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MLC's scenario insights & portfolio positioning

MLC Horizon, MLC Inflation Plus and MLC Index Plus portfolios

February 2019

CPD points will be available soon. Please check back at the end of January to earn CPD points.

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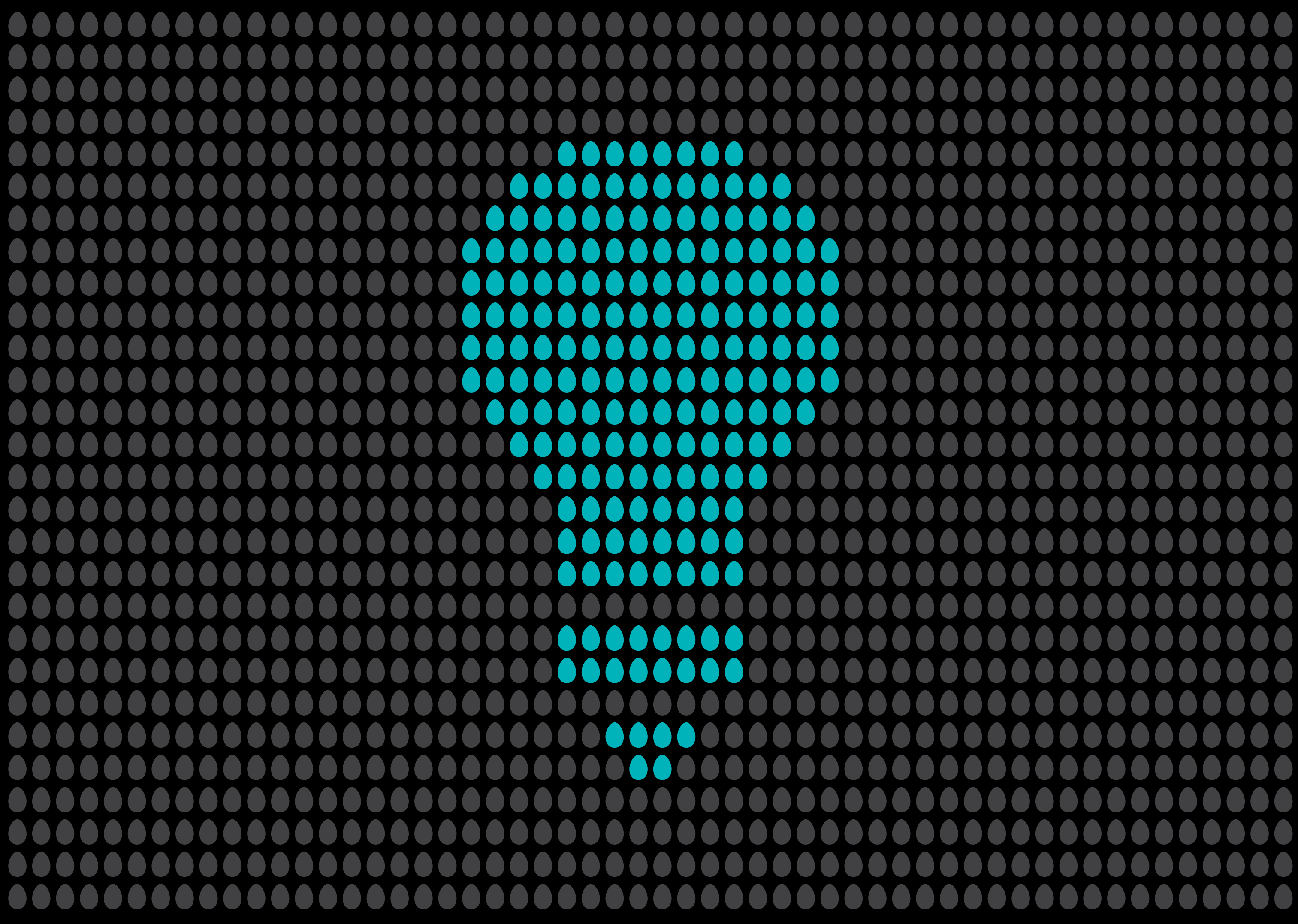

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Update for the quarter ending 31 December 2018.

Quarterly insights

In risk markets, calm begets calm and fear generates further fears. Prolonged asset price stability can occur both during times of economic prosperity and even when there is considerable uncertainty. Bad data or a shock can sometimes ignite a sharp price sell-off, yet at other times barely cause a tremor. Even with slow global growth and an array of risks to future earnings, shares moved progressively higher between mid-2012 and mid-2015. Britain's decision to exit Europe in 2016 was a shock, yet the Brexit decision proved only a blip for global shares. However, the surge in US wages growth in January 2018 was enough to prompt a severe sell-off in global shares.

Behavioural finance research now gives us a better understanding of why investors overreact to some data and not at all to other news. Since the world is extremely complex, investors must rely on simplifications or shortcuts to make sense of it. These shortcuts work reasonably well a lot of the time but can result in systematic errors in understanding. In an environment where the news flow is mostly positive, investors both tend to ignore bad news and extrapolate the continuation of good news, which leads to neglect of risk considerations.

These extrapolative beliefs evolve as the news flow shifts through time. A long period of predominantly positive news leads to excessive optimism about the future. This overestimation of future return potential makes it difficult to imagine what could go seriously wrong. We have just been in a period of overoptimism like this. It was encouraged or even engineered by central banks' ultra-low interest rates and their asset purchases since the Global Financial Crisis (GFC). Essentially investors were forced up the risk spectrum resulting in self-fulfilling strong returns.

However, the fragility of this artificial environment became more apparent during 2018. The underlying key change has been tightening liquidity. During the March quarter of 2018 we saw the first challenge for some time to the perception that the strong return environment will persist. Stronger US wages data resulted in a sharp interruption to the US share market's seemingly inexorable rise. The rise in volatility was a reminder of underlying fragilities that have accumulated in the financial system.

Investor behaviour seems to an extent to have shifted towards 'selling the rally'. This is in contrast to what has been a perennial 'buy the dip' mentality over the past decade. However, a sustained shift in investor expectations requires repeated confirmations that the future is not as rosy as previously presumed. In the final quarter of 2018, monetary policy, global trade and related concerns about the Chinese economy, as well as the US budget impasse all combined to more clearly shift investor expectations. This resulted in the worst year since 2008 for share markets. However in contrast to 2008 where bonds rallied strongly, bonds have not been effective diversifiers of risk during 2018. During 2018 both bonds and shares declined in value at the same time. This means that the only reliable way to limit downside risk has been to accept lower returns. Our understanding of this reality is the reason our Inflation Plus portfolios have been positioned so defensively.

MLC'S ACTIVE INVESTMENT APPROACH

- Key to MLC's market-leading investment approach is our unique Investment Futures Framework.
- In an unpredictable world, the Framework helps us comprehensively assess what the future might hold. By taking into account the many scenarios that could unfold – positive and negative – we gain continuing insight into return potential, future risks, and opportunities for diversification.
- The information from the Framework gives us a deep understanding of how risks and return opportunities change over time for both individual assets and total portfolios.
- We can then determine the asset allocations that will help achieve our portfolios' objectives with the required level of risk control, and adjust the portfolio if necessary. We'll generally reduce exposure to assets if we believe risk is too high. We prefer exposures with limited downside risk compared to upside potential.
- More information about MLC's investment approach is in Appendix 2.

What does the future hold? While it can take a long time, the underlying investment fundamentals will ultimately drive investment outcomes. Asset prices that are high are indicative of low return potential. While there are some exceptions (emerging market shares), our assessment is that asset prices are mostly not cheap and in some cases (US shares, nominal bonds) are still high. However, the path of returns will depend on how investor expectations change. A trade deal between the US and China that's favourable for economic growth is still possible. The argument over the US-Mexico border wall can be resolved. We also know that the US Federal Reserve (Fed) is 'data dependent' and that US growth remains robust. So a positive mindset could resume across global financial markets.

However, liquidity is tightening and has turned into more of a headwind. The rise in volatility that has ensued is a reminder of underlying fragilities that have accumulated in the financial system. We also know that the Fed understands the imperative to build policy options for the next economic downturn.

Indeed, the Fed, under the new leadership of Jerome Powell, has removed the 'lower for longer' bias that distorted the outlook for US interest rates. This is a very important step forward for all risk asset markets. The assumption of 'lower for longer' interest rates has been a core driver of stretched valuations across asset classes. Notably it has also been much harder to find opportunities for diversification in both traditional and alternative assets.

Even small movements in long-term discount interest rates can have a profound effect on the valuation of all assets. Share prices, for example, can move significantly if the market revises their cost of capital assumptions. Should the economy continue to operate above potential, further interest rate rises by central banks would likely drive the market's perception of the neutral (natural) interest rate higher again.

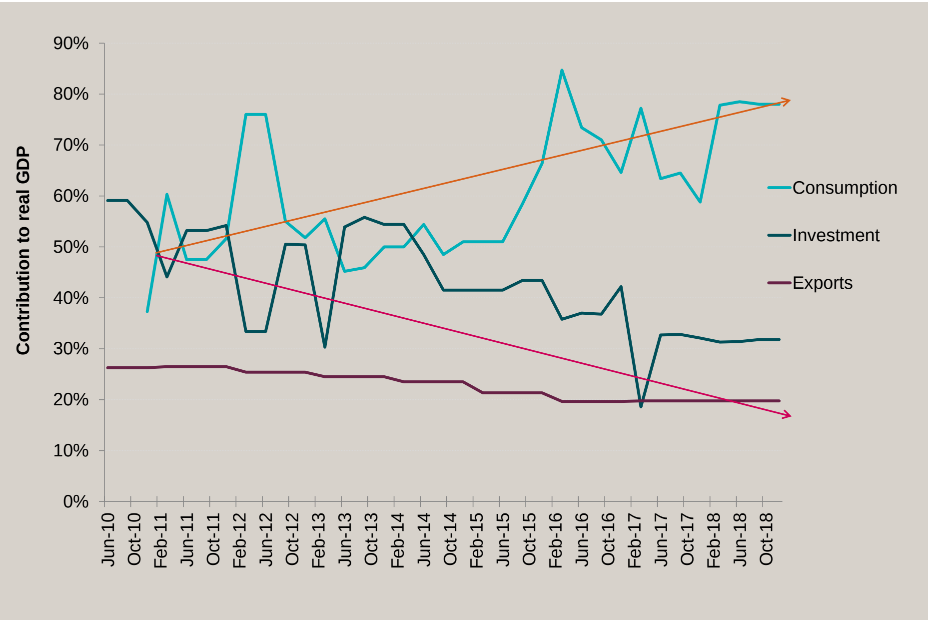
Yet, even if the real economy remains strong enough for interest rates to normalise, it is not true that a strong economy inevitably drives a strong share market. For just as the market rewarded taking risk in the face of low growth and high uncertainty from 2012 to 2015, risk can remain unrewarded during periods of economic growth, particularly when inflation is volatile or stubbornly low. In this vein, perhaps the most threatening aspect of a strong US economy for shares is that this could lead to the erosion of the high profit margins across most share sectors. Tight labour markets continue to threaten wage growth, while higher borrowing costs will eventually roll into financing costs and dampen net profit margins. Thus while corporate top line revenue growth may persist, given a strong economy, there is no guarantee that profit growth will keep up with expectations. This leaves investors potentially facing the double penalty of a rising cost of capital and declining profit growth.

Will the economy remain resilient enough for interest rate expectations to normalise? This is impossible to say. However, the friction between US President Donald Trump and the 'rest of the world' should be expected to undermine global growth prospects. The global economy will find it difficult to dodge the negative impact of an escalation in trade tensions if China President Xi Jinping and Trump are unable to find common ground on bilateral trade. Meanwhile, the UK is risking a complete dislocation from Europe, its main trading partner, as the politics of Brexit play out in front of a global grandstand that remains dumbfounded that the UK decision-making process appears to be in a state of paralysis. Common sense suggests that the UK government will push out the decision date, but common sense is a commodity in short supply. As we write this report Prime Minister Theresa May's deal has been rejected by parliament, what happens next is highly uncertain. However, importantly, there is now an identifiable majority of MPs who are against a no-deal Brexit. There are also others in May's government, that have refrained from voting against the government while May's deal is on the table, who may now join them. This creates the possibility that a cross-party coalition forms to take control of the path forward. This possibility may be the best hope for a clear and orderly decision to be made on an alternative path. The US economy is also at risk from the current poor policy such as the recent ructions over funding for the US-Mexican border wall.

Global trade and open capital markets are a mainstay of modern economic progress. Trade and cross-border investment greatly increase the efficiency of matching production and consumption in an otherwise fragmented distribution of global resources. Interruption of trade impedes the flow of these benefits. Any adverse changes in local supply and demand dynamics have the potential to lower productivity, thereby increasing prices and decreasing the standard of living. The past two decades have witnessed great leaps forward in globalisation. This has resulted in the partial transfer of productivity gains from Eastern producers to Western consumers. With globalisation, there has been some improvement in the standard of living in developed nations despite poor increases in economic efficiency and pockets of consumption-fuelled indebtedness.

While all countries should be fretting to some extent over threats to trade, the stakes remain highest for China. China has made great economic strides and undergone rapid and profound change but remains reliant on exports. Domestic consumption has indeed grown in importance for China. However, as shown in Chart 1, the main change has been a fall in investment's share which declined from a remarkable high of 55% of Gross Domestic Product (GDP) in 2013 to a much more balanced 30% in 2017 (the latest data point). At the same time, the share of gross exports has fallen by significantly less (from 26% to 19% of GDP). Currently, nominal Chinese exports expressed in renminbi (RMB) are still growing slightly faster than aggregate nominal GDP.

Chart 1: Contribution to China's real GDP



Sources: Bloomberg and NAB Asset Management Services Limited.

The importance of trade to the continued evolution of the Chinese economy means that the provocative stance of the Trump administration poses a difficult problem for the Chinese leadership. Xi Jinping clearly wants to leave a legacy of growing pride across China, underpinned by economic and cultural progress and a domestic perception that China is respected by global peers as a formidable power. Yet the Politburo of the Communist Party of China is fully aware that the road to success will quickly become lengthened if the trade pipes become blocked. This, combined with a tendency for the current Chinese leadership regime to favour pragmatism over outright idealism, means the US likely has the upper hand in trade negotiations.

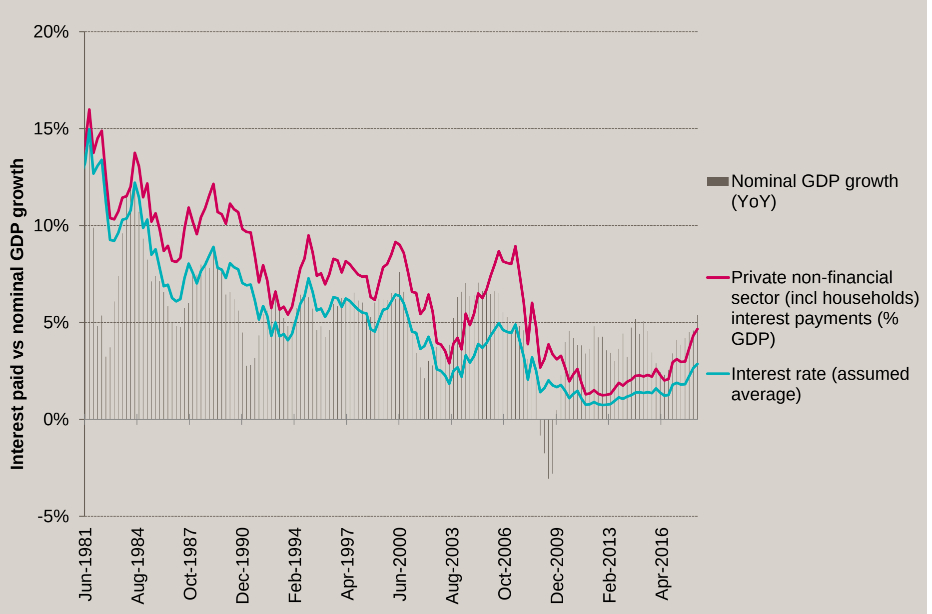
The Trump administration also clearly believes this to be the case. This line of logic suggests that the US is set to gain a meaningful portion of the set of concessions proposed to China. Among these, the lessening of support for industry should be favoured by the Chinese as it aligns well with a longer-term vision to rebalance the economy and lessen the muscle of state-owned enterprises (SoE). Whether this, and an agreement to set an import target for US goods and services, satisfies President Trump remains to be seen. Technology market access is set to be a much more sensitive topic. The Chinese leadership are more likely to resist the necessary lessening of censorship that will enable US technology firms to distribute product in the Chinese market.

But like all base cases built on a presumption of knowledge and rationality (neither of which are reliable), it would be unwise to discount completely the odds of a disruptive escalation in the trade war. This escalation would directly impact global economic progress and pressures corporate earnings.

We can't discount completely the odds that China is able to successfully stare down the US and resist a clip on export earnings. Both leaders are under pressure domestically, and neither will want to be seen to have lost this battle. Furthermore, the linkages between the US and China extend far beyond trade in goods and services. While China almost certainly has the lower hand from a trade perspective, China wields strength in other areas such as foreign reserve assets (China's holding of US government treasuries) and well understands the impact that a weaker RMB currency might exert on the US economy.

While trade tensions simmer, the US yield curve has grabbed attention over the last quarter. Increases to the Federal funds interest rate have pushed borrowing costs higher, whereas longer-term interest rates remain stubbornly contained at low levels. 'Finance-101' teaches that flattening yield curves are the harbinger of recession. Much has recently been written in recognition of this. Despite the straight forward explanation of why yield curve inversions can precede faltering economic growth, it is far from clear that the circumstances required to translate an inverted yield curve into a recessionary signal currently exist. First, outside of the public sector, leverage across both corporate America and the household sector remain reasonably contained relative to income and income growth (see Chart 2). Interest payments by the non-financial private sector expressed as a portion of income have risen of late, but remain approximately 200 basis points lower than they were between the mid-1980's and 2006. If history is any guide, then there is reason to believe that the US private sector economy can continue to support higher borrowing costs unless nominal growth itself falters (which in turn would probably spur a cut in interest rates).

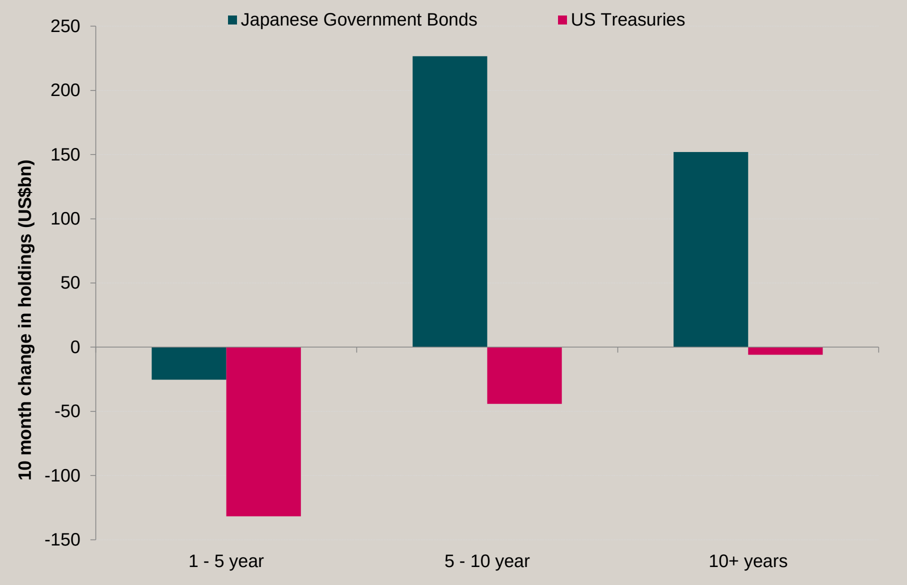
Chart 2: Private non-financial sector interest paid vs nominal GDP growth



Sources: US Federal Reserve, US Bureau of Economic Analysis (BEA) and NAB Asset Management Services Limited.

But if the leverage profile of the private sector is as far away from dangerous (as the data implies), then why have bond investors allowed the spread between long and short rates to converge to the degree that they have? While there are multiple possibilities to explain this phenomenon, one plausible explanation comes from a perhaps unintended consequence of unorthodox policy and the current disjoint policy between the Fed and offshore central banks, notably the Bank of Japan (BoJ).

Chart 3: Bank of Japan and the Fed's change in holdings over 10 month period



Sources: Bank of Japan, US Federal Reserve and NAB Asset Management Services Limited.

Policy divergence between the BoJ and the Fed is clear in Chart 3. While the Fed has been slowly paring its holdings of 5–10 year US Treasuries, the BoJ has at the same time considerably expanded its holdings of equivalent maturity Japanese Government Bonds (JGBs). This, and the highly interconnected global capital markets make it plausible that the BoJ's activity in the 5-10 year JGB market has spilt over to the market for US Treasuries. The extent to which this influences yields at the longer end of the US yield curve is unknowable. However, at the very least, being cognisant of the possibility that offshore policy might explain a degree of the US yield curve flattening, frees us to think about factors outside of recession fears and in doing so potentially glean other insights from observing the bond market.

Tying all this together is difficult. Both the real and financial economies remain caught in a position where a wide range of distinct outcomes are credible. Financial conditions remain loose, but market liquidity is dropping. Global growth remains challenged, but not without potential. Supply-demand seems to be caught on a fine line between disinflation and deflation. So policymaking by central banks and government remains key. Risk may well continue to be rewarded, but this may prove unwise if one chooses to ignore elevated valuations and gamble on either continuation of corporate-friendly growth or the 'central bank put', especially while diversification remains challenged. Given the range of disparate outcomes, we believe focussing tightly on risk control while seeking out areas where opportunity presents in the face of volatile pricing will be beneficial. This is a challenging risk period that will test all investors.

The Investment Futures Framework: Scenarios and changes in return potential

In managing MLC's multi-asset portfolios we assess potential future risks and opportunities. We invest by understanding what could happen as opposed to picking the single future that will unfold. The future is not predetermined; it depends on what policymakers do, how companies behave and how these things compare to investors' expectations.

By understanding the different ways in which the future might unfold we make informed choices about the trade-offs between risk and return. A higher exposure to shares will increase returns in some scenarios, but reduce returns in others. Where there are assets that generate positive returns when share markets decline, we can have a higher share market weighting. Nominal bonds played an important diversification role through the GFC. But today, low starting bond yields mean they are at best poor diversifiers of share market risk and are outright risky in some circumstances.

Looking forward from today, while valuations are less extended than they were before the third quarter sell off and we acknowledge the potential for strong returns to resume, markets have not yet re-priced sufficiently to raise return potentials and dampen risk to the extent needed for Inflation Plus to make a very significant move toward equity risk. However, in January we have cautiously added to our share allocations for Inflation Plus, but we continue to believe that it will be difficult for the strong returns of past years to resume and that significant vulnerabilities and downside risks remain. While it may still be possible for policy makers to engineer a benign path forward, we must take seriously the possibility of further market declines. Having said that, we are assessing small increases to risk positioning within Inflation Plus Assertive in select share markets. Our aim is to understand the key things that could happen and then identify the most appropriate trade-off of risk and return, given the objectives and constraints for each portfolio, to find at least an acceptable outcome regardless of what happens.

Our promise, particularly to our Inflation Plus portfolio investors, is to maintain the risk control discipline - this means that in a worst-case scenario we must avoid significant negative returns over each portfolio's time horizon. However, our awareness of the possibility of another speculative rally means we need to be nimble and rapidly re-assess positioning if the market pulls-back further - though we still suspect further strong rises have a declining probability we recognise that 'animal spirits' can mean that challenging news is ignored.

Due to the prevailing distortions and policy uncertainty, our tailored scenario set contains more complexity and covers a wider range of outcomes for assets than would be the case from a less distorted starting point.

The Investment Futures Framework scenario sets explained

Our approach assesses and analyses a comprehensive set of possible future scenarios – this is referred to as the Investment Futures Framework. This thorough assessment of the different ways in which the future might unfold provides us with detailed insight into return potential and, most importantly, the sources and the extent of risk and the means of efficiently controlling risk. We track how future risk and return potential changes through time. The process provides a deep and detailed understanding of future risks, return potential and the opportunity for diversification. Risk is not a statistic; it arises from a range of real economic, political and business events. Using our Framework's comprehensive assessment of the potential sources of future risk we are equipped to position portfolios to extract return potential while maintaining the required risk control.

The Investment Futures Framework comprises both our **generic** broad set of 40 scenarios which pivot around the main drivers of returns – the macroeconomic drivers and investor behaviour (swings in the level of optimism or pessimism, and rational changes in risk perception) – and a **tailored** scenario set which includes as many primary distinctive scenarios as is necessary looking forward from the current starting point.

The generic set of scenarios is designed to have relevance from any starting point and provide a consistent barometer of risk and return through time. The smaller tailored set of scenarios pivot around the key characteristics and uncertainties in the current environment. The tailored set might be seen as consisting of the most obvious potential futures, though we are aware that what seems most obvious today may not be after the event – the future is only ever obvious once it has become the past.

These two scenario sets in combination are used to assess portfolio positioning. Both sets of scenarios are updated as asset prices change – as asset prices change, future return potential and possible future risks change. We take this evolution into account in positioning our portfolios.

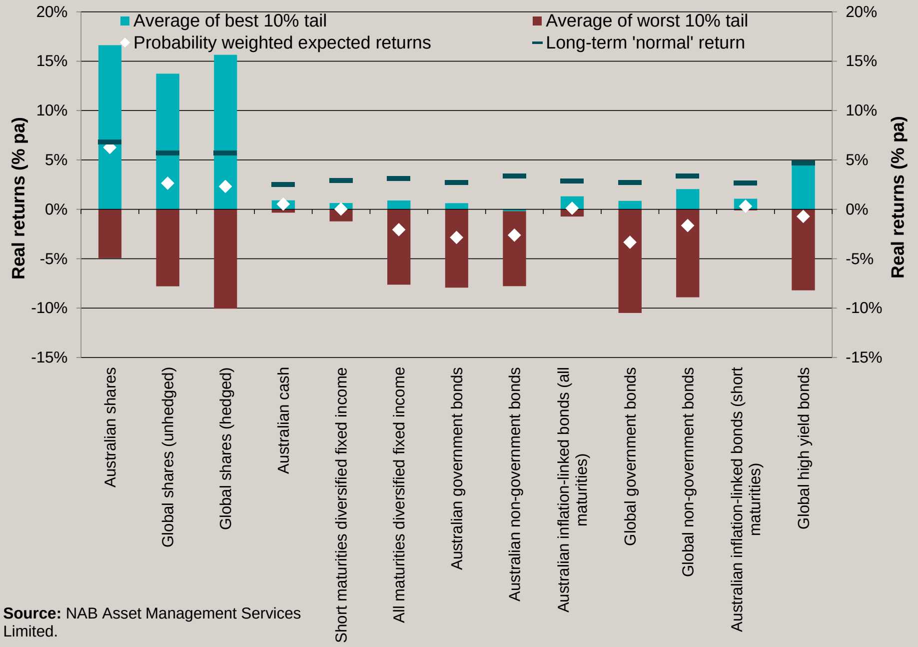
The fundamental underlying challenge remains widespread high debt loads. This means that outcomes will not just pivot along inflation and growth paths, but will be heavily influenced by decisions to either save or borrow in both the private and public sectors and by the direction of policy that might or might not foster an improvement in efficiency and a pickup in potential growth. Recent fiscal stimulus in the US has the potential to increase inflationary pressure while crowding-out private sector spending as ultimately a rapidly rising fiscal deficit needs to be controlled. Credible outcomes range from favourable improvements in nominal prices and improvements in capital productivity (ie **Inflationary debt resolution** scenario) through to the **Stagflation** and **Extended risk aversion** environments that we expect would eventuate should today's unorthodox policies fail and fiscal stimulus disappoints or fails to materialise. The political pressures that arise from what are now multiple displays of voter discontent with the status quo reinforces the need to change the policy agenda. This is a risk point to watch closely, particularly as it has coincided with changing

The Investment Futures Framework: Scenarios and changes in return potential

perceptions about monetary policy efficacy.

The potential real returns for each asset class are shown in Chart 4.

Chart 4: 40 scenario set (generic scenarios) potential real returns (December 2018) – 5 years, 0% tax with franking credits, pre-fees, pre-alpha



Source: NAB Asset Management Services Limited.

The probability-weighted real returns are shown in the chart (diamonds) have improved over last quarter. For comparison, we've provided long-term 'normal' return expectations which are set by considering a stable fair value world - these are shown by the horizontal lines. Also, as an indicator of how uncertain these returns are, we've taken the bottom (and top) 10% of the scenario real returns and calculated the probability-weighted average in those 'tail' outcomes. These are shown in the bars. Asset classes with wider ranges could have more extreme return outcomes than those with narrow ranges.

Performance expectations

Chart 5 shows return potential for the MLC Horizon, Inflation Plus and Index Plus portfolios based on our generic (40) scenario set looking forward from the end of December 2018.

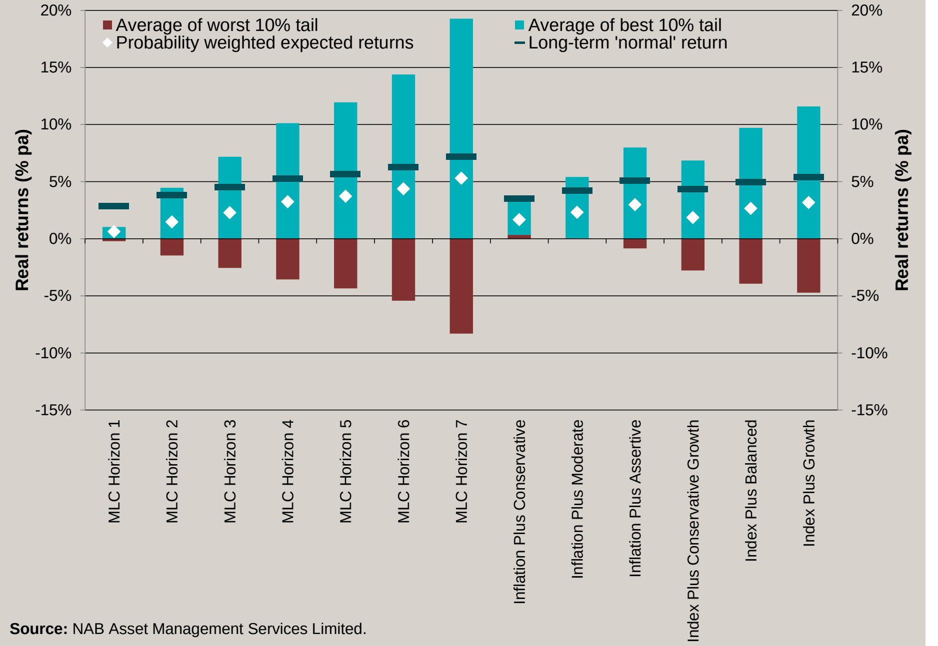
As with previous quarters, the chart shows that on average, looking across the whole scenario set, the potential reward for taking risk has improved but remains limited. In the event that a scenario with relatively higher returns occurs, the returns of those portfolios with larger share allocations will be sharply higher. However, looking across the range of future possibilities and using our assessment of their probabilities, it is clear that the reward for risk-taking could disappoint investor expectations.

Comparing the MLC Inflation Plus to the MLC Horizon and Index Plus portfolios, the stronger risk focus of the Inflation Plus portfolios is evident. Consistent with their objectives, these portfolios have responded to shrinking return potential and weakening risk diversifiers by reducing exposures to riskier assets. This reduces the return potential in strong scenarios but provides tight risk control in the event that an adverse environment occurs.

In positioning the MLC multi-asset portfolios we take into account outcomes in all our scenarios. For the MLC Inflation Plus portfolios, our focus is on strictly limiting both the probability and most importantly the extent of negative real returns over each portfolio's time horizon in the event that an adverse scenario occurs, while extracting as much return potential as possible subject to this risk constraint.

Also, in relation to the MLC Inflation Plus portfolios, the chart suggests that with a single static asset allocation, a particularly positive scenario is required to meet the return hurdle. Of course, in practice the portfolios' asset allocations are not static. We evolve the MLC Inflation Plus portfolios' allocations dynamically through time to control risk as required and exploit opportunities as they arise. However, we will not chase returns to meet the return hurdle if that requires too great a risk exposure. If a higher level of volatility persists, this may result in new opportunities to enhance returns in an appropriately risk controlled manner.

Chart 5: 40 scenario set (generic scenarios) potential real returns (December 2018) – 5 years, 0% tax with franking credits, pre-fees, pre-alpha



Source: NAB Asset Management Services Limited.

The probability-weighted real returns are shown in the chart (diamonds). For comparison, we've provided long-term 'normal' return expectations which are set by considering a stable fair value world – these are shown by the horizontal lines. Also, as an indicator of how uncertain these returns are, we've taken the bottom (and top) 10% of the scenario real returns and calculated the probability-weighted average in those 'tail' outcomes. These are shown in the bars. Portfolios with wider ranges could have more extreme return outcomes than those with narrow ranges.

MLC Inflation Plus portfolios

The MLC Inflation Plus portfolios have flexible asset allocations with few constraints which enable us to target tight control of risk over each portfolio's time horizon. In particular:

- we limit vulnerability to negative returns to preserve capital in above-inflation terms over the defined time frame – if there is higher prospective risk this triggers tighter risk control
- in other scenarios, we aim to deliver attractive inflation plus returns over the defined time frame, and
- we will not chase higher returns if the risks of doing so are inconsistent with capital preservation over each portfolio's investment time frame.

Returns over the past year have been very modest, particularly relative to those generated in prior years. The past 12 months have been challenging for our defensive positioning but it has served clients well during the various bouts of volatility we've experienced this year.

Here is a summary of the positioning of the MLC Inflation Plus portfolios.

Asset class	**Change in target allocation to asset classes in the MLC Inflation Plus portfolios (in MLC MasterKey's super and pension products) over the December quarter**			**Comment**
	Conservative	**Moderate**	**Assertive**	
China A-shares with downside limit of 20% (through derivative strategies)	Zero allocation	Steady (+0.5%) allocation	Steady (1.0%) allocation	We maintain our exposure to the on-shore China-A share market using the combination of a Total Return Swap (TRS) and a 20% out-of-the-money put. As the put is completely funded by the fee received from the TRS, the payoff profile for this exposure is performance of the China-A share market (AUD unhedged) with a downside limit of -20%. Due to the high growth potential and volatility of Chinese shares, this type of exposure has a favourable prospective payoff profile. To compensate for the increase in risk, we made a commensurate de-allocation from emerging market shares.
Emerging market shares	Zero allocation	Steady allocation	Steady allocation	Small emerging markets shares exposure.
Defensive Australian shares	Steady allocation	Steady allocation	Steady allocation	Our defensive shares investment process directly takes account of the risks identified in our scenarios analysis. By investing in defensive Australian shares we're able to have a higher exposure to Australian shares than we otherwise would.
Global shares (through derivative strategies)	Zero allocation	Steady allocation	Steady allocation	Tailored exposure to specific markets via futures on the basis of fundamental value and risk offsets via currency exposure plus a call options exposure provides a risk controlled exposure to share market upside with a limited and pre-defined downside. This strategy exploited very low levels of volatility at the start of the year making the options unusually inexpensive.
Defensive global shares (unhedged)	Steady allocation	Steady allocation	Steady allocation	Primary global share exposure is defensive. The portfolios have a strong bias to absolute, not index-relative, shares.
Foreign currency exposure	Call options protection maintained	Call options protection maintained	Call options protection maintained	AUD/USD upside protection maintained at a lower level.
Gold exposure (through derivative strategies)	Zero allocation	Zero allocation	Steady allocation	Gold helps protect the portfolio against a range of shocks and inflationary scenarios. However the gold price can be volatile and the concept of fair value is nebulous. Exposure to gold is through our derivative strategies using futures.
Low correlation strategy	Steady allocation	Steady allocation	Steady allocation	High quality, transparent hedge fund strategies are a relatively important source of return potential in a world where it has become more difficult to generate returns with reasonable risk. However, these strategies are exposed to a variety of risks, and allocations are sized accordingly.
Real return strategy	Steady allocation	Steady allocation	Steady allocation	Allocation to our multi-asset real return manager, Ruffer, maintained.

Asset class	Change in target allocation to asset classes in the MLC Inflation Plus portfolios (in MLC MasterKey's super and pension products) over the December quarter			Comment
	Conservative	**Moderate**	**Assertive**	
Derivative strategies	Steady allocation	Steady allocation	Steady allocation	Focus has increased on risk controlled equity exposures using derivative strategies opportunistically, taking advantage of favourable market pricing where this is consistent with our scenario insights.
Global private assets	Steady allocation	Steady allocation	Steady allocation	Within the private equity portfolio some rebalancing is underway which reduces the venture capital exposure. This locks in what have been very strong returns in this part of the market and reduces the overall risk profile of the strategy.
Global property securities	Zero direct exposure	Zero direct exposure	Zero direct exposure	In the portfolio we are limiting exposure to interest rate sensitive assets. We prefer the broader opportunity and absolute return orientation of defensive global shares and multi-asset strategies. There is potential reversion in the prices of higher yielding assets such as Real Estate Investment Trusts (REITs) in scenarios in which monetary policy normalises.
Global government bonds	Zero direct exposure	Zero direct exposure	Zero direct exposure	Deeply unattractive, with limited diversification benefit.
Australian inflation-linked bonds	Steady allocation	Steady allocation	Steady allocation	Maintaining emphasis on short duration inflation-linked bonds, which helped protect returns as yields rose during the quarter.
Insurance-related investments	Zero allocation	Steady allocation	Steady allocation	Insurance-related investments are uncorrelated to other asset classes though it's a risky exposure that we believe is appropriate in portfolios with a sufficient investment time horizon.
Bank loans	Steady allocation	Steady allocation	Steady allocation	Floating rate loans offer some exposure to diversifying income-based risk premia without as much capital risk as fixed coupon bonds. While this exposure has been attractive in the current environment, tight spreads increase price risk and a tendency for low liquidity in adverse environments limits the degree to which portfolios should have exposure.
Australian non-government bonds (short duration)	Steady allocation	Steady allocation	Steady allocation	These short-duration bonds offer some return enhancement while limiting additional risk.
Cash	Steady allocation	Steady allocation	Steady allocation	We continue to keep significant powder dry (in cash) waiting for better opportunities. The benefit of cash allocations comes from the optionality it provides in a risk-off environment.
Borrowings	Borrowing not permitted	Borrowing not permitted	No borrowings	Reward for risk is too limited.

MLC Horizon portfolios

For the active management of the MLC Horizon portfolios, risk is primarily benchmark-related. Benchmarks have been designed to efficiently generate above-inflation outcomes on the basis of long-term investment assumptions and taking into account that over time a broad range of scenarios could play out. For setting our benchmark asset allocations we use our comprehensive 'generic' set of scenarios which comprises a broad set of distinctive potential futures which are not grounded in current conditions. Target allocations deviate from the benchmark when (as is typically the case) the prospective medium-term investment environment differs from these long-term assumptions.

Our scenarios analysis (taking into account current starting conditions) is used to identify target allocations which are more risk-return efficient than the benchmark which, because these portfolios must remain true to label, have constraints on the extent to which they can deviate from the benchmark. In particular, these traditional multi-asset portfolios have constraints to the mix of fixed income and shares which they can hold. This provides a level of certainty to investors about where their money will be invested, however it also means that portfolio risk is primarily a function of market risk.

As the riskiness of assets changes through time, we vary the asset allocation to position the portfolios to achieve a higher reward for risk than the benchmark. The risk aware nature of our investment process tends to mean that value is added via the adoption of defensive positioning when risk is high, which reduces loss exposure.

For MLC Horizon portfolios we are maintaining a relatively defensive orientation, in part this comes from exposures to Inflation Plus but also through significant deviations from benchmark debt allocations. We continually test our thinking, and we retain high conviction in the appropriateness of this positioning. While the flexibility is more limited and exposure lower, we are utilising similar derivative strategies, as for Inflation Plus portfolios, to enhance the defensiveness of share exposures and manage exchange rate risk.

Here is a summary of the positioning of the MLC Horizon 4 Balanced Portfolio.

	MLC Horizon 4 Balanced Portfolio (in MLC MasterKey's super and pension products) target asset allocation at end of the December quarter			**Comment**
	Under	**Benchmark**	**Over**	
Growth-focussed assets		•		
Australian shares		•		Retained benchmark allocation.
Global shares (unhedged)			•	We continue to be overweight foreign currencies (underweight the AUD), with an overweight allocation to unhedged global shares at the expense of hedged global shares. While foreign currency remains an important source of risk control, its power as a risk diversifier has reduced as the AUD has declined significantly from peak levels.
Global shares (hedged)	•			
Global property securities		•		Retained benchmark allocation – the benchmark allocations are underweight versus peers.
Income-focussed assets	•			
Cash			•	To reduce interest rate risk in MLC Horizon 2 to 5 portfolios we've maintained the overweight to cash and underweight exposure to Australian and global bonds. We've taken this position in response to low bond yields, gradually rising risks of higher inflation and potential headwinds from a slow tightening in monetary conditions.
Australian bonds - All Maturities	•			Underweight to longer duration Australian bonds maintained for MLC Horizon 2 to 5 portfolios, to reduce interest rate risk.
Australian inflation-linked bonds		•		This allocation to inflation-linked bonds in MLC Horizon 2 to 5 portfolios includes exposure to both short and all maturities duration inflation-linked bonds. The portfolios are underweight all maturities exposure, and overweight the short duration exposure which reduces interest rate risk.
Global bonds - All Maturities	•			Underweight to longer duration global bonds maintained for MLC Horizon 2 to 5 portfolios, to reduce interest rate risk.
Global non-investment grade bonds (high yield bonds and loans)		•		Retain benchmark allocation.

	MLC Horizon 4 Balanced Portfolio (in MLC MasterKey's super and pension products) target asset allocation at end of the December quarter			Comment
	Under	Benchmark	Over	
Alternatives			•	
Global private assets		•		Retain target benchmark allocation.
Real return strategies (including Inflation Plus)			•	MLC Horizon 4 and 5 portfolios remain overweight real return strategies, other portfolios are at benchmark. We believe the allocation to real return strategies provides the portfolios with a greater potential ability to preserve investors' capital in volatile markets and provides our investors with potentially better investment returns for the level of risk we take.
Low correlation strategy		•		This fund of hedge funds strategy aims to generate a return above cash and deliver returns that are mostly independent of share market performance.

MLC Index Plus portfolios

Risk is primarily benchmark-related for the Index Plus portfolios. Benchmarks have been designed to efficiently generate above-inflation outcomes on the basis of long-term investment assumptions and taking into account that over time a broad range of scenarios could play out. For setting our benchmark asset allocations we use our comprehensive 'generic' set of scenarios which comprises a broad set of distinctive potential futures which are not grounded in current conditions. Target allocations deviate from the benchmark when (as is typically the case) the prospective medium-term investment environment differs from these long-term assumptions.

Our scenarios analysis (taking into account current conditions) is used to identify target allocations which are more risk-return efficient than the benchmark which, because these portfolios must remain true to label, have limitations in the extent to which they can deviate from the benchmark. In particular, these traditional multi-asset portfolios have constraints to the mix of fixed income and shares which they can hold. This provides a level of certainty to investors about where their money will be invested, however it also means that portfolio risk is primarily a function of market risk.

As the riskiness of assets changes through time, we vary the asset allocation to position the portfolios to achieve a higher reward for risk than the benchmark. The risk aware nature of our investment process tends to mean that value is added via the adoption of defensive positioning when risk is high, which reduces loss exposure.

For MLC Index Plus portfolios we are maintaining a relatively defensive orientation, this is through adjustments made to the fixed income strategy and allocation to the real return strategy. We continually test our thinking, and we retain high conviction in the appropriateness of this positioning.

Here is a summary of the positioning of the MLC Index Plus Balanced Portfolio.

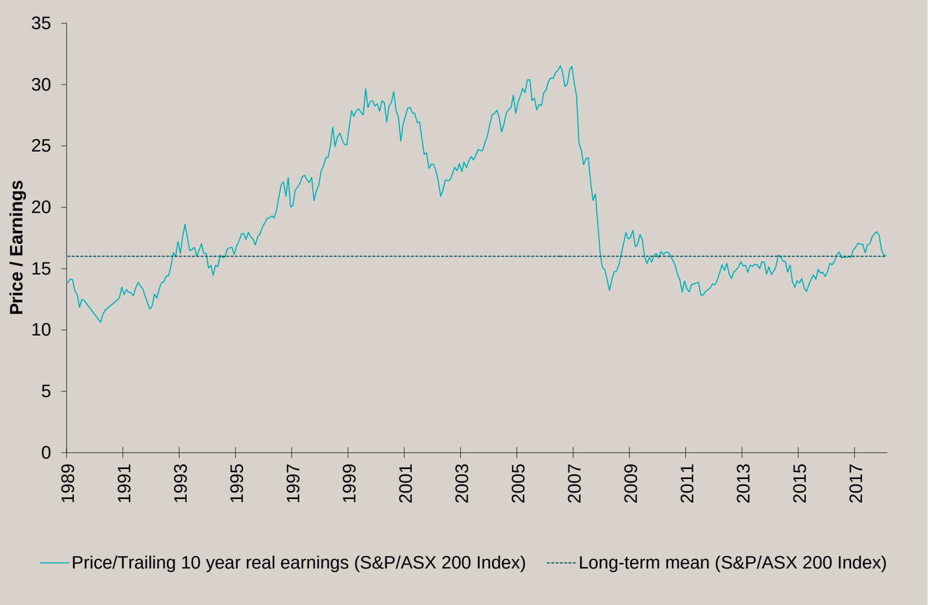
	MLC Index Plus Balanced Portfolio target asset allocation at end of the December quarter			**Comment**
	Under	**Benchmark**	**Over**	
Growth-focussed assets	•			
Australian shares		•		Retained benchmark allocation.
Global shares (unhedged)			•	We continue to be overweight foreign currencies (underweight the AUD), with an overweight allocation to unhedged global shares at the expense of hedged global shares. While foreign currency remains an important source of risk control, its power as a risk diversifier has reduced as the AUD has declined significantly from peak levels.
Global shares (hedged)	•			
Global property securities		•		Retain benchmark allocation – the benchmark allocations are underweight versus peers.
Income-focussed assets			•	
Cash			•	To reduce interest rate risk in all Index Plus portfolios we've maintained an overweight to cash and underweight exposure to Australian and global bonds. We've taken this position in response to low bond yields, gradually rising risks of higher inflation and potential headwinds from a slow tightening in monetary conditions.
Australian bonds – Short maturities			•	Overweight maintained.
Australian bonds - All maturities	•			Underweight to longer duration Australian bonds maintained for all Index plus portfolios, to reduce interest rate risk.
Australian inflation-linked bonds		•		This allocation to inflation-linked bonds includes exposure to both short and all maturities duration inflation-linked bonds. The portfolios are underweight all maturities exposure, and overweight the short duration exposure which reduces interest rate risk.
Global bonds - Short maturities			•	Overweight maintained.
Global bonds - All maturities	•			Underweight to longer duration global bonds maintained for all Index Plus portfolios, to reduce interest rate risk.
Alternatives		•		

	MLC Index Plus Balanced Portfolio target asset allocation at end of the December quarter			Comment
	Under	**Benchmark**	**Over**	
Real return strategies		•		We believe the allocation to real return strategies (through the Simple Real Return strategy) provides the portfolios with a greater potential ability to preserve investors' capital in volatile markets and provides our investors with potentially better investment returns for the level of risk we take.

Asset class indicators

Commentary on the main asset classes follows.

Chart 6: Australian shares

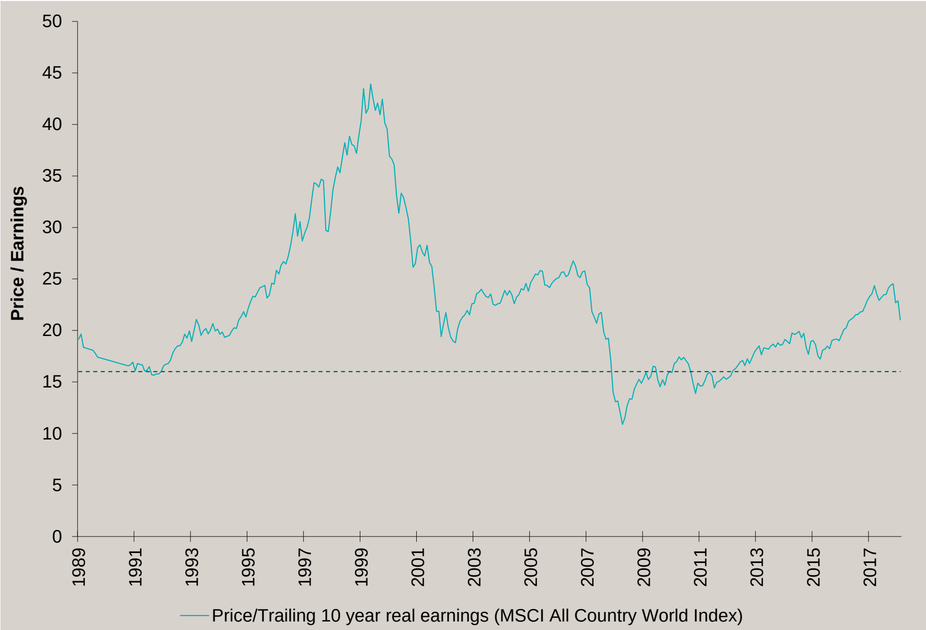


Source: Global Financial Data.

Australian economic data was mixed with concerns over global trade tensions and the softer local housing market being counterbalanced by solid employment growth. However consumers are cautious as seen in sedate retail spending. House prices continue to fall in both the Sydney and Melbourne markets after an extended boom. The Reserve Bank of Australia (RBA) has kept the cash interest rate steady at 1.5%.

Australian shares fell sharply in line with global markets, posting a sharp negative return of -8.2% for the quarter. There were broad based falls across all industry sectors. The Energy sector (-21.3%) was particularly hard hit given falling oil prices. The Consumer Discretionary sector (-14.1%) also endured a sharp decline given concerns over the Australian consumer's willingness to spend given falling house prices. The Australian Real Estate Investment Trust sector was more resilient given lower government bond yields but still fell by -1.9% for the quarter.

Chart 7: Global shares



Source: FactSet.

Global shares (hedged) recorded a negative return of –12.7% over the past three months to December 2018. A weaker AUD performance only partly improved performance with global shares (unhedged) posting a slightly better but still very weak -10.2% quarterly return.

A combination of concerns weighed on global shares including the escalating trade war between China and the US, higher US interest rates, China's growth slowdown as well as European political risks.

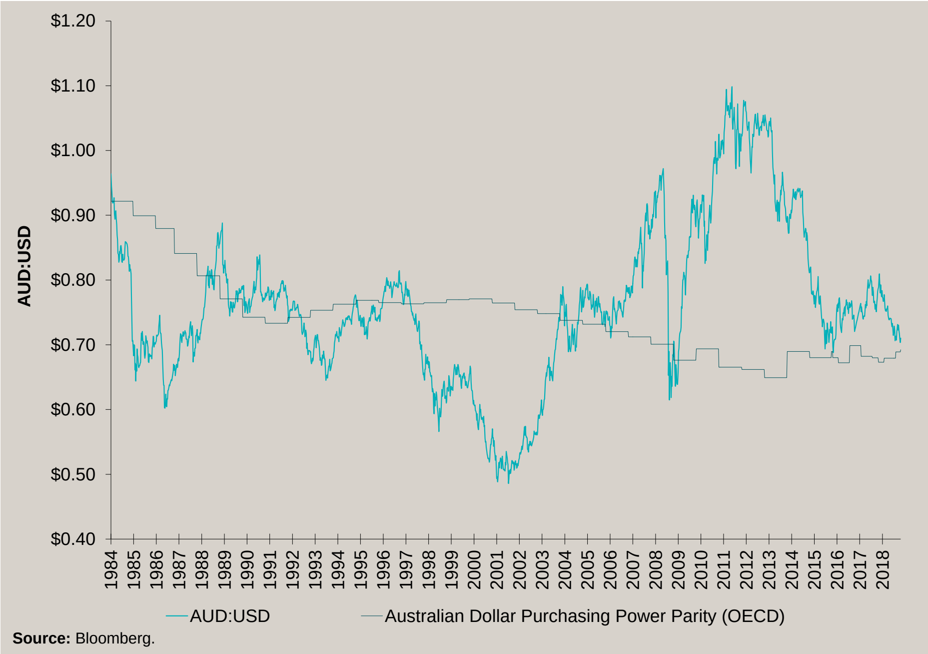
US shares fell sharply by -13.6% in terms of the benchmark S&P 500 Index. Concerns over President Trump's trade policy and the US central bank raising interest rates weighed heavily on Wall Street. The Federal Reserve raised US interest rates by another 0.25% in December.

European shares also fell sharply in line with the global downturn. Germany's share market as represented by the DAX declined by -13.8% with concern that the trade war would spread to European car exports. Political concerns with Britain's pending exit from Europe ('Brexit'), France's 'yellow vest' protests and the Italian government's contentious budget proposals were also key contributing factors to European share weakness.

Asian shares also recorded large declines over the past quarter. The MSCI China share index recorded a sharp fall of -8.3% given global trade tensions and signs of a slowing Chinese economy. Emerging markets (unhedged) were also caught in the global downturn with a -4.8% return. Concerns over inflation and political risks in Argentina and Turkey as well as higher US interest rates have seen emerging markets struggle in 2018.

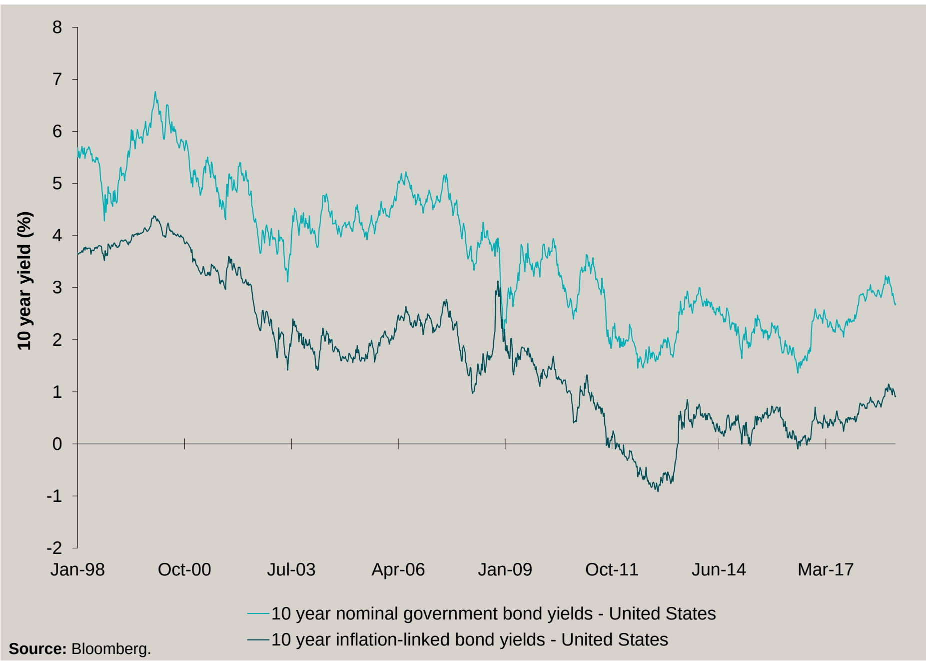
Asset class indicators

Chart 8: Australian dollar



The AUD weakened during the quarter, particularly against the US dollar and Japanese yen. A combination of global concerns weighed on the AUD including higher US interest rates, China's growth slowdown as well as the escalating trade war between China and the US.

Chart 9: Global government bonds



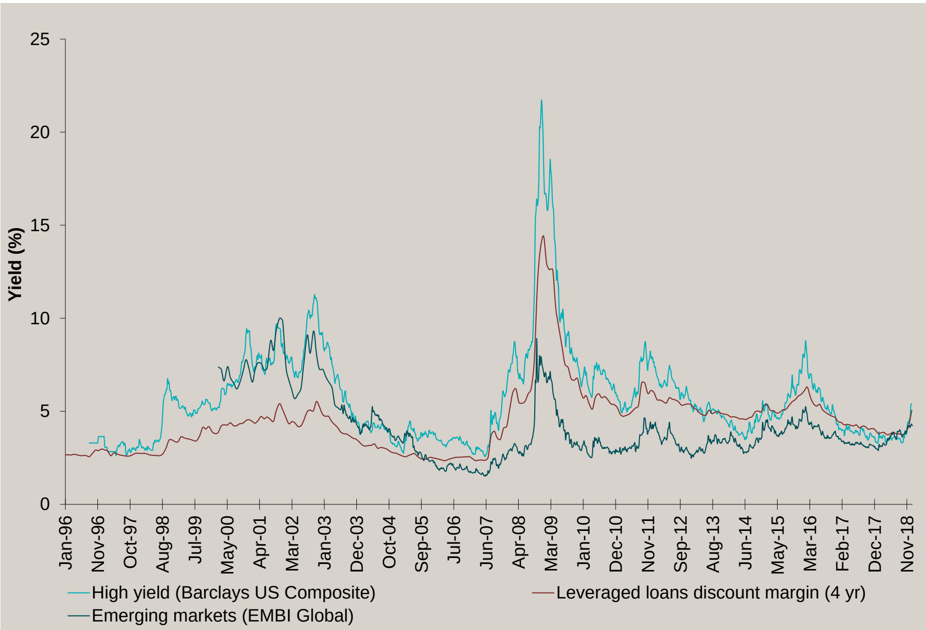
Global bonds (hedged) delivered a solid return of 1.7% for the quarter. Government bonds were the safe haven amidst the global share market falls. Even US and Italian government bond yields made strong returns despite concerns over future budget deficits.

Chart 10: Australian government bonds

Source: Bloomberg.

Australian fixed interest managed a solid return of 2.2% for the quarter. The sharp falls in global share markets favoured Australian government bonds as a safe haven.

Chart 11: Non-investment grade bonds



Sources: Credit Suisse, Barclays and Bloomberg.

Global high yield bonds (hedged) delivered a negative -3.5% return for the quarter. Credit markets proved sensitive to the US central bank raising interest rates as well as the sharp selloff in global share markets.

Appendix 1 – Tailored scenario set

Scenario	Probability ranking (previous rank)	Description
Inflationary debt resolution	1 (1)	Central banks err on the side of supporting growth while economic reforms do not occur fast enough to entirely offset inflationary pressure, resulting in an orderly rise in inflation. Upward pressure on skilled wages supports demand but squeezes profits. Widespread USD, GBP, JPY and EUR liquidity support asset prices, but this is offset by earnings reversion in the US. Bond markets are reasonably well behaved, but yields do rise. Inflation is high enough to help inflate away the debt burden and global productivity levels decline. Emerging markets experience more severe inflation than the developed world, slightly normalising the growth differential across the emerging markets and developed markets.
Three speed global economy (China soft landing)	2 (2)	The world continues to split into three distinct economic growth zones. Emerging markets led global growth with some rebalancing and moderation in China; the US and UK grow at or above trend; while Europe continues to stagnate. Japan struggles to escape stagnation for now. Strong USD and AUD vs JPY and EUR.
Synchronised moderate growth	3 (3)	Japan's and Europe's growth approach trend levels, while the US, UK and China moderate, resulting in a synchronised modest global growth scenario.
Slow global growth deleveraging	4 (4)	A prolonged and slow consumer deleveraging. Slowing consumption growth and falling nominal prices extend the deleveraging cycle. There is global growth convergence as persistent slow growth and further disinflation in the developed world spills over into the now highly indebted emerging world.
Reform (path to growth normalisation)	5 (5)	A growth upside scenario contingent upon coordinated reforms that address inefficiencies that are idiosyncratic to particular economies (eg labour in many European economies and Japan, infrastructure in the US, sector contribution to growth in China and structural issues in the eurozone). This scenario is increasingly more likely in light of recent policy initiatives. The US and UK grow at or above trend, reforms and stimulus in Japan boost growth to above trend, reforms continue in the eurozone which start to increase growth potential and easing of austerity reduces growth constraints.
Inflation shock	6 (6)	Similar to **Stagflation**, though assumed growth is higher. Sharp rise in inflationary expectations.
Australian stress	7 (7)	This vulnerability increases as China's growth slows - a more pronounced slowdown is a potential trigger for this scenario. A consequence of moderating demand for Australia's mineral exports is deteriorating terms of trade which erodes national income. In this scenario, positive real growth could disguise an income recession. Since interest payments must be made in nominal rather than real terms, this stress becomes more acute at higher levels of foreign debt. Where this occurs, coincident with an unravelling of the over-extended residential property market, a worst case scenario loss of confidence in Australia causes funding stress to banks which requires central bank intervention.
Extended risk aversion	8 (8)	A generic scenario to capture prolonged aversion to risk. The probability of a **Eurozone slow disintegration** scenario was previously included in this generalised risk aversion scenario. Potential triggers include policy disappointment, in particular a protectionist Trump presidency with rising tension with China.
Rise in USD risk premium	9 (9)	Low starting yields are a valuation risk for bonds. Yields could rise to more normal levels even in the context of low growth/inflation expectations. High government debt burdens (UK/core Europe/Japan/USA) provide the potential for a bond-vigilante style re-rating of sovereign yields that undermines key safe haven currencies including the USD. This is not a likely near-term scenario, but given the low yields and high level of indebtedness as a starting point, there is a risk that the environment could progress to one where apparently safe paper becomes compromised. This in turn increases the cost of funding and reduces corporate activity. At the same time, government spending is curtailed by enforced austerity in an effort to limit yield increases, remain liquid and stay solvent. This may be a precursor to a prolonged stagnation scenario. AUD strong but does not re-visit highs vs USD.
Stagflation	10 (10)	With no clear roadmap for the withdrawal of policy stimulus, the inflation risks from quantitative easing may be much bigger than are currently appreciated. In this scenario, policy stimulus is not withdrawn fast enough, perhaps coupled with increased policymaker tolerance for an inflationary work-out (due to a much stronger aversion against deflation than inflation) which gets out of hand. Run-away inflation in this scenario is likely to be negative for real growth, which could in turn lead to **Stagflation**. The scenario is likely to involve monetary policy reversals reminiscent of the 70s. The US economy is getting closer to the point at which an inflationary policy mistake could occur.
Early re-leveraging	11 (11)	Low yields and a period of policy stability prompt a resumption of credit growth in developed economies. Economic growth picks up more quickly than expected and unemployment recedes. Debt imbalances begin worsening again as the developed world quickly re-levers and Asia focuses on investment. This scenario could precede an **Inflation shock**, a second crisis or, if policy makers are nimble enough, a transition to a mild **Inflationary debt resolution**.

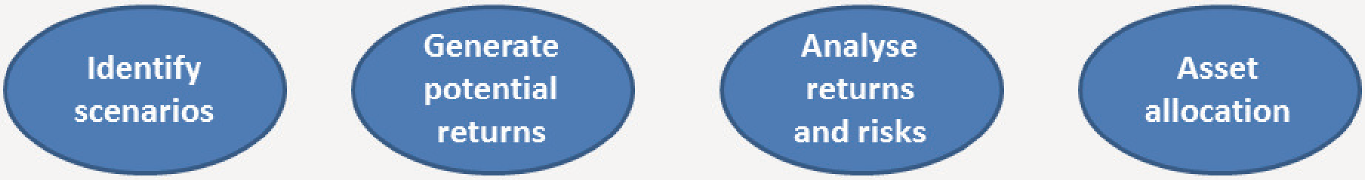
Scenario	Probability ranking (previous rank)	Description
Negative nominal interest rates	12 (12)	Central banks of Japan and Europe move further into negative deposit rates with the Fed and the Bank of England inching towards negative policy rates. This scenario includes the impact of expanded USD, GBP, JPY and EUR liquidity which principally finds its way into asset prices, rather than spurring consumption. The character of this scenario has changed as further extensions of monetary policy have less impact on asset market pricing. Important drivers to change include rising confidence on robust US growth, and moderation in Chinese resources demand with consequent flow-on effects for the Australian economy and interest rates. Consequently it is not anticipated that the AUD would re-visit recent peaks in this scenario, though could remain elevated versus measures of fair value particularly versus the EUR and JPY. China's economy continues to rebalance and growth moderates. China accepts more foreign direct investment. Sourcing these funds externally - rather than from within China - could act as a 'backdoor bailout' of China's poorly performing projects from the 2008/9 stimulus.
Eurozone slow disintegration (possibly leading to reform)	13 (13)	Rising risk of anti-eurozone politicians gaining power, most notably in France with consequent loss of confidence in the stability of the eurozone periphery. A worst case version of this scenario is most likely expressed in the form of withdrawal of cash from banks in countries where an exit is feared, potentially prompting capital controls and raising questions about the union. The path a **Eurozone slow disintegration** might take is highly uncertain. A positive version of this scenario occurs if existential fears lead to a meaningful policy change including on the contentious issues of closing the output gap which requires a significant shift from Germany, and external immigration. In a best case situation there is meaningful reform which potentially influences Brexit - this possibility is captured in the **Reform** scenario.
Monetary failure	14 (14)	A distinctive and hence important scenario that accounts for the possibility of unorthodox monetary policy to fail. Ineffective or stop-go policy, in the absence of meaningful fiscal stimulation, could result in this scenario that could lead to global stagnation, recessionary or even hyperinflationary conditions. In this scenario investors and consumers lose faith in the ability of monetary policy to resolve critical imbalances within the global economy. Developed market economic expansion is negligible and emerging markets slow down significantly, running the risk of a crash. Shares perform poorly. Commodities fall. Nominal yields rally further and remain low.

Appendix 2 – MLC's market-leading investment process

Step 1

Scenario analysis and portfolio construction

The Investment Futures Framework



- We can never be certain what the future will hold. To adequately understand risk we must take into account the things that *could* happen.
- We do this by building a comprehensive understanding of the possible future investment environments or scenarios that could occur. This includes not just those things most likely to occur, but also unlikely but very distinctive environments (such as financial crises and other 'tail risk' environments).
- The Investment Futures Framework builds a detailed understanding of how returns vary in each scenario. This also provides detailed information about the nature and extent of investment risks, the means to diversify those risks and how these change through time.
- Understanding how returns and risks can change over time means we can determine the best combination of assets, strategies and managers to generate returns while controlling risks in all scenarios - the asset allocation.

Step 2

Implementation

We implement the asset allocation as efficiently as possible to minimise costs.

Step 3

Review

We continuously apply our Investment Futures Framework to determine if portfolio adjustments are appropriate.

MLC

CPD points will be available soon.
Please check back at the end of January to earn CPD points.