealth Bank of Australia, Melbourne Institute of Applied Social & Economic Research, MSCI Inc., Standard & Poor's, WM Reuters.

The chart above clearly illustrates the sharp downturn in global financial markets last year, but also the strong rebound from early 2020 through to the end of December.

Looking back over the past 30 years, it also shows that all asset classes have provided consistent growth over time, and some much more than others.

Taking the Australian share market, for example, up until the end of December it had delivered an average return of 8.9% per annum over three decades, assuming all distributions had been fully reinvested.

Using a base amount of $10,000 invested back in 1990, a person holding Australian shares through an ETF or managed fund tracking the whole Australian market would have turned their initial holding into more than $141,000. That's a total return of well over 1,000%, excluding any fees, expenses and taxes.

A $10,000 investment into U.S. shares over the same time frame would have returned 10.3% per annum and be worth more than $200,000 using the same assumptions as above.

Even cash, the lowest-returning asset, would have delivered a total return of 5.2% per annum and turned $10,000 into almost $50,000 with the benefit of compounding returns.

That’s the ultimate power of being focused on time in the markets, instead of trying to time markets.

Having exposure to a range of asset classes to achieve broad diversification also reduces concentration risk and helps smooth out returns.

That’s because the returns performances of different asset classes are constantly changing in line with market movements.

Markets will rise and fall, but it’s all about staying the course, leveraging the combination of compounding returns and low investment costs, which together really add up over the long term.

After such a volatile investment year, it’s abundantly clear that time in markets will always win out over trying to time markets.

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Vanguard Capital Markets Model

IMPORTANT: The projections or other information generated by the Vanguard Capital Markets Model regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. VCMM results will vary with each use and over time.

The Vanguard Capital Markets Model forecasts distributions of future returns for a wide array of broad asset classes. Those asset classes include Australian and international equity markets, several maturities of the Australian Treasury and corporate fixed income markets, international fixed income markets, money markets, commodities, and certain alternative investment strategies. The theoretical and empirical foundation for the Vanguard Capital Markets Model is that the returns of various asset classes reflect the compensation investors require for bearing different types of systematic risk (beta). At the core of the model are estimates of the dynamic statistical relationship between risk factors and asset returns, obtained from statistical analysis based on available monthly financial and economic data from as early as 1960. Using a system of estimated equations, the model then applies a Monte Carlo simulation method to project the estimated interrelationships among risk factors and asset classes as well as uncertainty and randomness over time. The model generates a large set of simulated outcomes for each asset class over several time horizons. Forecasts are obtained by computing measures of central tendency in these simulations. Results produced by the tool will vary with each use and over time.

Although central tendencies are generated in any return distribution, Vanguard stresses that focusing on the full range of potential outcomes for the assets considered, such as the data presented in this paper, is the most effective way to use VCMM output.

The VCMM seeks to represent the uncertainty in the forecast by generating a wide range of potential outcomes. It is important to recognise that the VCMM does not impose "normality" on the return distributions, but rather is influenced by the so-called fat tails and skewness in the empirical distribution of modelled asset class returns. Within the range of outcomes, individual experiences can be quite different, underscoring the varied nature of potential future paths. Indeed, this is a key reason why we approach asset-return outlooks in a distributional framework.

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