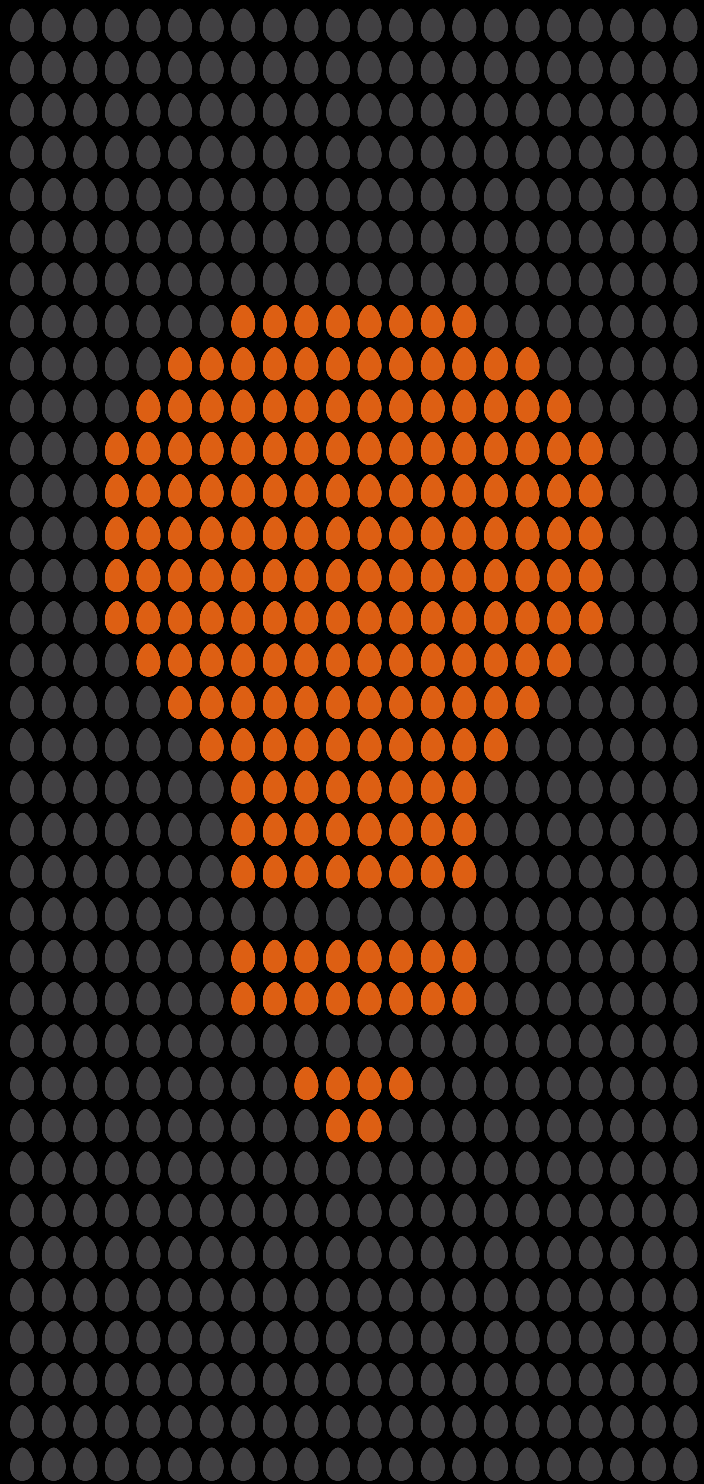

MLC's scenario insights & portfolio positioning

MLC Horizon and MLC Inflation Plus portfolios

July 2016

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MLC Horizon and MLC Inflation Plus portfolios

MLC's scenario insights & portfolio positioning

Financial markets are not just affected by news, but by how news differs from expectations. At the end of the June quarter investors were disappointed at the outcome of the Brexit referendum. While there are obvious uncertainties for the UK economy, most economists expect adverse implications but the magnitude is unknowable. The main concern for global investors is whether this could ultimately lead to the breakup of the eurozone. That is the key risk scenario flowing out of recent events. Across Europe populist pressures mean that we cannot ignore the possibility of similar disruptive events. On the other hand, the best case is that the vote proves a catalyst for reforms which increase unity and stability in Europe. More generally, the Brexit outcome is a reminder that in any two-horse race, each potential outcome must be taken seriously ...something that should not be forgotten as we approach the US elections in November. As an aside we note that Donald Trump's main policy proposals - higher deficit-financed infrastructure spending, more restrictive immigration policy, and rising trade protection - are negative for growth and bullish for inflation, the US dollar (USD) and gold. Trump's rise and the UK's referendum results are indicative of the phenomenon of anti-establishment politics which we talked about in our Investment Insight article '**Focus on Brexit**'.

Since the GFC, worker's real wages in the UK, and hence their living standards, have declined at an unprecedented rate. Prior to 2008 the rate of real wage growth had been around 2% since 1980 (though some slowing occurred after 2000). After 2008 real wages began to decline (refer to Chart 1). In 2014 average real wages were 8.6% below their 2008 level. Also the pain has not been evenly distributed, with the middle and particularly the lower income groups more affected than the higher paid – in other words income inequality has increased at a time when real wages have fallen. While last year real wages rose by 2.7%, middle and lower income workers are clearly significantly worse off as a consequence of the GFC. In contrast, the wealthy (including those seen as bearing some responsibility for the crisis) have prospered due to rising share prices and the higher paid have also been more insulated against downward pressure on wages. This gives rise to a sense of injustice and a focus on scapegoats – not for the first time, immigrants have presented an easy target.

In the US, while real wages have (on average) not declined, for many workers they have been stagnant for decades. The disquiet that this creates increases support for 'anti-politicians' like Trump. Scapegoat policies, notably increasing protectionism, could make the situation for workers much worse. We also need to be aware that the corollary of this is that the profit share of income is high...creating a vulnerability for earnings as tighter labour markets increase the bargaining power of workers. It is perhaps surprising that the effects of labour market tightness and emerging skill shortages have not shown up clearly in the wages numbers yet. However, upward pressure on wages is becoming a bigger drag on company earnings (a concern that is reinforced by moribund productivity growth), at the same time the tailwind of declining borrowing costs is no longer a benefit and higher leverage means scope for financial engineering has diminished.

We question whether anti-establishment tendencies can be easily reversed even with firming wages, increasing the risk of emotionally rather than fact driven policy making. If this transpires it increases the risks of both growth disappointment and inflation surprise. Indeed we strongly suspect that the possibility of higher inflation is underappreciated. US core inflation has been inching higher as cyclical pressures build and global deflationary pressures have eased. Current expectations are consistent with decades of low and falling inflation to come. Inflation rates discounted by markets in the US have fallen from close to 2.5% a year ago to under 1.5%. Elsewhere, policy evolution is leaning towards money financed fiscal policy (sometimes referred to as printing money). The Italian banking system, burdened by excessive debt, requires an injection of public funds. However under new European Union (EU) rules this is only possible if bondholders incur losses first – this would impact retail investors and be deeply unpopular risking Italy's anti-euro Five Star Movement coming to power (the exit of Italy would threaten the survival of the euro, at the time of writing it appears some rule bending (which is nothing new) is underway.

Despite declining market inflation expectations (refer to Chart 2), for several reasons our assessment is that there is a rising probability of higher inflation and hence we are preparing portfolios to weather that risk.

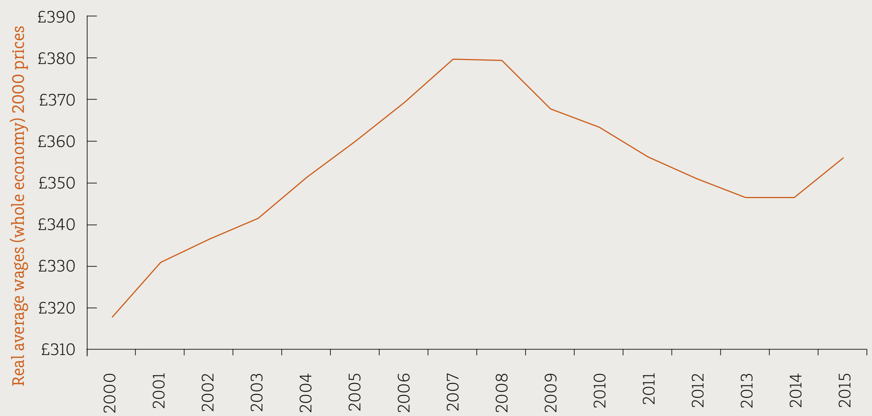
MLC's active investment approach

- 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.

MLC Horizon and MLC Inflation Plus portfolios

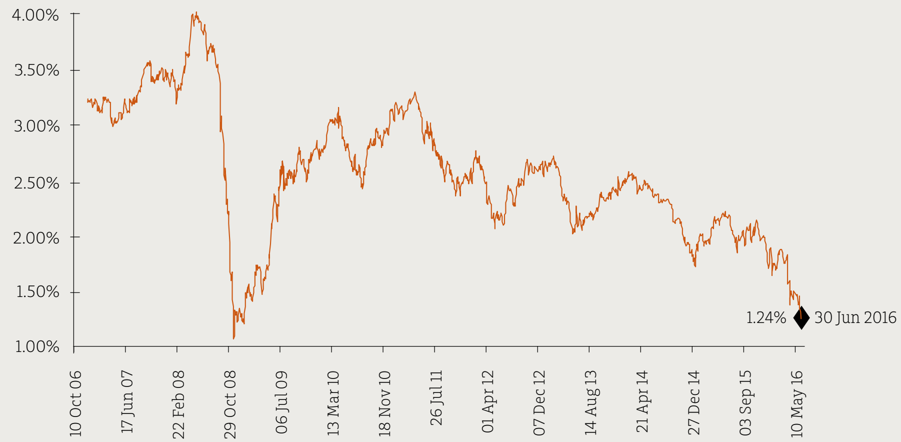
MLC's scenario insights & portfolio positioning

Chart 1: UK average weekly earnings (total pay)



Source: UK Office for National Statistics & JANA Corporate Investment Services Limited

Chart 2: Declining market inflation expectations - *5 year Australian breakeven inflation rates (based on government bonds)*



Source: Antares Capital Partners

Japan – reason to hope?

The decades of near stagnation in Japan have constrained wages and increased income inequality, also policy decisions continue to erode retirement incomes. This should in principle present fertile ground for anti-establishment politicians. Perhaps the greatest expression of discontent in Japan is the rapid turnover of prime ministers with eight changes since 2000. While Prime Minister Shinzo Abe is certainly an establishment man, he came back into power in 2012 with a promise of genuine change.

As part of our on-going research process we spent time in Japan during the quarter, meeting with economists, strategists, fund managers (including Ruffer's Japan research team) and political commentators. While the challenges remain formidable, we found some grounds for hope. The strategy of weakening the yen to stimulate growth suffered a major setback when the introduction of negative interest rate policy (NIRP) in the first quarter failed to weaken the exchange rate. This episode provides a good illustration of the limitations of policy to counter the underlying fundamentals. We understand that the Governor of the Bank of Japan (BoJ), Haruhiko Kuroda, discussed the NIRP with his deputies only two days before the policy announcement. This erratic policy making, and (we understand) antipathy to the move within the BoJ bureaucracy, are concerning. More generally we worry about a lack of policy coordination and adequate feedback mechanisms from policy outcomes, back to policy calibration.

The source of yen robustness lies in significantly improved fundamentals following a return to current account surplus, consistent with the decline in the oil price. Nevertheless the current level of the yen, close to long-term measures of fair value, is not an impediment to growth and arguably a weak yen is not the solution to Japan's economic problems. In other words, there is no barrier to rising wages (a very positive development) *unless policy makers make a mistake*. The question as to whether Japan can decisively escape deflation hinges on the course of the on-going battle between Abe and his cadre of reformers versus the recalcitrant bureaucracy. Abenomics is about reducing corporate savings which are excessive. While there is talk of taxing retained earnings, the most effective way to induce corporates to spend is higher demand which encourages hiring, higher wages, and eventually capex. Abe wants to use fiscal policy, which may be effectively money financed, to target demand more directly. Expectations are for new fiscal stimulus by the end of August, and there are rumours that it could surprise on the up-side. However the Ministry of Finance (MoF) is a major obstacle - it has engineered what is generally perceived as a persistent contractionary bias over past years (making it somewhat surprising that Japan has managed to grow at all).

The MoF's primary focus on fiscal consolidation, has led them to steadily tightening in the background via reduced welfare payments – notably pensions. The real purchasing power of pension payments (which for 75% of retirees is their only income) is estimated to be 5% lower than 2012 levels. Not surprisingly labour force participation in older age groups has been rising. Importantly the consumption tax hike that was scheduled for 2017 has been pushed back, and if we see a stimulus of at least JPY5 trillion (which is 1% of GDP) then, in the absence of other shocks, we would expect the labour market to tighten and more decisive wage rises to result.

Japan has a deeply dysfunctional labour market and related to that a two-tier society of haves and have-nots. Arguably this is the biggest thing that needs to change. Around 20% of workers have permanent contracts which entitle them to an extraordinary level of protection. Even foreign firms are hamstrung by labour laws which make it very difficult to sack permanent employees even for misconduct or incompetence. Sacked employees keep turning up for work until they are induced to leave with a sufficient pay-off. In contrast the other 80% of workers have no rights; they are often classed as part time even though they work hours consistent with full time employment. However, the balance of bargaining power for part-time/ non-permanent workers is starting to shift. Companies are starting to have to pay more to secure a labour force and those without sufficient value added will lose out. In a best case scenario, rising wages feed through to higher demand and back into higher wages and domestic capex – and there is a decisive escape from deflation. In a worst case, stealth tightening by the MoF short circuits the rise in demand and an erratic BoJ unnerves markets and increases precautionary savings.

China reform versus growth – is the balance changing?

Our research focus in the past quarter also included China where we have recently seen some important developments. China has seen an ongoing tension between the pursuit of economic growth and control of progressively higher costs of economically inefficient deployment of capital via increasingly elevated rates of debt to GDP. While to date the emphasis has been firmly on growth, with the reform process tending to move forward only when growth has been sufficiently robust, there are now signs of a change of emphasis. The risks in acting too late on the debt issue is that China follows the same path as Japan, in other words boosting short-term growth is ultimately at the cost of lower future growth potential. The government understands the risks and knows that reform is the key to debt sustainability. Both Japan and China have an issue with high savings, but in China it is the household sector which has the savings. In this case though, the solution is not so much getting those savings down as redistributing income from the bloated and inefficient state owned enterprise (SOE) sector to the household sector. If China grows at 3% but household income is rising by 5% then it is a tolerable rebalance. Political and vested interests are the source of opposition to rebalancing. All the reforms in the 13th five year plan are the right ones but opposition makes them hard to implement. To overcome these challenges Premier Xi Jinping has been concentrating power. The anti-corruption program is part of this process of clearing away opposition to reform by overcoming vested interests that are not aligned with the direction of change. There are different perspectives on whether this concentration of power might be related to some backtracking on moves towards greater rule of law and establishment of a modern economic state. We do have concerns about what might be some shift away from a meritocratic approach to political appointments; however at the same time the concentration of power seems to be an essential ingredient for reform to be effective.

Encouragement with regard to the reform agenda comes from two sources. First, consistent with the uptick in the frequency of official communications on the resolution of soured loans noted in our April update, there is a new regulation (Document 82) which is aimed at curtailing growth in shadow loans; and secondly an article which recently appeared in the People's Daily (the official newspaper of the Chinese Communist Party) reporting comments from an "authoritative person".

The shadow banking system includes loans issued by intermediaries which fall outside regulatory oversight, companies that cannot comply with bank's lending criteria access the shadow loan market. This includes loans made by banks which are in structures (for example packaged in wealth management products) which mean they are not visible in balance sheets and no provisioning is required when loans turn bad. Document 82 is major reform, the importance of which may be being underestimated. It forces non-performing shadow loans onto balance sheets and hence also forces provisioning; and prohibits their inclusion in wealth management products. This is an important step in ensuring that banks are adequately capitalised, and it has already curtailed the growth of shadow loans. It may also be key to stopping SOEs from taking such a large share of resources. SOEs feature heavily in the over-capacity sectors (most notably coal and steel), some of these will struggle to meet banks' credit standards. Ultimately this should force zombie companies out of business, though there will be resistance from vested interests.

Recognition of the declining marginal efficiency of debt may be part of the reason for both Document 82 and the "authoritative person" article. The "authoritative person" is suspected by some to be Xi Jinping, while this is speculation the content presumably has high level approval. The article suggests that China should not support growth by adding leverage (something the developed world has to come to grips with too). "High leverage will lead to high risk; if not well controlled, it will lead to systemic financial crisis and negative growth". As a middle income country with a declining working age population, "China's economic growth trend in future should be 'L-shaped', rather than 'U-shaped', not to mention 'V-shaped'". This is a clear suggestion that growth will trend lower. The writer believes that China should avoid using strong stimulus to raise investment growth; and that the most important thing is to push forward supply-side reforms (cutting over-capacity and red tape, reducing property inventory) and actively but steadily reduce leverage (though many are sceptical that an actual reduction in debt is achievable). This is encouraging, if this does indeed represent a change of policy emphasis, it reduces the risks of China following the Japanese experience.

In conclusion

At the time of writing share markets have rebounded from their post Brexit referendum sell off, however bond yields remain at levels not seen since 2012. This might seem to imply an inconsistency in expectations about the health of the economy, instead both reflect expectations about easier monetary policy – Brexit reinforces the "lower for longer" scenario. This ultra-low cash rate scenario offers investors a choice between the certainty of very low (in some cases negative real) returns or the hope that share prices can continue to ratchet higher as share markets attract more investors desperate to generate a positive return. This trade-off becomes more vexed in the face of faltering corporate profits which are in part a function of the distorted environment manufactured by central banks. We suspect that monetary policy efficacy is diminishing, that the balance between the costs and benefits of further stimulus are shifting adversely. Persistent low yields distort decision making and helps keep inefficient firms in business which reduces productivity.

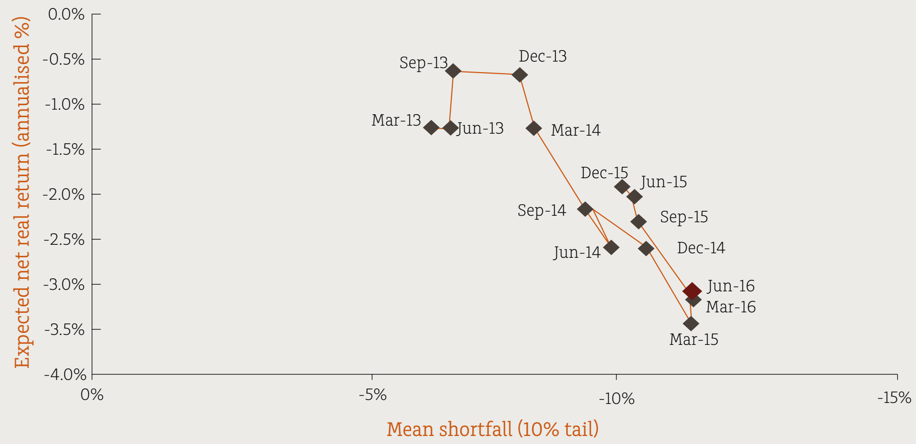
We are concerned that short term share market gains may be at the expense of medium-term risk, and that the longer and deeper this environment of policy manipulation of markets persists, the more painful the eventual adjustment will be. The challenge remains balancing the risks of missing out on short term gains, versus generating a sustainable medium-term outcome for investors. The issues are stark in the US where the share market is pricing as positive a scenario as can be expected. Long term share market return potential is in the low single digits but, while it exceeds cash rates, downside risk is to an extent contained. This explains the high sensitivity of share prices to interest rate expectations. These concerns have only increased with share markets now also complacent about a future with heightened political uncertainty with pressures for reversal of globalisation. We have suspected for some time that markets are too complacent about rising inflation, and we suspect that recent developments increase inflation risk. The greatest risks from the Brexit vote lie in the adoption of populist policies in developed economies which lead to declining living standards and challenge the benign assumptions implicit in share prices.

Looking forward

Over the past year we have seen alternating episodes of market weakness and recovery. Market behaviour remained contingent on monetary policy decisions, but the ability of policy to push share prices sustainably higher appeared to diminish. In consequence the financial year 2015/16 was characterised by modest returns overall, reflecting our expectations that the opportunity for robust returns to persist was diminishing. Looking forward this remains the case. As always, we recognise that the future is always uncertain. It is possible that the new financial year will offer more rewarding investment opportunities but the underlying economic fundamentals are not well aligned with such an outcome.

In spite of already very elevated prices, over the past year investors' search for yield has pushed the prices of income generating assets ever higher. In consequence bond markets have outperformed shares. A year ago we were highlighting the risk embedded in long nominal bonds, over the past year that risk has increased markedly. During the year traditional multi-asset portfolios, such as MLC Horizon and Index Plus benefited from their nominal fixed income allocations. This provided a return advantage to MLC Horizon versus Inflation Plus because the risk control requirements of Inflation Plus have meant that nominal bonds are an inappropriate investment. This was to a degree offset by Inflation Plus exposure to defensive global shares which generated valuable returns (well ahead of market indices), though their return still fell short of all maturities debt. Looking forward, as Chart 3 illustrates, the risk-return characteristics of nominal bond exposures have deteriorated as yields ratcheted lower. In response both MLC Horizon and Index Plus nominal bond allocations have been reduced during the past quarter, with further adjustment taking place in July. While these normally defensive but today risky exposures may continue to benefit from yield-chasing behaviour, the risks embedded in such positioning are increasingly unpalatable with negative real returns permeating our broad scenario set.

CHART 3: PROSPECTIVE RISK AND RETURN – AUSTRALIAN BONDS



Source: JANA Corporate Investment Services Limited

MLC Horizon and MLC Inflation Plus portfolios

MLC's scenario insights & portfolio positioning

In managing MLC's multi-asset portfolios we assess potential future risks and opportunities. We invest by understanding what would happen as opposed to picking the single future that will unfold. The future is not forecastable, indeed it is not predetermined. If we seek to understand what could happen, we can then seek at least an acceptable outcome regardless of what the future holds. 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 the generic broad set of 40 scenarios which pivot around the main drivers of returns – the macro-economic 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 tailored scenario set currently consists of 13 scenarios (refer to Appendix 1). Due to the prevailing distortions, these scenarios contain more complexity and a wider range of outcomes for assets than would normally be the case. The pressure exerted by high debt loads, on both the real economy and policy, mean that outcomes will not just pivot along fundamental paths, but will be heavily influenced by central bankers, legislators, and importantly the reaction of agents within the economy to whatever path policy takes. Credible outcomes range from continuation of the status quo (ie Global Growth Convergence scenario) to favourable improvements in nominal prices and improvements in capital productivity (ie Inflationary Debt Resolution scenario) through to the stagnation and risk aversion environments that we expect would eventuate should today's unorthodox monetary policies fail. And while further disinflation and deflation appear to be the obvious near term direction of prices, we take account of the possibility of an ultimate inflationary outbreak – which like any risk needs to be addressed before it manifests. We also take into account the potential for decisive reforms to restore growth potential faster than is currently anticipated – albeit with a relatively low probability at this stage.

As the future unfolds, we reassess the nature of the starting point – which scenario are we in? – and the propensity for that environment to transition into a range of other scenarios. Our perceptions of this evolution point include a potential diminution of monetary policy efficacy, rising inflationary pressures and some tightening in liquidity (particularly in fixed income markets). Also the Brexit referendum points to increased fragility and vulnerability to shocks (particularly within the eurozone), and potentially heightened risks of protectionism (which could increase inflation propensity and reduce growth). Our scenario design and probabilities largely capture these tendencies, though we are reviewing how we have placed probabilities across the range of possible scenarios involving higher inflation and also the factoring in of the effects of possible protectionist policies.

MLC's scenario insights & portfolio positioning

What also drives quarter to quarter changes in return potential and risk are changes in asset prices through the quarter. For example, a rise in asset prices that exceeds the improvement in economic fundamentals will reduce return potential and increase risk. The market declines seen early in the year were reversed during April which, in spite of the Brexit-related volatility, left developed share markets flat to modestly higher over the quarter. The main exceptions were Europe and Japan where Brexit weighed more heavily on the markets (in the case of Japan due to the safe haven appreciation of the yen). Overall global share return potentials were little changed versus the previous quarter. However, bond yields declined, which has further compressed future return potential for this traditional safe haven asset.

There has been one other source of change to return potential. We have also continued evolving the way in which we model the Australian shares sector. This quarter we have moved to a bottom-up sector based model. This work involves the modelling of the Global Industry Classification Standard (GICS) sector level for each scenario and the combination of these models into a market aggregate. This gives our process further insight into risks and opportunities in the heavily concentrated domestic share market.

The potential real returns for each asset class are shown in Chart 4 on page 9. The probability-weighted real returns are shown in the graph (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. Asset classes with wider ranges could have more extreme return outcomes than those with narrow ranges. Chart 5, on page 9, shows return potential for the MLC Horizon and Inflation Plus portfolios.

At a glance, return potential for bonds is highly adverse. The current risk/reward trade-off for Australian shares still compares favourably to global shares because Australian shares have a higher probability weighted return, and similar downside tail to global shares. But as previously outlined, the highly concentrated nature of the Australian market clouds this comparison. The large differences between industry sectors of the Australian and global share markets, exert a significant impact on broad market valuations. The impact of sector concentration is clear in the models of our tailored set of scenarios. Depressed commodity prices and poor sentiment towards Mining and Energy stocks has dampened valuations within these (highly cyclical) sectors to levels significantly below the broader market; while other important sectors (including Financials) trade at a premium, which in some cases is extreme (eg Healthcare, Utilities and Consumer Staples). This means that a key issue in determining the appropriate allocation to Australian shares revolves around the assessment of the extent to which potential risks are fully reflected into current Mining and Energy share prices.

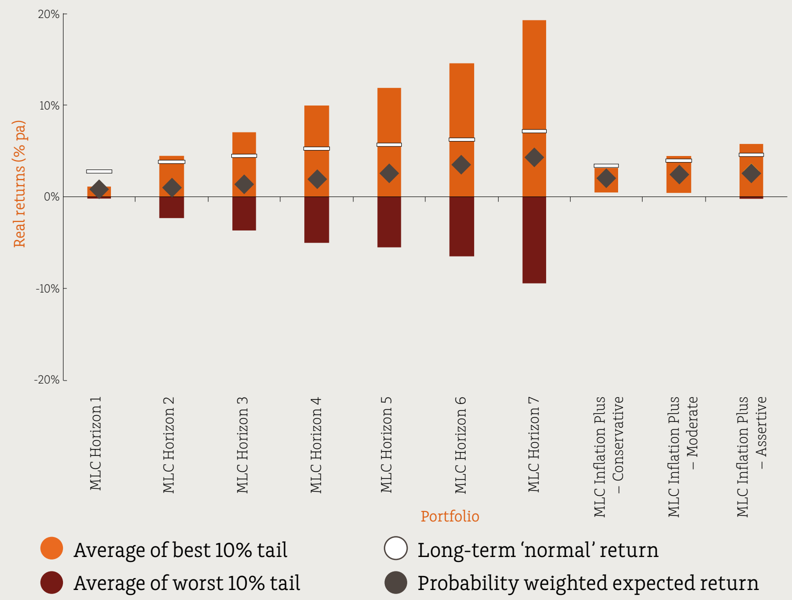
MLC Horizon and MLC Inflation Plus portfolios

MLC's scenario insights & portfolio positioning

**Chart 4: 40 scenario set (generic scenarios) potential real returns (June 2016)
5 years, 0% tax with franking credits, pre-fees, pre-alpha**

Source: JANA Corporate Investment Services Limited

**Chart 5: 40 scenario set (generic scenarios) potential real returns (June 2016)
5 years, 0% tax with franking credits, pre-fees, pre-alpha**



Source: JANA Corporate Investment Services Limited

MLC Horizon and MLC Inflation Plus portfolios

MLC's scenario insights & portfolio positioning

Our current positioning

Portfolio positioning continues to reflect the challenges of a world in which actions of policy makers have distorted asset prices and removed safe haven investments. Although the first tentative step has been taken by the US Federal Reserve (Fed) in reversing ultra-low interest rates, a stop-start mentality has again taken over and this has been reinforced by the uncertainties surrounding the Brexit vote. Taking the Fed at face value (which is generally sensible), the pace of future US interest rate rises remains data dependent, while we may see a continuation of offsetting new stimulus in the eurozone and Japan which could foster market complacency. However, the challenges to yield-driven investing are increasing and the potential for renewed stimulus to boost or even calm markets is becoming more uncertain. Indeed prospective policy decisions remain a source of uncertainty. Nevertheless, while ultimately there must be an end to the challenging liquidity-driven distorted environment which has resulted in the mis-pricing of risk, we understand that it could still be of long duration.

We are acutely aware that, while volatility has increased, the strong return environment could still resume. This is challenging because the logic of our strategy only becomes entirely apparent once previously disguised risks are revealed. The past teaches us that distorted market behaviour persists for longer than seems possible which tests perceptions and patience, but then when it unwinds it can do so more rapidly than anticipated. Importantly, the thoroughness and depth of our assessment of future return potential and future risks provides the level of confidence to maintain appropriate positioning through extended periods in which markets behave perversely – this is critical to ultimately delivering for investors. While we are comfortable with the performance of the portfolios over meaningful periods, we are far from complacent about the future challenges. Nimbleness and flexibility are more important than ever if we are to both generate returns and control risk, but it is undeniable that the challenges of doing both have increased. We will maintain the risk discipline even if this requires some patience before return expectations are met.

Our analysis of scenarios is designed to build an understanding of return potential and downside risk. Where there is significant asymmetry (ie the upside potential is less than the downside risk) we have an opportunity that we can exploit to increase the return compared with the level of risk. There have been two important asymmetries: in currency and fixed income markets. These asymmetries remain to an extent but the medium-run fall in the Australian dollar (AUD) significantly weakens our key risk diversifier. As the AUD fell towards purchasing power parity (PPP), our Framework led us to reduce exposure to foreign currencies across the MLC Inflation Plus portfolios early in 2016. Since then, the AUD's recovery during this quarter to the mid-70's against the USD has partially restored the upside/downside skew, but not to the extent required to extend our recently reduced foreign currency positioning in Inflation Plus portfolios. In fixed income markets, we observe that while bond yields could follow what is now a very long-term trend and decline even further, the extent of this is limited relative to the potential for yields to rise. This means that the opportunity cost from shortening duration (ie having a lower than benchmark exposure to interest rate risk) is low relative to the risks faced by owing duration should yields rise.

Similarly, while there are circumstances in which the AUD could regain strength (and we assume it does in a number of our scenarios), on current pricing the downside factors are arguably still an efficient diversifier of some portfolio risk. Because of this, while our exposures to foreign currency have reduced, it remains significant exposure within the MLC Inflation Plus portfolios (particularly the Assertive portfolio), and we remain overweight to foreign currencies across the MLC Horizon 2 to MLC Horizon 7 and Index Plus portfolios. Our positioning against the AUD does not mean that we 'expect' the AUD to fall further – indeed, two of our tailored scenarios expect the dollar to rise. Instead, our analysis continues to suggest that the AUD is an efficient source of diversity that decreases overall risk, allowing greater exposure to other sources of risk and hence return potential than we would otherwise have carried in the portfolios. In short, in many scenarios the AUD is a perceived safe haven that turns out to be something of an illusion – this reality is now starting to be priced in. The market dynamics of the AUD in the first half of 2016 are a sharp reminder that the AUD can rally quickly. This reinforces the importance of our option-based risk management strategies to complement exposure to foreign currencies, particularly the strong USD.

MLC's scenario insights & portfolio positioning

Performance expectations

Future portfolio returns depend on where we are starting from, the path that markets and economies take, and where we end up. The management of MLC's portfolios is not based on the shaky foundation of predicting the one future that will unfold. Instead, we take into account that there is always a range of potential futures. MLC's portfolio positioning relies on understanding that there are things that can go wrong as well as recognising opportunities to generate returns and to diversify risk. We use this information to determine the most appropriate balance between risk and return for each portfolio. Importantly we use information about risk and diversification that is forward looking and we track how these characteristics change through time.

Chart 5 on page 9 looks at our barometer of risk and return – based on our generic (40) scenario set, described on page 7 – for the MLC Horizon and Inflation Plus portfolios looking forward from the end of June 2016. The probability-weighted real returns are shown in the graph (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.

The chart continues to show that on average, looking across the whole scenario set, the potential reward for taking is still 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.

Comparing the MLC Inflation Plus and MLC Horizon portfolios, the stronger risk focus of the MLC 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 all our 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.

MLC's scenario insights & portfolio positioning

MLC Inflation Plus portfolios

The MLC Inflation Plus portfolios have flexible asset allocations with few constraints which enable targeting 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 (and particularly the past quarter) have been challenging to navigate. While the AUD has declined over the year, it has had some renewed strength over the past 6 months which saw a rebound from below 70 cents. This has reduced returns over the past 6 months. The portfolios' defensive global shares allocation helped protect portfolio returns. At the current time we are working on enhancing the inflation control characteristics of the portfolio.

Here is a summary of changes to the positioning over the quarter for the MLC Inflation Plus portfolios.

Asset class	Change in allocation to asset classes in the MLC Inflation Plus portfolios (in MLC MasterKey's super and pension products) over the June quarter			Comment
	Conservative	Moderate	Assertive	
Australian shares	Zero allocation	Steady allocation	Steady allocation	Low or zero allocation maintained.
Global shares	Close to zero allocation	Close to zero allocation	Zero allocation	Limited exposure due to strong preference for a defensive share allocation in a relatively high risk environment.
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	**Increased options protection**	**Increased options protection**	**Increased options protection**	When the AUD declined during May we took the opportunity to purchase out-of-the-money call options, which were funded by the sale of put options with the puts automatically expiring if the AUD rallied sufficiently. In the event the AUD did rally resulting in the tranche of call options being acquired at zero cost. The strategy automatically reduced the portfolios' AUD exposure if the AUD rallies.
Gold			**New 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.
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	**Reduced allocation**	**Reduced allocation**	**Reduced allocation**	Reduced allocations, in favour of cash to moderate risk stance.
Emerging markets strategy	Steady allocation	Steady allocation	Steady allocation	Allocation recognises emerging economies and markets are vulnerable to US monetary policy normalisation.
Global private assets	Steady allocation	Steady allocation	Steady allocation	The private assets allocation for the MLC Inflation Plus - Assertive Portfolio (in MLC MasterKey's superannuation and pension products) has been above target.

MLC Inflation Plus portfolios
continued

Asset class	Change in allocation to asset classes in the MLC Inflation Plus portfolios (in MLC MasterKey's super and pension products) over the June quarter			Comment
	Conservative	Moderate	Assertive	
Global property securities	Zero direct exposure	Zero direct exposure	Zero direct exposure	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	Unattractive, with limited diversification benefit.
Australian inflation-linked bonds	Steady allocation	Steady allocation	Steady allocation	We remain concerned about the inherent risks associated with the very low current yields.
Insurance related investments	Zero allocation	Steady Allocation	Steady Allocation	Uncorrelated though risky exposure is appropriate where time horizon is sufficient.
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	Offer some return enhancement while limiting additional risk.
Cash	**Increased allocation**	**Increased allocation**	**Increased allocation**	This is a challenging environment in which allocations to cash are higher than we prefer because abnormally low cash rates and abundant liquidity have caused an adverse shift in the risk-return trade-off for all assets. We continue to keep significant powder dry (in cash) waiting for better opportunities.
Borrowings			No borrowings	Reward for risk is too limited.

MLC Horizon and MLC Inflation Plus portfolios
MLC's scenario insights & portfolio positioning

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. 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 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 Horizon and Index Plus portfolios we are maintaining a relatively defensive orientation, in part this is reflected in changes to MLC Horizon portfolios' benchmark asset allocation during the year which reduced the allocation to Australian shares and increased the real return focus of the strategy. This assisted in increasing the consistency of returns during the second half of 2015.

MLC's scenario insights & portfolio positioning

MLC Horizon portfolios
continued

	MLC Horizon 4 Balanced Portfolio (Super & Pension) weights at end of the June quarter			Comment
	Under	Benchmark	Over	
Growth assets		●		
Australian shares		●		From a valuation perspective, Australian shares have some attraction, but the risks for the domestic economy from a slowing in growth in China outweigh the positives.
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 declined significantly in 2015. While this decline was positive for the portfolios' returns we are concerned about scenarios which could result in the dollar rising again. Therefore we continue to hedge the risk of renewed AUD strength
Global shares (hedged)	●			
Global property securities		●		Retain benchmark allocation – the benchmark allocations are underweight versus peers.
Defensive assets	●			
Cash			●	Overweight increased for MLC Horizons 3, 4 and 5 and Index Plus portfolios.
Australian bonds – All Maturities	●			Increased underweight in Australian bonds (and increased the overweight to cash) for MLC Horizons 3 and 4 and Index Plus this quarter.
Australian inflation-linked bonds	●			Horizons 4 and 5 increased underweight this quarter.
Global bonds – All Maturities	●			Increased underweight for Horizons 3 and 4 and Index Plus this quarter.
Global non-investment grade bonds (high yield bonds and loans)		●		

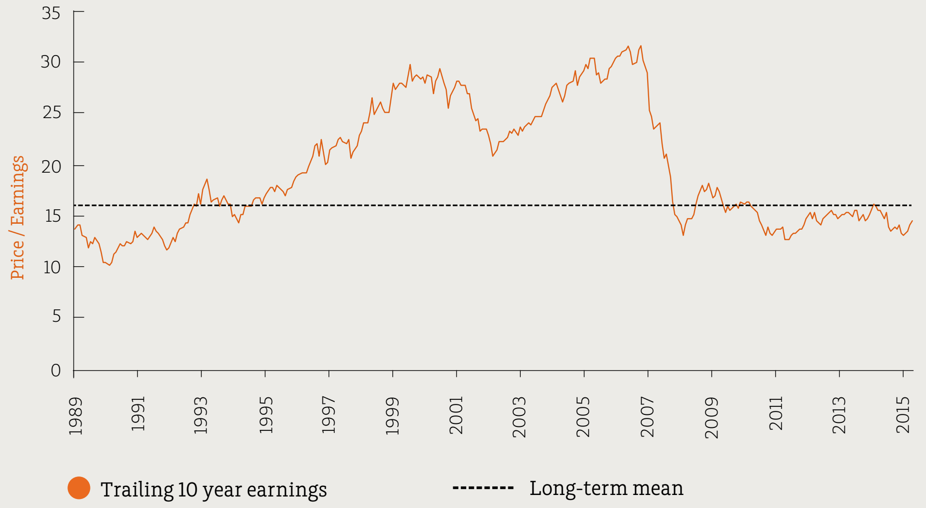
MLC Horizon portfolios
continued

	MLC Horizon 4 Balanced Portfolio (Super & Pension) weights at end of the June quarter			Comment
	Under	Benchmark	Over	
Alternatives			●	
Global private assets		●		Retain benchmark allocation.
Real return strategies (including Inflation Plus)			●	MLC Horizon 4 now overweight real return, otherwise allocations are on benchmark. We believe increasing the allocation to real return strategies provides the portfolio with a greater potential ability to preserve investors' capital in volatile markets and provide 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.

Asset class indicators

Our view of the main asset classes is as follows.

Australian shares
Market indicator *S&P/ASX 200*



Source: Global Financial Data

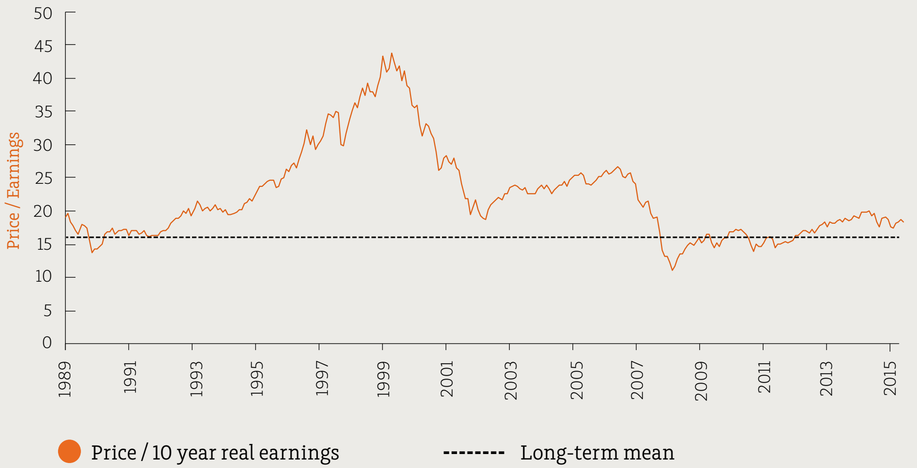
Comment

The Australian share market returned 3.9% over the quarter. During April and May the market was supported by a Reserve Bank of Australia (RBA) rate cut, however global volatility brought on by the Brexit vote saw the domestic market fall in the month of June. Over the quarter Healthcare and Utilities were strong performing sectors, along with the Materials sector which benefited from improved expectations of commodity prices.

During the quarter company earnings remained under pressure. Elevated levels of macro uncertainty continued to see company management reluctant to invest in growth opportunities.

Asset class indicators continued

Global shares
Market indicator *MSCI All Country World Index*



Source: Factset

Comment

The MSCI All Country World Index finished the quarter up 1.2% as measured in local currency terms. Volatility was high during the quarter, particularly during the month of June. Despite the extreme market reactions immediately following the Brexit result, global markets posted a strong recovery days before the quarter ended.

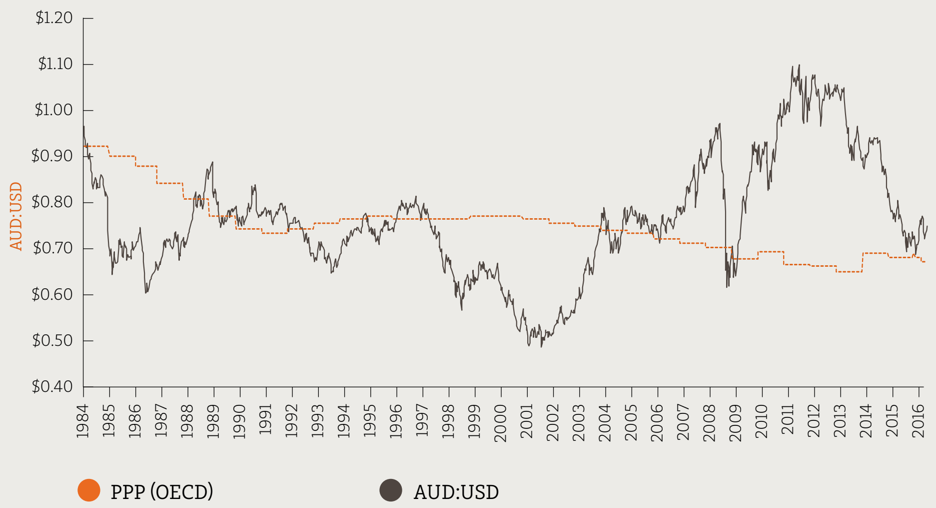
Emerging markets produced a modest return of 0.7% for the quarter as measured in local currency terms. Improving commodity prices did little to help emerging markets shares as investors preferred the perceived safety of the Consumer Staples and Information Technology sectors.

Global monetary policy remained ultra-supportive as central banks continued to encourage real economic activity despite the increasing concerns around the effectiveness of such policies.

Asset class indicators continued

Australian dollar

Market indicator *Australian Dollar Purchasing Power Parity (PPP)*



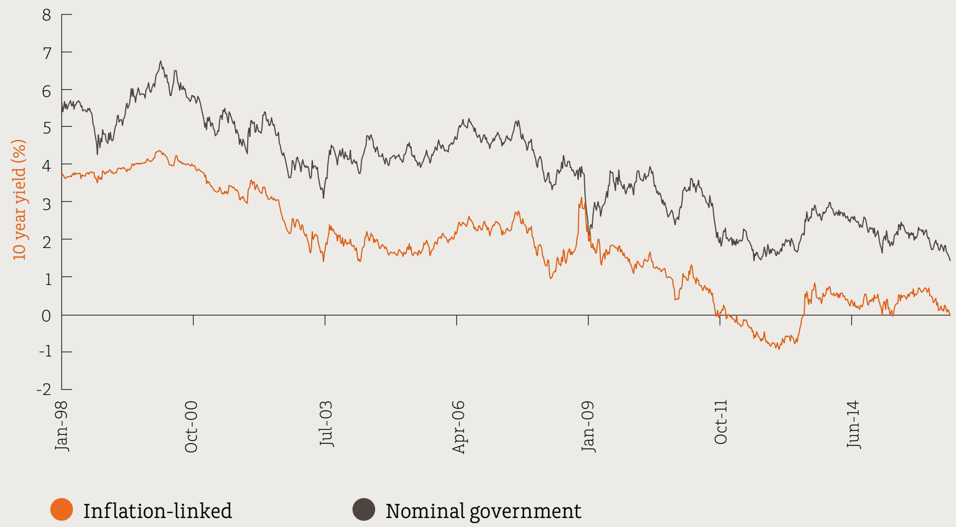
Source: Bloomberg

Comment

The AUD fell -3.2% against the USD over the quarter. The RBA lowered the official cash rate for the first time in a year after inflation data fell below the RBA's target band. Despite the cash rate reduction, the AUD retains a significant interest rate differential to most other developed market cash rates. The Fed left rates unchanged during the quarter as employment data was insufficient to warrant further tightening.

Global government bonds

Market indicator *10 year bond yields – United States*



Source: Bloomberg

Comment

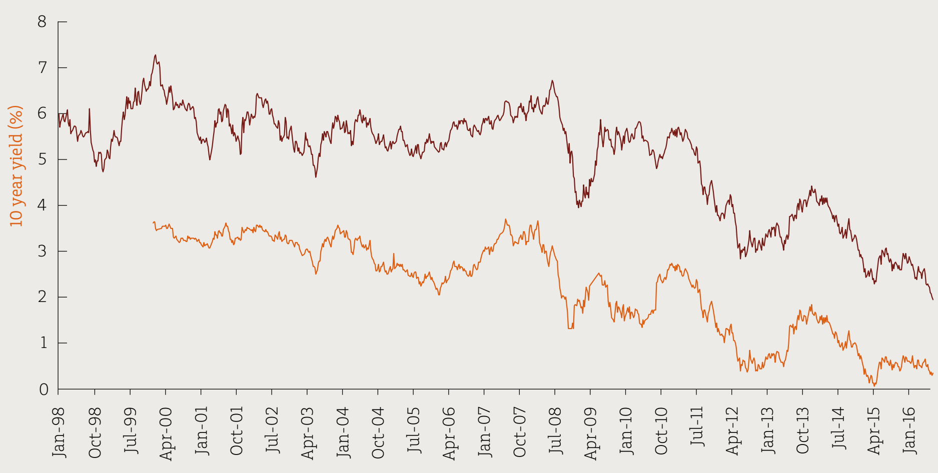
The June quarter saw sovereign yields fall as the unknown effects of an unexpected referendum result in the UK reverberated across the world. The subsequent flight to safety dragged the yield on government bonds significantly lower with the exception of China's 10 year government bonds, which fell only marginally, to 2.86%.

10 year UK gilts and German bunds were characterised by the sharpest yield declines, with the bund entering negative yield territory for the first time in its history. The pair finished the quarter at 0.86% and -0.19%, down from 1.42% and 0.16% respectively.

Across the Atlantic, their American counterpart saw a drop of smaller magnitude as yields on US 10 year Treasury Notes decreased 30 basis points to finish at 1.47% for the quarter.

Asset class indicators continued

Australian government bonds
Market indicator *10 year bond yields – Australia*



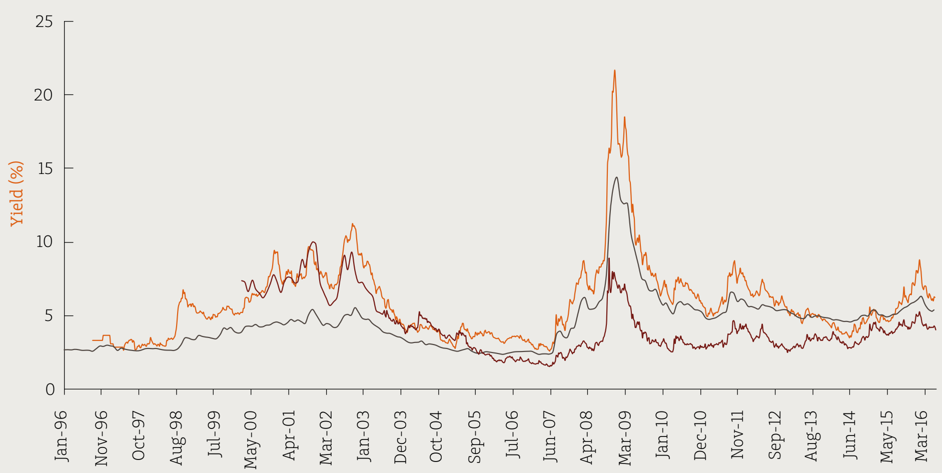
Source: Bloomberg

Comment

The Australian 10 year government bond yield continued its March quarter decrease, falling 50 basis points to 1.98%. The March quarter inflation rate showed price levels decreasing by 0.2%, giving Australia its first deflationary period in seven years. This combined with declining inflation expectations prompted the RBA to cut the official cash rate by 25 basis points to 1.75%.

Asset class indicators continued

Non-investment grade bonds
Market indicator *Fixed income spreads*



Source: Credit Suisse, Barclays and Bloomberg

Comment

Non-investment grade credit spreads narrowed sharply during the quarter which generated strong performance from the sector. The rally in high-yield bonds and loans though was disrupted at quarter end by the surprise decision of UK voters to leave the EU. Performance was broad based with the Energy sector recording very strong performance in line with the recovery in energy prices. Dovish policy guidance from the Fed during the quarter allayed global growth concerns which also benefitted credit sensitive assets.

Appendix 1 – tailored scenario set

Scenario	Probability ranking	Description
Three speed global economy (China soft landing)	1	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 euro.
Negative nominal interest rates	2	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 euro and yen. 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.
Synchronised moderate growth	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.
Early re-leveraging	4	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 resolution.
Inflationary debt resolution	5	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 euro 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.

Appendix 1 – tailored scenario set continued

Scenario	Probability ranking	Description
Reform (path to growth normalisation)	6	A growth upside scenario contingent upon coordinated reforms that address inefficiencies that are idiosyncratic to particular economies (eg labour in the many European economies and Japan, infrastructure in the US, sector contribution to growth in China and structural issues in the eurozone). This scenario has become more likely with 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.
Global deleveraging – slow growth and disinflation	7	A prolonged and slow consumer deleveraging. Slowing consumption growth and falling nominal prices extend the deleveraging cycle. There is global growth convergences as persistent slow growth and further disinflation in the developed world spills over into the now highly indebted emerging world.
Rise in USD risk premium	8	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.
Monetary failure	9	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.
Australian stress	10	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.

Appendix 1 – tailored scenario set continued

Scenario	Probability ranking	Description
Stagflation	11	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. US economy is getting closer to the point at which an inflationary policy mistake could occur.
Inflation shock	12	Similar to stagflation, though assumed growth is higher. Sharp rise in inflationary expectations.
Extended risk aversion	13	A generic scenario to capture prolonged aversion to risk. An immediate potential trigger for this scenario is the disorderly exit of countries from the eurozone with consequent loss of confidence in the eurozone periphery. This 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. While there is a widely held view that such contagion effects would be limited, this remains conjecture.

Appendix 2 – MLC's market-leading investment process

Step 1
Scenario analysis and portfolio construction

Investment Futures Framework

Identify scenarios

Generate potential returns

Analyse returns and risks

Asset allocation

- 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.

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