# AIQ

ISSUE 001




# THE AMAZON EFFECT

*Who will be the winners – and losers – in the battle with e-commerce?*


AVIVA INVESTORS

# Welcome to AIQ...

## a new publication that brings together the collective insight of Aviva Investors' teams from across the globe on some of the key themes influencing investment markets.

*Our cover story looks at the seemingly insatiable ambition of Amazon to conquer new markets. From books to music; fresh food to car parts; few companies have exerted such influence over the global retail sector. But what can its competitors do to withstand the Amazon onslaught?*

*Also in this issue, Aviva Investors' CEO Euan Munro gives his thoughts on what the asset management industry needs to do to win back public trust; while US policymaker Andy Stern makes his case for a universal basic income for all.*

*Other articles look at the considerable influence of sovereign wealth funds, the return of credit risk, the pros and cons of military rule and why the anti-globalisation movement can no longer be dismissed.*

*We hope you enjoy the first issue*

Rob Davies,
Head of PR and Thought Leadership,
Aviva Investors
**AIQ** Editor

# FINDING DIVERSIFICATION IN A CORRELATED WORLD

**TREVOR LEYDON**
Head of Investment Risk and Portfolio Construction, Multi-Asset

**The actions of central banks have helped fuel returns since the end of the financial crisis and increased correlations between assets. Diversification may not seem so important in a world of rising asset prices, but its virtues will become all too apparent when the market turns.**

With unprecedented monetary policy easing by the world's major central banks since the end of the financial crisis driving interest rates to record lows, the price of pretty much everything other than commodities and deposit accounts – from sovereign debt to emerging-market equities to fine wine – has climbed sharply.

With interest rates at near zero, or in many countries below zero, if they do begin to rise investors are likely to face an altogether harder challenge generating attractive performance. This is compounded by the extent to which correlations between asset prices have risen. Falling interest rates have helped push asset prices higher in lockstep. An increase in correlations is fine as long as prices keep rising, but there is an obvious danger rising rates will have the opposite effect. Which begs the question: how can investors diversify their portfolios?

The two heat maps, figures 1 and 2, give a visual indication of the extent to which correlations between various international equity markets have risen in the past eight years when compared with the 15-year period that preceded the financial crisis. In the tables, red indicates a strong positive correlation, orange a weaker one, and yellow a weaker one still. The correlation between the six indices averaged 0.64 in the years leading up to the financial crisis and 0.79 since.

Interestingly, while many investment assets have risen in price since the onset of the financial crisis, they've not always done so simultaneously. Take US equities and government bonds. As figure 3 shows, the correlation between the two has actually got steadily more negative over the past 20 years. Furthermore, there have been many periods since the crisis when the correlation has been below the 20-year average. So although government bonds have also rallied over the last eight years, they've actually provided one of the few means of diversifying a portfolio of shares, or 'risky' assets.

The apparent incongruity of an increasingly inverse relationship between the prices of US stocks and Treasuries, which have nevertheless both risen, is explained by the fact that while monetary easing has driven financial asset prices higher simultaneously for much of the past seven years, there have also been lengthy periods when this has not been the case. During such moments, market sentiment has gyrated wildly with periods of optimism interspersed with bouts of extreme pessimism, as investors questioned central banks' ability to reignite economic growth.

**Figures 1 and 2: Heat maps showing correlations of equity market weekly returns between:**

**1993 and 2008**

| | US | UK | Europe | Japan | Asia ex Japan | Emerging markets |
|---|---|---|---|---|---|---|
| US | 1.0 | 0.696 | 0.745 | 0.462 | 0.524 | 0.574 |
| UK | 0.696 | 1.0 | 0.927 | 0.505 | 0.577 | 0.61 |
| Europe | 0.745 | 0.927 | 1.0 | 0.537 | 0.585 | 0.643 |
| Japan | 0.462 | 0.505 | 0.537 | 1.0 | 0.644 | 0.627 |
| Asia ex Japan | 0.524 | 0.577 | 0.585 | 0.644 | 1.0 | 0.929 |
| Emerging markets | 0.574 | 0.61 | 0.643 | 0.627 | 0.928 | 1.0 |

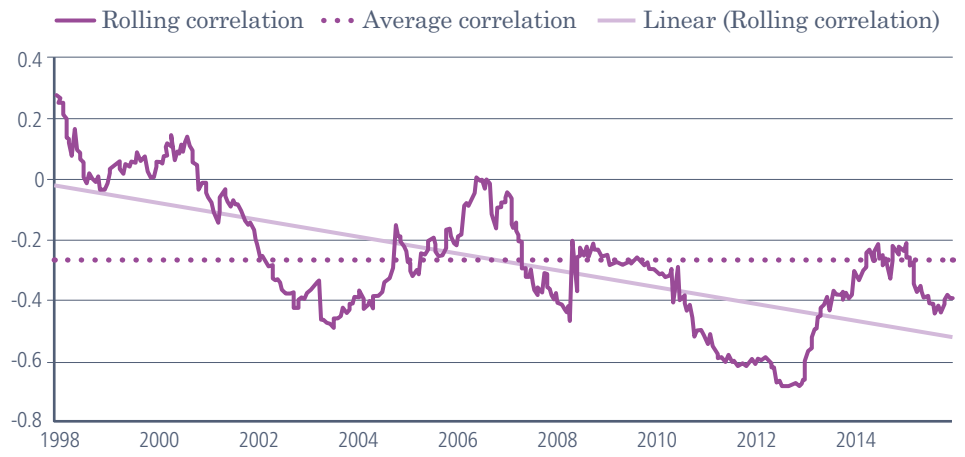
**… and since 2008**

| | US | UK | Europe | Japan | Asia ex Japan | Emerging markets |
|---|---|---|---|---|---|---|
| US | 1.0 | 0.886 | 0.891 | 0.658 | 0.769 | 0.783 |
| UK | 0.886 | 1.0 | 0.969 | 0.675 | 0.794 | 0.807 |
| Europe | 0.891 | 0.969 | 1.0 | 0.706 | 0.795 | 0.803 |
| Japan | 0.658 | 0.675 | 0.706 | 1.0 | 0.718 | 0.678 |
| Asia ex Japan | 0.769 | 0.794 | 0.795 | 0.718 | 1.0 | 0.967 |
| Emerging markets | 0.783 | 0.807 | 0.803 | 0.678 | 0.967 | 1.0 |

Source: Bloomberg.

US – S&P 500 Total Return; UK – FTSE All-Share Total Return; Europe – MSCI Europe ex-UK Total Return in local currencies; Japan – Nikkei 225 Total Return; Asia ex Japan – MSCI Asia-Pacific ex-Japan Total Return in local currencies EM – MSCI Emerging Markets Total Return in local currencies.

**Figure 3: Correlation of returns from US government bonds and equities**




Source: Bloomberg.

## Risk on, risk off

In market parlance, a pronounced 'risk on, risk off' (RORO) environment has prevailed during these moments with investors tending to behave in a herd-like manner; at times clamouring for 'safe havens' such as government bonds only to suddenly switch back into risky assets once the panic has subsided.

This is making it increasingly difficult to ensure portfolios are sufficiently diverse. For a start, it is becoming ever harder to predict the correlation between 'risk' and 'safe-haven' assets, as illustrated by what happened to the US dollar late last year. After a prolonged period where the dollar acted as a safe-haven asset, this changed dramatically in December, when sharp falls in risk assets were accompanied by a sizeable decline in the dollar against both the euro and yen. Whereas previously a 'long' position in the dollar would have provided downside protection to a portfolio of risky assets, suddenly at the start of this year it would have exacerbated losses.

More fundamentally, even if investors can correctly pick out safe-haven and risk assets that will continue to be negatively correlated, positions in the two don't represent independent sources of risks. Both are really just opposing legs of the RORO trade. The main driver of the performance of a portfolio or investment strategy is simply whether the correct call was made on being net long or short risk. Individual asset class or regional idiosyncrasies are of lesser importance.

As for those periods when the actions of central banks are dominant, pretty much all assets move in the same direction. That may not be so much of a problem in the current environment. But it begs the obvious question: where will investors get the diversification they need when interest rates are rising?

## FINDING DIVERSIFICATION IN A CORRELATED WORLD

*continued*

> *Although the future is full of uncertainty, that doesn't mean investors can't take steps to prepare for it*

### Prepare for the unexpected

The answer lies partly in being as prepared as possible for the unexpected. Although the future is full of uncertainty, that doesn't mean investors can't take steps to prepare for it. This requires analysis of how financial markets would be likely to respond to a range of hypothetical scenarios, and building portfolios that at least stand a chance of coping with the most extreme of them.

As an example, you may believe that inflation will remain subdued over the medium term and wish to build a portfolio accordingly. But it would probably be sensible to assess how that portfolio would perform in the event your forecasts proved inaccurate and inflation began to take root. That may cause you to adjust your investments, with the size of adjustment depending on how much uncertainty surrounded your forecast. It would probably also be wise to make more allowance than previously for the possibility that correlations may change – potentially quite suddenly – as was seen with the dollar and risk assets earlier this year.

This, together with the fact there maybe fewer assets capable of offering diversification, means it is advantageous to have the biggest tool kit possible. For example, since shifts in market sentiment are likely to coincide with big spikes in volatility, positions in derivative contracts that profit from rising volatility are obvious ways to diversify risk. The asymmetric return profile offered by options means they can be another useful way of taking out insurance. And establishing a combination of short and long positions is another means of boosting diversification, while investors could also broaden the range of assets in which they look to invest. Rather than considering just government bonds as diversifiers, they should consider whether a mix of assets would provide more protection.

It seems likely that financial markets will struggle to adjust when central banks decisively reverse course given the enormous scale of the intervention seen in recent years. But that doesn't mean investors need to get caught in the headlights. Preparation is key to ensuring that portfolios are built to be sufficiently diverse and able to withstand the challenging period ahead ●

# DON'T DISCOUNT SOLVENCY II

**JOHN DEWEY**
Head of Investment Strategy, Global Investment Solutions

**Solvency II was written for insurers, but its risk management and valuation ethos can benefit UK pension schemes, writes John Dewey**

Of all the European Union regulations that the UK might look to repeal or revamp when it leaves the bloc, Solvency II already looks likely to be high on the list. On September 13, the influential Treasury Committee launched an extensive inquiry into the rules[1], declaring that Brexit "provides an opportunity for the UK to assume greater control of insurance regulation".

> *Solvency II has created new investment opportunities*

This will likely be seen as good news to UK pension schemes, which have long resisted calls to replicate Solvency II for the pensions industry. Proposed moves to amend the Institutions for Occupational Retirement Provision (IORP) directive and implement a similar risk-based (Holistic Balance Sheet) regime for defined benefit pension schemes met with strong objections as far back as 2010.

Given the significant challenge of underfunding among many UK pension funds, replicating Solvency II could clearly lead to unrealistic capital requirements. It now seems unlikely to come to fruition, particularly in light of the extra leverage the UK should have over its regulations after Brexit. Nonetheless, discounting Solvency II altogether might be a mistake – some elements of the regulation can add value for pension funds, and an understanding of its impact on insurance investment allows funds to identify investment opportunities.

Implemented in January 2016 after a long gestation period, Solvency II was designed to improve and harmonise the supervision of insurers across Europe and give policyholders greater protection and confidence. Like the Basel framework for banks, the regulation is split into three pillars: minimum capital requirements; risk management, governance and supervision; and finally reporting and disclosure.

### Going Dutch

Solvency II was always designed for insurers rather than pension funds, but some countries drafted similar requirements for pension schemes long before the European rules were implemented. In the Netherlands, for example, a more disciplined and consistent approach to pension fund risk management and reporting has had a positive impact on the country's financial system over the past decade. Under the Financial Assessment Framework (FTK), implemented in 2007, a pension fund's capital must amount to at least 105 per cent of its liabilities, and funds must hold sufficient additional capital buffers to protect them from financial shocks.

# DON'T DISCOUNT SOLVENCY II

*continued*

In the event this coverage ratio falls below 105 per cent, the fund must submit a recovery plan to De Nederlandsche Bank, the Dutch supervisory authority, with strict rules on indexation (not allowed if the funding ratio falls below 110 per cent) and benefit reductions, if required. Meanwhile, the Netherlands Authority for the Financial Markets monitors the behaviour of pension funds to ensure relevant information is disclosed to members on a timely basis.

Adopting this risk-based framework early on has enabled the Dutch pensions market to navigate the difficult market conditions and volatility of recent years in better shape than some other countries. While the same framework may not work for all countries, there are clearly elements of a risk-based approach that can bring tangible benefits to pension funds. The benefits of this consistent measurement and disclosure were recently highlighted by the International Monetary Fund (IMF).

## A consistent approach

In its latest Global Financial Stability Report[2], published in October 2016, the IMF stated: "In Europe, regulations should be strengthened to ensure a common framework for risk assessment and enhanced transparency. This means valuing assets and liabilities on a market-consistent basis to facilitate standardized reporting and risk analyses, such as stress testing. Greater consistency would boost transparency, including by ensuring regular public disclosure of balance sheet metrics and risk analyses."

Setting aside the stringent capital requirements of Solvency II, which would require huge capital injections from corporates, the underlying risk management philosophy is worthy of closer consideration. Specifically, having a simple, consistent and transparent mechanism for the measuring of liabilities is a cornerstone of Solvency II and would be a positive step forward for the pensions industry.

Across Europe, a range of methodologies are used to measure pension fund liabilities today, which can create a distorted and misleading picture for investors. In the UK for example, there are diverse ways in which pension funds value their liabilities. While corporate accounting uses corporate bond discount rates, funding valuations allow schemes some subjectivity in setting their discount rate.

## Reality check

This enables pension schemes to take into account their current funding situation and future expectations, but it creates a perverse situation in which a fund can take more risk, target higher returns, and report a lower liability valuation by discounting liabilities at a higher rate. A market-consistent valuation such as the methodology enshrined in Solvency II may result in less favourable valuation results in the short-term, but it would be a more realistic and objective measure that could be applied consistently and transparently across the industry.

It remains to be seen exactly what will come of the Treasury Committee's review of Solvency II, and it could be a long time before there is any concrete move to change the framework governing pension funds in the UK. Nonetheless, it is important for the industry to remember that some of Solvency II's provisions may work for pension schemes.

In the shorter term, the implementation of Solvency II in the insurance world has created new investment opportunities for pension funds that may not be immediately obvious but are worthy of consideration. Heightened capital requirements are driving insurers towards secure long-dated fixed-rate assets that closely match their liabilities, but assets with pre-payment risk don't meet Solvency II requirements and should therefore be more readily available to pension funds.

Structuring a portfolio to avoid targeting the same long-dated fixed rate assets as insurers could help pension funds avoid being part of the herd. Shorter-dated assets can provide a significantly deeper pool of opportunities to exploit liquidity premia and diversified credit exposure. Another potential option can be found in assets, such as real-estate debt, that may carry flexibility for borrowers to pre-pay towards the end of a contract. Even if the pre-payment window is relatively short in comparison with the life of the asset, such assets are popular with borrowers but now less likely to be bought by insurers if they can't get the necessary capital treatment under Solvency II. While pension funds may not need to comply with Solvency II, they should understand the nuances of the rules so that they can target these private asset investment opportunities.

## Buy-outs

Finally, there has been heavy speculation in recent years over the impact of Solvency II on pension fund buy-outs, with the expectation that it would become more expensive for pension funds to discharge a chunk of their liabilities to insurers. In reality, this is still a highly competitive market and through careful management of their assets and liabilities, many insurers have managed to maintain similar pricing since the implementation of Solvency II. Pension funds should not be deterred from considering buy-outs, however, as opportunities still exist.

There is no doubt that Solvency II has dramatically changed the landscape for European insurers, but it would be wrong for pension funds to dismiss the regulation in its entirety. Not only are there elements of the framework that could ultimately benefit pension funds, careful scrutiny of the rules and the impact they have had so far could also yield unexpected business and investment opportunities ●

1. http://www.parliament.uk/business/committees/committees-a-z/commons-select/treasury-committee/news-parliament-2015/eu-insurance-regulation-inquiry-16-17/
2. http://www.imf.org/external/pubs/ft/gfsr/2016/02/index.htm

# THE THAIS THAT BIND

**ED WILTSHIRE**
Portfolio Manager, Emerging Market and Asia Pacific Equities

> *The success or failure of any government can only be assessed in the fullness of time*

**Economic stability is not the first thing investors would associate with military rule. Thailand's experience might pose an uncomfortable challenge to that assumption, writes Ed Wiltshire.**

To the Western mind, mature democracies are all but synonymous with stability. Part of the reason investors expect a premium for venturing into emerging markets is the perceived increase of geopolitical risk. Countries with nascent, dysfunctional, corrupt or no democracies are seen as having markets that are inherently unstable.

Recent events present a challenge to this worldview: even functioning democracies can deliver unexpected outcomes. The UK Referendum on EU membership seems set to reconfigure European geopolitics in the most fundamental way, while the US presidential election may also threaten the status quo if the first 'post-political' candidate can buck the opinion polls and win. Investors have come to realise that political risks and instability are not confined to the emerging markets and are starting to adjust the relative risk premia of the developed and developing worlds accordingly.

## Not for the squeamish

Conversely, political stability may not always come in a form those of a liberal or democratic stripe find particularly palatable. But can investors afford to be squeamish about these matters? What, for example, are those involved in the markets of Asia to make of Thailand? Since absolute monarchy was ended by an unprecedented military coup in 1932, it has been at best an intermittent democracy. The army retains its taste for intervention at times of political crisis, having staged coups on a fairly regular basis ever since. The latest, in May 2014, was Thailand's twelfth.

So how concerned should international investors be about such democratic hiatuses? Well, if the occurrence of these coups is mapped against GDP growth levels (as shown in the chart below), it is difficult to discern any consistent impact, negative or positive. The pattern of GDP growth is not greatly dissimilar to that of Thailand's neighbour Malaysia, which has enjoyed a relatively stable democracy since 1971.

The Thais, like the people of the UK, have experienced a referendum in recent months. This one related to ratifying a draft constitution designed, according to the ruling military junta, to bring stability to this notoriously fragile democracy. It will ensure the military remain close to the levers of power for some time to come, but does leave open the possibility of elections relatively soon. Bangkok, unlike Westminster, was never going to be unpleasantly surprised by the outcome of this vote; perhaps a consequence of banning any criticism of the draft constitution and prohibiting monitoring of the referendum.

The new constitution also takes into account the latest source of instability, the death of King Rama IX on October 13. While governments have come and gone and Thailand has switched between democracy and military junta a number of times, King Rama was a model of constancy for over 70 years.

## Succession planning

The succession of his heir, the Crown Prince, is likely to be a traumatic period for the kingdom. The military junta is likely to hold the reins of power over the period of the succession, and has a key role in providing both political and economic stability.

Following the King's death, a period of official mourning was declared for one year; during which time there may be a natural reluctance to launch new businesses or commercial ventures. With private investment respectfully subdued for such a period, it may fall on the military junta to increase public investment in an effort to maintain growth at the start of the successor's reign.

This may be why the market was so sanguine back in May 2014 when the tanks rolled back in for that twelfth coup. Knowing the watershed moment of the end of the King's reign was somewhere on the horizon, perhaps the security and certainties provided by a military junta were viewed as preferable to the instability of a less than fully-functional democracy.

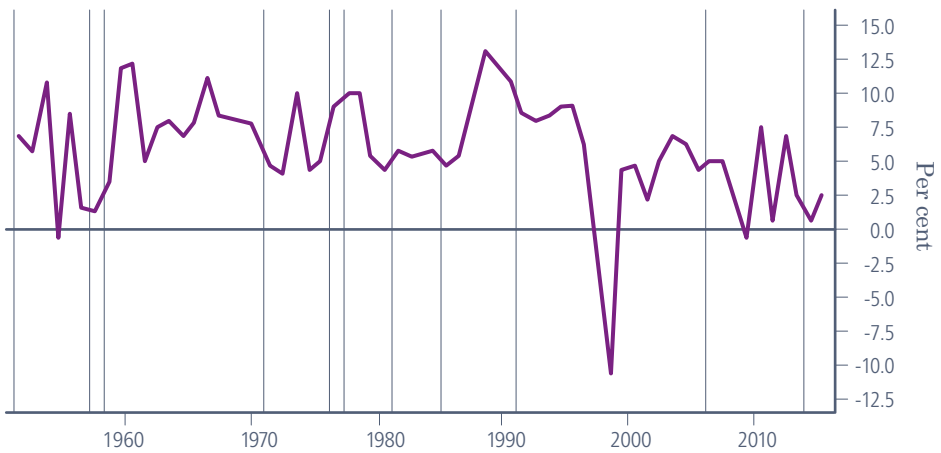
## For better or worse?

Certainly the Stock Exchange of Thailand Index barely paused for the coup. Having risen 15 per cent in local currency terms from the start of 2014 to the beginning of May prior to the military takeover, it rose by another 12 per cent by the end of November. Even the frequently volatile Thai baht moved surprisingly little relative to the US dollar over the course of that year. While it has hardly been plain sailing for the Thai market since then, there is little to suggest the domestic economy would have been any less buffeted by external macro forces under a democratic government.

The success or failure of any government can only be assessed in the fullness of time, but to give the current regime its due, it has at least proved willing to invest for growth. Whereas the previous civilian government had become paralysed by protests from an opposition movement determined to end former Prime Minister Thaksin Shinawatra's influence over Thai politics, the military government initiated approval of a number of stalled infrastructure projects in mass transit, dual track railways and motorways. These investments totalled 1.8 trillion baht.

The tentative step towards a stable democracy that the implementation of the new constitution represents is a welcome development. In the meantime, Thailand's rulers – in whatever garb – will be judged by the markets largely on how their actions impact the economy. For many investors, the quality of policy is more important than its source ●

**Thailand: GDP growth and military coups**




Source: Macrobond.

# A MATTER OF TRUST

**With asset managers facing significant scrutiny from regulators and the public alike, Aviva Investors' CEO Euan Munro discusses what the industry can do to demonstrate its societal and economic value.**

> *It is imperative we can prove our value to society*

While the banking sector bore the brunt of public and political wrath in the aftermath of the global financial crisis, the asset management industry now finds itself under the microscope.

The UK Financial Conduct Authority (FCA) launched a thematic review into the industry in November 2015 to "understand whether competition is working effectively to enable investors to get value for money when purchasing asset management services".

Thematic studies by regulators happen for a reason; and questions over whether asset managers offer value for money were being asked long before the FCA announced its review. But is there genuinely something wrong at the heart of the industry or is it just doing a poor job of demonstrating value?

***The asset management industry finds itself under significant scrutiny: is it doing enough to demonstrate its societal and economic purpose?***

**Euan Munro:** You're right to say the industry is in the spotlight given that it is under review by the FCA. I suspect the review was driven in part by a concern that some managers are charging active fees but aren't trying that hard to beat the index – in other words, active fees for semi-passive propositions. They'll either find that smoking gun or they won't.

The point I would make is that regulators or politicians are really following rather than leading the public mood. The public feel they have been let down by the financial sector broadly: banking has been through its own trauma and some unpleasant revelations emerged, such as the Libor scandal. That tarnished the whole industry so people are looking at asset management to see if there is something fundamentally wrong.

I don't actually think there is, but at the same time it is imperative we can prove our value to society and what we do to support economic growth and development. That is something we have not done a good enough job of and something we have to get better at.

***The FCA review is looking closely at whether asset managers offer value for money. Where are improvements needed?***

The value for money issue is critical. There is no doubt that as we moved from a high interest-rate world to a zero interest-rate world, relatively simple styles of passive investing where you own chunks of the market have all done well. Straightforward market exposure – or beta – has been a powerful driver of returns over the past 15-20 years.

However, I believe we're at an inflection point because interest rates cannot keep going down. The factors or low-cost styles of investing that led to success and appear to offer value for money are not going to be able to deliver the same results over the next 10-15 years. We can't be driving using the rear view mirror: we have to think about the styles of investing or philosophies that will deliver the outcomes clients are hoping for in future.

My fear is that customers in these low-cost strategies, largely because they delivered in the past, are going to be disappointed. True value for money, I believe, will be found in high quality active solutions and also high quality illiquid assets. You can't do that for nothing: any focus on value for money can't only be about the fee; it has to look at the fee in the context of the expected outcome.

***If simple strategies aren't likely to deliver the same results as before, can we expect a wave of new product innovation or should asset managers focus more on improving existing propositions?***

Fundamentally we need less products and propositions, but they need to be of better quality. When I think about innovation in the financial sector generally, some of the biggest innovations have also been the biggest disasters. Within investment banking we saw the splicing and dicing of credit into instruments such as collateralised debt obligations, which were subject to further financial engineering and ultimately led to a catastrophe in 2008.

In the past, the asset management industry came up with its own innovations such as 130:30 funds, where you invested 30 per cent of the fund in stocks you liked and shorted 30 per cent of stocks you didn't. It was a construct that was supposed to allow stock pickers to show off their capabilities, but didn't really benefit clients or solve their real-life problems. That's why they weren't commercially successful.

Our role as fund managers is to deliver a small number of client needs – to generate a decent return or level of income; or beat inflation or liabilities. Clearly there is an element of innovation that is required in terms of idea generation, but primarily we should be identifying innovators in the real economy and backing them with capital.

***If returns, as you say, will be less predictable, presumably portfolio construction will assume greater value?***

I've described portfolio construction previously as a Cinderella science. When a fund manager is being written about in the press or compared to peers, the

focus will often only be on the return. Part of the job is clearly to outperform the benchmark you've been set by a client, but a really pertinent question for a fund manager is whether she or he has taken more risk than is inherent in that market. That is a portfolio construction issue: in the pursuit of return, how much risk do you have to take?

Asset management is a twin-task business: it's about generating ideas to deliver positive returns and putting them into portfolios that are robust in a range of market scenarios. The Holy Grail is the delivery of good returns with low volatility. That is why portfolio construction will increasingly be at the heart of what is necessary to meet client expectations.

### *Does the industry need to do a better job in educating investors on this – there is so much emphasis on performance and less about the stability of returns?*

That's right, we do need to emphasise that more in all of our communication and remind people it is a critical part of our remit. We could also do more in terms of providing empirical evidence that shows that if you reduce volatility for investors, they are less likely to make a mistake. If you take a simple investment strategy such as buying a passive investment in equities, it is true that someone who started a strategy a few decades ago and stuck with it would have received very good returns. But behavioural aspects means that people sometimes invest more in boom years like 1999 and panic in bear markets like 2008 and switch out. They get a much worse outcome than if they had stayed with the programme and invested consistently through the period.

If we can avoid the extremes, we can guide people towards much better outcomes from their savings. Ultimately that will help them live better in retirement.

### *You mentioned earlier the importance of illiquid assets: should they be part of all investors' portfolios or just institutional clients who can live with the illiquidity?*

One key challenge in the industry is how to give retail investors appropriate access to illiquid assets. These assets will almost certainly be an important area of return generation in future. I think a lot of individual investors would really get a sense of the value of fund management if they were investing in assets such as wind farms, tidal energy projects, bridges and hospitals. The nature of these investments is that you are helping to build useful infrastructure, but very often retail investors are kept out of these markets because the assets are by their nature long-term and illiquid. We haven't yet been able to develop the right fund structures and need innovation to give people that exposure.

Someone in their mid-60s who has decided to retire and wants to secure a long-term income from their asset pot can buy an annuity. Clearly an annuity provides security for life and that's worth something, but the rate of return will not be much better than investing in a government bond. What might be interesting to investors prepared to take some risk would be investing in the kind of assets that an insurance company is able to.

In Europe, Jean-Claude Juncker [European Commission President] has talked about the development of 10-year funds where people subscribe for the entire period. That potentially could be the solution: if we could set up mutual funds with a defined long-term maturity, people might be able to invest more in illiquid assets.

### *Could investments in areas such as infrastructure help asset managers redefine their societal purpose, particularly in the post-Brexit environment?*

Potentially. I'm proud of the investments we have made in solar panels, windfarms, biomass, energy centres and hospitals, where the societal value is clear. Even with liquid assets, the thoughtful allocation of capital to industry in the UK and beyond also has a clear benefit. We definitely have an opportunity to play a part in the post-Brexit world, but I'd argue we have always been involved in activities that have social and economic value. We maybe just haven't got the message across ●

> *"The Holy Grail is the delivery of good returns with low volatility"*

# THE amazon EFFECT

**The rise of Amazon.com has forced traditional retailers to adapt their business models. But who will be the winners – and losers – in the battle with e-commerce?**

On August 8, after weeks of fevered speculation, US retail giant Walmart Stores announced its acquisition of Jet.com, an e-commerce firm, for $3.3 billion in cash and stock. For Walmart, which has an estimated market value of $250 billion, the sum was little more than pocket change – but it seemed rather a large amount to lavish on Jet, a two-year old company yet to turn a profit.

A clue to Walmart's thinking lay in its statement on the deal, which lingered on the past achievements of Jet's charismatic founder and CEO, Marc Lore. "Lore previously co-founded and led Quidsi, [the parent company of several e-commerce sites]…a prominent and successful business that was ultimately sold." The statement neglected to mention the buyer. In 2010, Quidsi was snapped up for a cool $545 million by the world's biggest online retailer: Amazon.com.

The market consensus is that Walmart's takeover of Jet was a vastly expensive 'acqui-hire' – a way of obtaining Lore's expertise in developing websites able to compete with the might of Jeff Bezos' Internet giant. The deal illustrates the lengths to which bricks-and-mortar retailers are willing to go as they battle for supremacy with e-commerce companies, which have lured their customers, disrupted their business models and eroded their profit margins.

"There are many challenges to Walmart's business," says David Bucolo, Senior Securities Analyst at Aviva Investors. "The Jet deal is a sign that Walmart can't figure out how to build an online platform to rival Amazon's, so it's trying to buy in the expertise. Like a lot of other companies, it's trying to do whatever it can to remain relevant in the era of online business. For traditional retailers, it's a case of 'adapt or die'."

With no choice but to adjust to the new market landscape, traditional retailers are building their own websites and distribution platforms, rethinking the location of stores and even creating new in-store 'experiences,' such as high-tech augmented reality displays, to retain customers. Investors in retail should keep a close eye on the success or failure of these initiatives, because they are likely to determine the winners – and losers – in the battle with e-commerce.

> *"For traditional retailers, it's a case of adapt or die"*

## Bezos' beast

Online retail is booming. E-commerce sales topped $97 billion in the second quarter of 2016, an increase of 16 per cent over the same period a year earlier, according to data from the US Department of Commerce, while total retail sales grew by five per cent. Overall, e-commerce remains a relatively small part of the market, accounting for 8.1 per cent of total sales in the second quarter, although that figure is expected to rise to 12 per cent by 2018[1].

Amazon is responsible for much of the growth in e-commerce in the West. According to Morgan Stanley, Amazon's gross merchandise value has grown faster than total global e-commerce sales for the last six years, reflecting its dominance[2].

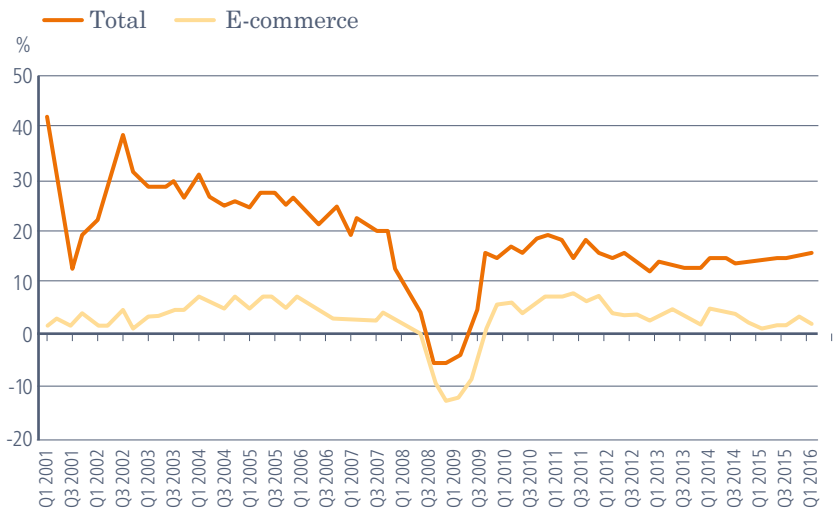
The reasons for Amazon's success are manifold; from the entrepreneurial nous of Bezos, its founder and CEO, to its tentacular reach into new markets and sectors. But Amazon's business model lies at the heart of its power. From its beginnings as a value bookseller in the late 1990s, Amazon has been designed to cut out the kind of costs that hamper its store-based rivals. Instead of shelling out on costly retail floor space, Amazon runs large, efficient warehouses; in place of expensive human staff, Amazon operates a growing army of storage-and-retrieval robots and – pending regulatory approval – whirring flocks of delivery drones.

"Originally, Amazon was based on exploiting the cost inefficiency of bricks-and-mortar retailers," says Giles Parkinson, Fund Manager, Equities at Aviva Investors. "If your model is based on warehouse deliveries, you can avoid the occupancy costs of owning a shop and the labour costs of staffing it. The cost advantage was very wide in some categories – and those profits enabled Amazon to move into new areas."

Crucially, Amazon passes on a large chunk of its cost savings to consumers, keeping its margins thin. Morgan Stanley estimates Amazon's core retail margins were less than 0.5 per cent of its global gross merchandise value of $205 billion in 2015. "Percentage margins are not one of the things we are seeking to optimize," Bezos explained in a 2013 interview with the Harvard Business Review, stressing instead the importance of customer loyalty and cash flow.

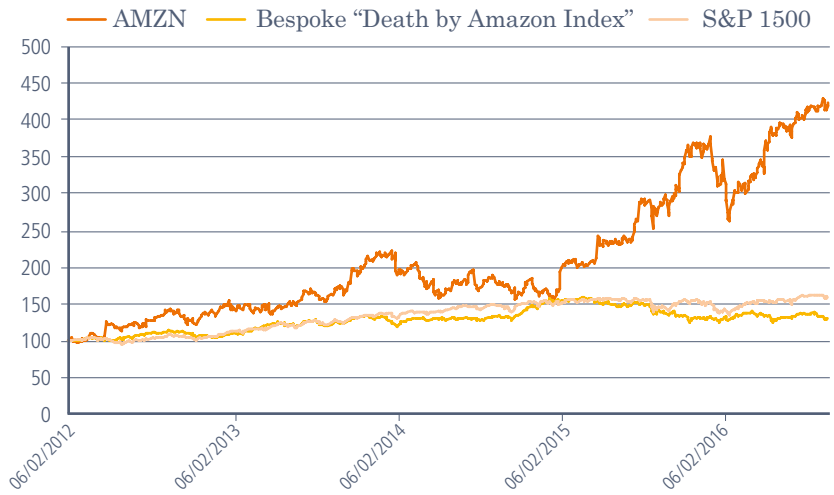
For investors in Amazon, the idea profit margins are unimportant might be concerning – although they have so far been willing to give Bezos the benefit of the doubt. And customers aren't complaining. As business columnist Matthew Yglesias put it, Amazon could be described as "a charitable organization being run by elements of the investment community for the benefit of consumers."[3] Those razor-thin margins give Amazon another key advantage: they make it more difficult for

Figure 1: Quarterly percentage change in retail sales by value, 2001-2016




Source: US Census Bureau, June 2016.

Figure 2: Cumulative returns on Amazon shares versus rival retailers and S&P 1500 Index




Source: Bespoke Investment Group, July 2016[4].

new entrants to the e-commerce market to compete, cementing its position as the leader of the Internet retail pack. This is a particular problem for traditional retailers that must go through the costly process of building online platforms and adapting their existing business models, even as Amazon streaks ahead.

## Adapt or die

The rise of online is not the only pressure faced by traditional retailers in Europe and America – stagnant economic growth and rapidly ageing populations both cloud the horizon – and it can be difficult to isolate e-commerce as a variable.

However, there is no doubt online shopping is a significant threat to incumbent retailers. An index compiled by the Bespoke Investment Group, a US-based consultancy, shows how a group of 50 traditional retailers have underperformed since 2012 even as Amazon has soared (see figure 2). Since February 2012, Amazon's shares have returned 300 per cent, while the so-called 'Death by Amazon' index, consisting of rival retailers including Walmart, Target, Macy's and Nordstrom, among others, has risen only 50 per cent, lagging both Amazon and the benchmark S&P 1500 Index.

"There is no let up," says Parkinson. "The pressure from online is relentless. This makes it difficult for investors, because we have to try to judge what a company will look like in ten or twenty years' time. Is there any potential for disruption to its business model or a threat to its competitive advantage? The rise of e-commerce makes it more difficult to answer those questions, because the landscape changes so quickly."

Part of the problem is Amazon's sheer speed at moving into new areas, including sectors that appeared impervious to the 'Amazon effect.' Take car parts. This sector had been thought to be insulated from the rise of online retail: if customers need a new tyre or windscreen wipers, they usually prefer to visit a garage immediately than wait for an online delivery. But on August 25, Amazon announced the launch of Amazon Vehicles, a platform enabling customers to build a profile that seamlessly selects the parts they need for their own cars – and delivers them the same day in some cases – which may allow it to establish a foothold in the sector.

"There are very few businesses that I'm convinced hand on heart are impervious to online because e-commerce just keeps growing," says Parkinson. "A lot of the incumbents in the car parts sector may be hit hard by Amazon's entry. It's just another tightening of the screw."

All is not lost for bricks-and-mortar retailers, however. According to Richard Levis, Global Real Estate Analyst at Aviva Investors, stores must be able to offer three things in order to match companies that trade exclusively online. If they achieve this, they may just be able to mitigate the effects of e-commerce.

"The first consideration is convenience – given that buying online is so convenient, stores need to ensure they are not badly located or difficult to access," says Levis. "They also need to offer a compelling 'experience': when buying online is so easy, consumers need a good reason to make the journey to a shop. The third – and most important – factor is value. Buying online is generally cheaper, so stores have to reduce prices to remain competitive. Traditional retailers that address these concerns will tend to be resilient in the face of online competition. Those that don't will fall behind."

## Convenience

So which companies are succeeding on these three fronts? The first – convenience – presents perhaps the most daunting challenge. Amazon's 'one-click' system and 24-hour delivery service means most customers can get what they need from its vast range of merchandise at short notice and with a minimum of fuss. Smaller, nimbler e-commerce companies, such as UK-based ASOS, have focused on making goods returns simple and affordable; enabling consumers to try a handful of garments before rejecting the ones they don't want.

Traditional retailers have no choice but to develop their own online offering if they are to keep pace. Since 2011, capital expenditure by US department stores and specialty retailers on information technology and distribution has risen 10 per cent[5]. The same trend is evident in the UK, where 73 per cent of retailers plan to increase their investment in digital operations over the next 12 months[6]. These companies aim to become 'multi-channel' retailers that can seamlessly cater for both online and in-store orders.

> *Few businesses are impervious to online*

# THE AMAZON EFFECT

*continued*

> *More retailers may eventually throw up their arms and sell through Amazon*

Walmart will hope its purchase of Jet gives impetus to its sluggish online revenue growth. New hire Marc Lore – who is reportedly receiving up to $1 billion in cash and stock from the Jet deal – has his work cut out: e-commerce presently accounts for only three per cent of Walmart's total sales. A successful online strategy is likely to take advantage of Walmart's extensive store network. As well as splashing out on Jet, Walmart recently introduced an e-payments system called Walmart Pay in an effort to match the ease of Amazon's integrated ordering and payment platform. Crucially, customers can use Walmart Pay to purchase items in-store as well as online – an example of how companies are trying to integrate their online and physical offerings.

Like other bricks-and-mortar retailers, Walmart has also introduced 'click-and-collect' services that allow customers to order online and pick up their purchases in a physical store. This speaks to the way the growth of multi-channel retail is changing the nature of shops. Increasingly, retailers are favouring city-centre locations or those near transport hubs to save customers onerous out-of-town journeys. And in many cases, stores are becoming hybrids of traditional shops and logistics centres.

Some existing business models will be more conducive than others to this shift. Take catalogue-based retailers such as the UK's Argos. Once lampooned for its reliance on an unwieldy product catalogue – "the laminated book of dreams," as comedian Bill Bailey once described it – Argos' business model was ideally suited to the online transition, because its catalogues could easily be digitised and its stores already operated as showrooms-cum-warehouses.

Argos' fast-track option promises home delivery within four hours – faster, cheaper and more widely available than Amazon's 'Prime Now' service in the UK. This slick online model has yet to translate into greater financial gains – Argos recorded a slump in profits in the financial year to February 27, 2016 – but it has attracted the attentions of supermarket chain Sainsbury's, which bought Argos' parent company, Home Retail, for £1.4 billion in September 2016. Sainsbury's is expected to consolidate existing Argos outlets with its own stores, taking advantage of its successful online delivery system and recent tie-up with auction website eBay, which enables customers to pick up eBay purchases at its sites.

## Experience

As well as trying to compete with the convenience of e-commerce, traditional retailers are aiming to capitalise on their continued high-street presence. After all, the vast majority of shopping still occurs offline. According to PricewaterhouseCoopers, more than one in three consumers still visit shops at least once a week; by comparison, only 20 per cent shop online on a weekly basis[7].

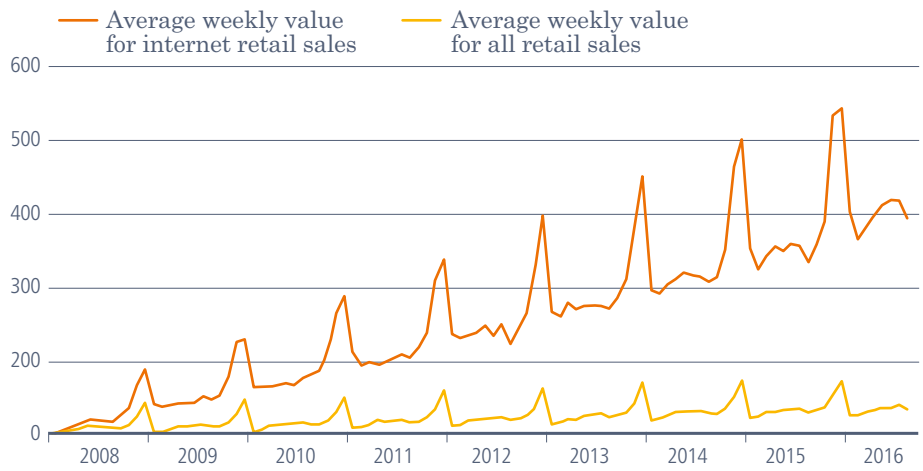
Retailers are focusing on making their stores more than glorified showrooms for stock. For example, one of the companies hit hardest by the rise of Amazon, bookseller Barnes & Noble, recently announced plans to expand the cafes inside its stores. These will now serve wine, beer and offer a waiter service – a way to attract customers and entice them to stay longer.

Amazon has tacitly acknowledged the advantages of a store network by announcing plans to open as many as 400 physical bookshops, which will feature books, e-readers and computer terminals where customers can order online. But many traditional retailers already offer this sort of service. For example, Swiss supermarket chain Migros has installed in-store kiosks to enable customers to browse online while in a shop and buy items that are not held in its physical inventory[8].

Retailers are also investing in newer, cutting-edge technology. The latest wheeze is 'augmented reality,' a mixture of real-life images and computer graphics that has propelled Nintendo's Pokémon Go phenomenon. Toy manufacturer Lego, for example, has started installing a 'Digital Box' in its outlets that shows customers what a finished Lego model will look like in three-dimensions. Diamond company De Beers is using similar technology to allow customers to virtually 'model' jewellery before buying it.

This focus on experience doesn't necessarily mean expensive technology or store revamps, however. 'Off-price' retailers such as TK Maxx (known as TJ Maxx in the US) or Ross Stores have proved notably resilient in the face of online competition. TK Maxx, for example, has benefited from the rather intangible sense of novelty its stores offer. "Every week the merchandise will be different. That generates customer loyalty, because customers will keep returning to see what's new," says Bucolo. "There's a 'treasure hunt' element – people like scouring the racks for discounts."

**Figure 3: Weekly value of UK internet sales versus total retail sales, 2008-2016**




Source: Thomson Reuters Datastream.

## Value

But TK Maxx also offers something else – value. This is partly because its vast network of stores enables it to buy in bulk from wholesalers and to offer discounts on brand-name apparel that customers cannot find elsewhere. In China, where the sector lacks an incumbent of TK Maxx's size and scale, the biggest off-price retailer is Vipshop, an online firm that offers flash sales of luxury goods.

This shows that 'experience' alone is not enough to insulate a sector from the threat of online disruption – companies also need to compete on value. And as retailers expand online operations, their margins are suffering as a result. Retailers' earnings before interest and tax (EBIT) decline 30 basis points for every percentage point of online penetration. In other words, the more trade a retailer does online, the thinner its margins become[9]. And price-matching initiatives designed to see off the threat of 'showrooming' – where consumers visit a store to see a product before buying it online – have also hit profits.

Interestingly, this applies even to retailers that have built successful online models. Argos is a good example. Its profit margins shrank two percentage points in the fourth quarter of 2015 even as its online sales rose 10 per cent, largely because it was forced to cut its prices to stay competitive during the pre-Christmas shopping bonanza known as 'Black Friday.' Overall profits fell nearly 36 per cent in the fiscal year 2016, to £83 million.

In the US, one of the more astute multichannel retailers, department store Nordstrom, has seen its margins decline despite strong online sales. Nordstrom.com recorded a 30 per cent annual growth rate between 2010 and 2014, partly because of its unconditional free shipping policy. But this largesse – motivated by the imperative to match other e-commerce firms on the convenience front – has eaten into its margins. Shipping expenses amounted to three per cent of Nordstrom's total retail sales in 2015, up from 1.4 per cent in 2010[10]. Like Amazon, Nordstrom seems to be prioritising market share, sales growth and cash flow in the hope it can increase margins later on as its online platform becomes more cost-efficient.

"Cutthroat competition has led companies to undercharge returns on apparel. They're almost cutting off their nose to spite their face," says Parkinson. "The same goes for groceries. [UK supermarket chain] Tesco is generating billions of dollars in sales as it moves online, but no profit, because it can't charge customers enough for the cost of deliveries."

The UK groceries sector had been viewed as relatively safe from the incursions of e-commerce, because consumers generally like to see their food before they buy it. But this may be changing. Amazon recently announced plans to start selling groceries in the UK under its brand Amazon Fresh, which has also started to make headway in the US after a slow start. Following the announcement, shares in the big supermarket chains Tesco and Sainsbury's and Ocado, an existing online retailer, fell sharply.

Online competition is having wide-ranging effects on established names. Supermarkets are increasingly favouring smaller, convenience-store sites rather than large megastores to cut rental costs and save shoppers from having to make out-of-town journeys[11]. And the increasing importance of value favours discount retailers such as German companies Aldi and Lidl, which have both increased sales and market share[12] over the last year, even as Tesco's and Sainsbury's have suffered.

## If you can't beat 'em…

There is another option for retailers concerned about the rise of online other than offering ever-steeper discounts: collaboration, or more precisely 'coopetition,' whereby a company teams up with its ostensible competitors. Another UK supermarket, Morrisons, has signed a deal with Amazon to provide fresh produce for its Amazon Fresh service. While it is early days, the strategy seems to be paying off. Morrisons' profits rose 13.5 per cent in the first half of 2016, the first such increase for four years.

As competition becomes increasingly fierce, more bricks-and-mortar retailers are likely to join forces with online companies to counter the threat of e-commerce. Walmart recently signed an agreement with car-hailing companies Uber and Lyft to offer grocery deliveries, for example.

Bucolo says alliances with Bezos' giant are likely to become increasingly common, with more retailers signing up to Amazon Marketplace, a platform that third parties can use to sell their wares. "More retailers may eventually throw up their arms and sell through Amazon, "says Bucolo. "There comes a point when Amazon, with its sophisticated logistics operation, may offer a better selling proposition for retailers than running their own e-commerce operations."

In the brave new world of online retail, bricks-and-mortar stalwarts may need to fall back on an old truism: If you can't beat 'em, join 'em

1 US Department of Commerce, quarterly retail sales report, August 2016
2 E-commerce: the long(er) path to profitability,' Morgan Stanley, May 2016
3 'Amazon profits fall 45 per cent, still the most amazing company in the world,' Slate, 2013
4 'The Bespoke death by Amazon indices,' Bespoke Investment Group, September 2016
5 'E-commerce: the long(er) path to profitability,' Morgan Stanley
6 WBR Digital survey, June 2016
7 'Total retail 2015: retailers and the age of disruption,' PricewaterhouseCoopers consumer survey, February 2015
8 'Retailers and the age of disruption,' PricewaterhouseCoopers
9 'E-commerce: the long(er) path to profitability,' Morgan Stanley
10 Morgan Stanley
11 All but one of the 20 planning applications for new stores filed by Tesco and Sainsbury's pair during 2016 are for convenience stores. Barbour ABI/ Daily Telegraph research, September 2016
12 Kantar WorldPanel research, June 2016

# SOVEREIGN WEALTH FUNDS: EVOLUTION OF THE GIANTS

**As sovereign wealth funds shift their vast portfolios into new asset classes, such as real estate, infrastructure and private debt, perceptions of these investment behemoths are beginning to change.**

It has been a tough few years for sovereign wealth funds (SWFs). The collapse in oil prices that began in mid-2014 ripped holes in government budgets across the Middle East, where many of these funds are based. 1Malaysia Development Berhad (1MDB), a Malaysian state-owned investment vehicle, is being investigated by authorities across the globe after allegations of corruption on an epic scale. And the billions housed in Libya's SWF have been the subject of a high-profile tug-of-war between two governing factions.

The cases have attracted lurid headlines and tainted the public perception of government investors. Not all SWFs are alike, however. The term 'sovereign wealth fund' encompasses a diverse range of institutions: some are commodity-rich newcomers, others decades-old market operators with no connection to oil; some are secretive about their operations, others are open and transparent; some rely on external asset managers, others run sophisticated investment teams of their own.

What is incontestably true is that these organisations wield a significant and growing influence in the financial markets. SWFs' assets under management stand at nearly $6 trillion, up from $650 billion in 2002. And the nature of their investments is changing. SWFs that once divided their capital between fixed-income and long-only equity positions are now investing more adventurously in real estate, infrastructure and private-market debt.

"Sovereign wealth funds are investing more of their assets in private markets to diversify their portfolios and gain access to higher yields," says Enrico Soddu, Head of Data at the London -based Sovereign Wealth Center (SWC), which tracks the industry. "They are increasingly looking beyond traditional '60-40' allocations to bonds and equities [see chart]."

SWC data shows private-market investments now account for 28.6 per cent of SWF portfolios, up from 12 per cent in 2007 and 9.4 per cent in 2002. This trend illustrates what sets most of these funds apart from other institutions: not shadowy political agendas, but decades-long investment horizons and a freedom from defined liabilities. Taking the long view, SWFs are able to gain exposure to illiquid assets, to invest against the grain and take advantage of secular trends such as ageing demographics and the rising spending power of emerging-market consumers.

## Growth of the SWF

Definitions of SWFs abound, but the International Monetary Fund's is the most concise: SWFs are "special-purpose investment funds or arrangements, owned by general governments. SWFs hold, manage or administer assets to achieve financial objectives, and employ a set of investment strategies that involve investing in foreign financial assets[1]."

SWFs have been around for decades – the Kuwait Investment Authority, often cited as the oldest fund, was founded in 1953 – but really came to prominence in the mid-2000s as they grew in size and proliferated in number amid a boom in energy prices. Oil-funded SWFs saw their assets skyrocket during the so-called 'commodity supercycle' of 2000-2014; Norway's Government Pension Fund Global and the Abu Dhabi Investment Authority among them. And new funds launched across the Middle East and Sub-Saharan Africa as governments sought ways to manage their newfound riches.

Not all SWFs are financed by oil. Funds in East Asia, such as the China Investment Corporation and Singapore's GIC, benefited from the growth of their sponsoring governments' foreign-exchange reserves over the last decade, as did central banks and other state-run entities such as China's State Administration of Foreign Exchange and the Hong Kong Monetary Authority, both of which run dedicated portfolios for the sole purpose of generating investment return (these portfolios are often considered to be quasi-SWFs).

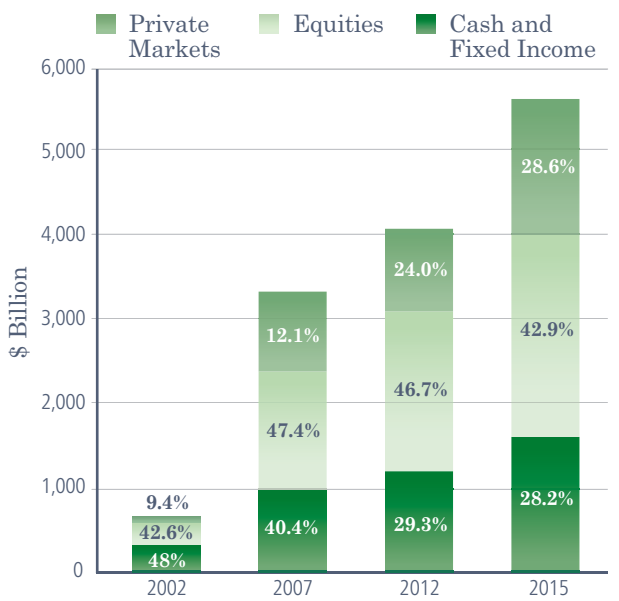
The gathering power of state-owned investors attracted some suspicion, however. Fears about the growing influence of wealthy governments came to a head in 2006, when Dubai Ports World (DPW) – not technically a SWF, but a maritime company owned by the government of the United Arab Emirates – acquired British shipping firm P&O in a deal that included the leases to six North American ports. US Congress threatened to stop the transaction on the basis that it compromised national security by surrendering control of strategic assets to a foreign power. Amid the political backlash, DPW sold P&O's US operations to insurance giant American Insurance Group.

Leading SWFs tried to address the concerns that lay behind the DPW controversy in 2008, when they formed the International Working Group of Sovereign Wealth Funds (now known as the International Forum of SWFs). Its members pledge to be transparent in their operations and to invest purely on commercial – rather than political or strategic – grounds, following a set of voluntary rules on good governance known as the Santiago Principles, named after the city where they were drawn up.

## SWFs: doing it for themselves

The collapse in oil prices since mid-2014 has led to a new accusation against SWFs: that these funds are a source of systemic risk in the financial markets. During the stock-market turmoil of early 2016, SWFs were criticised for contributing to the volatility by selling assets en masse to support their cash-strapped governments[2].

**Sovereign Wealth Fund Asset Allocation, 2002-2015**




Source: Sovereign Wealth Center.

There is, in fact, little evidence to support this assertion. SWFs' overall assets under management actually rose between 2014 and mid-2016, from $5.6 trillion to $5.8 trillion, despite the plunge in oil prices, and there have been few major divestments. According to a report from the Sovereign Investment Lab, a department at Bocconi University in Milan, most of the 70 asset sales recorded in 2015 were from non-commodity-based SWFs. "The divestments we observe seem to indicate more a tendency to rebalance and diversify portfolios …rather than an attempt by SWFs constrained by low commodity prices to divest holdings to create liquidity to support domestic budget deficits," the Bocconi analysts wrote[3].

Some oil-rich countries, including Russia and Kazakhstan, have indeed dipped into their savings to plug yawning budget deficits. And Saudi Arabia has ploughed through billions of dollars saved in the Saudi Arabian Monetary Agency, its central bank, since 2014 as it grapples with low oil prices and a costly war in the Yemen[4].

However, many Middle Eastern governments, such as Kuwait, continued to contribute to their SWFs last year despite the oil-price collapse. This illustrates that, on the whole, SWFs are autonomous organisations that now rely on investment income rather than ongoing government support to finance their operations, and are protected by strict rules over withdrawals.

> *When you invest over generations, you can afford to ride out short-term peaks and troughs*

*Flying high? The Kuwait Investment Authority invested in London's City Airport in February 2016.*

Where SWFs have sold out of positions or redeemed investment mandates, the reasons go beyond plunging oil prices. Among them is the fact that SWFs are becoming more discerning about their relationships with external companies. Roslyn Zhang, Head of Fixed Income and Absolute-Return Strategies at the China Investment Corporation, captured the newly-assertive tone of many state investors at a hedge fund conference in May, when she complained that managers are not offering value for the fees they demand. Zhang said she was "disappointed" by the performance of the fund's hedge fund partners and was looking to reallocate funds to more "skilful" firms[5].

Similarly, the New Zealand Superannuation Fund has sold several stakes in private-equity real estate funds in 2016, stressing its desire for "fewer, deeper relationships" with external managers[6]. And the Abu Dhabi Investment Authority, the largest of the emirate's complex ecosystem of state investment funds, has also reduced its reliance on third-party firms. As of December 31, 2015, the fund outsourced 60 per cent of its investments, down from 65 per cent in 2014[7]. That might not seem like a big reduction, but in the context of its vast asset base – $590 billion, according to SWC estimates – it amounts to some $30 billion, a sizeable shift.

Soddu says that while SWFs will continue to use external managers, they are increasingly looking for more tailored, mutually-beneficial partnerships that recognise their unique requirements. "SWFs still need external managers, but they are now using them to access specific market niches."

## Hard assets

One of those niches is real estate. "We are seeing SWFs partner with local asset managers to take substantial positions on prime real-estate assets in particular," says Barry Fowler, Managing Director, Alternative Income Solutions at Aviva Investors. "Some Middle Eastern funds have more risk appetite and are partnering with external firms on development deals: Qatari Diar [a unit of the Qatar Investment Authority] is working with Canary Wharf Group on London's Shell Centre redevelopment, for example."

Traditionally, SWFs maintained conservative asset allocations that relied heavily on equities and fixed income. But they are increasingly moving into alternative assets as government bonds, the traditional cornerstone of their portfolios, become less lucrative. Global sovereign debt yields $500 billion less annually than five years ago, according to Fitch Ratings. SWFs' average allocation to cash and fixed-income assets has dropped from 40 per cent in 2007 to less than 30 per cent as of December 31, 2015.

Because of their long-term investment focus and lack of defined liabilities, many SWFs have the capacity to take on significant real-estate allocations. The world's biggest SWF, Norway's gargantuan Government Pension Fund Global, is a case in point. Since it was founded in 1996, the fund has focused its efforts on bond and equity investments – it owns more than one per cent of all global listed shares – but the fund is now building a sizable property portfolio. Norway started tapping the fund for the first time in 2016 in response to the drop in oil prices, but annual withdrawals are capped at four per cent and – for now, at least – are more than covered by its investment returns. This means it retains the flexibility to take on more risk.

Norges Bank Investment Management (NBIM), the arm of the central bank that manages the fund, has gobbled up huge swathes of real estate in London and the US. NBIM recently paid $1.7 billion for a share in a Manhattan property portfolio owned by a Wall Street church, and stepped in to buy an office building on Oxford Street in London for £124 million soon after the UK voted to leave the European Union at the referendum of June 23.

"Traditionally SWFs have chosen to invest in the most transparent real estate markets, such as London, New York and Paris, and they have tended to target offices and luxury hotels," says Chris Urwin, Global Research Manager, Real Estate at Aviva Investors. "The illiquidity premium available on real estate relative to other asset classes suits them, because they can afford to lock up capital for a long time. They could potentially allocate far more to real estate than they do currently."

The Norwegian government recently approved a plan to raise the fund's real-estate allocation from five per cent of its overall portfolio to seven per cent, or $60 billion. NBIM has also been trying to win the freedom to invest the fund in higher-yielding unlisted infrastructure assets, although politicians remain stubbornly reluctant to grant it.

Nevertheless, other SWFs are allocating huge sums to motorways, railways and energy-distribution networks. Increasingly, the funds are collaborating on big infrastructure deals to spread risk and to cement relationships with their peers. The Kuwait Investment Authority was part of a consortium that acquired London's City Airport for £2 billion in February, while the China Investment Corporation and Australia's Future Fund were involved in a $7.3 billion deal for a container-ship port in Melbourne in September.

"The investment objectives of sovereign wealth funds aren't the same as other long-term institutional investors, such as pension funds and insurers," says Mark Versey, Chief Investment Officer, Global Investment Solutions at Aviva Investors. "They don't need to match liabilities in the same way and don't have the same regulatory constraints, which gives SWFs flexibility in terms of asset allocation. For example, they see infrastructure equity and other private asset classes as high-growth investment opportunities where they can put a lot of money to work."

## Emerging-market deals

As well as investing for the long-term in developed-market real estate and infrastructure, SWFs are building their allocations to private-market assets in the developing world. Where funds once sought the relative safety of government bonds issued by Western governments, they are now seeking to invest more widely to diversify their portfolios and take advantage of long-term trends, including the rise of consumer spending in emerging markets.

At the forefront of these efforts are two of the more-sophisticated state investors, Singapore's GIC and Temasek Holdings, whose investments range from Indian financial services to Filipino pizza parlours.

# SOVEREIGN WEALTH FUNDS

*continued*

**TOP 10 SWFs BY ASSETS**

| Name | Country | Assets Under Management |
|---|---|---|
| Government Pension Fund Global | Norway | $857.8 billion |
| China Investment Corporation | China | $813.7 billion |
| State Administration of Foreign Exchange (Investment Portfolio) | China | $612 billion |
| Kuwait Investment Authority | Kuwait | $592 billion |
| Abu Dhabi Investment Authority | Abu Dhabi | $589.8 billion |
| GIC | Singapore | $353.6 billion |
| Qatar Investment Authority | Qatar | $338.6 billion |
| Saudi Arabian Monetary Agency (Investment Portfolio) | Saudi Arabia | $210.7 billion |
| Investment Corporation of Dubai | Dubai | $196 billion |
| Temasek Holdings | Singapore | $180 billion |

Source: Sovereign Wealth Center, June 2016.

GIC's recent investments in Brazil demonstrate how SWFs are able to look beyond short-term political and economic turmoil to invest on the basis of generational shifts. In 2015, for example, even as President Dilma Rousseff became embroiled in impeachment proceedings and the economy sank into its worst recession for a quarter of a century, GIC paid $1.6 billion for a 15 per cent stake in Rede D'Or Sao Luiz, a Sao Paolo-based hospital chain. The fund expects spending on healthcare to increase in Brazil and other emerging markets as populations age and the growing middle class spends more on better medical treatments.

Temasek invests even more of its portfolio in emerging markets. Earlier this year it provided capital to e-commerce firms in Thailand and Malaysia as part of a deal with Singapore-based United Overseas Bank. Temasek is also allocating more capital to China, targeting companies that stand to benefit from consumer-driven trends such as the rise of e-commerce. In April, it participated in a financing round for Beijing-based G7, a company that uses 'Internet of Things' technology to provide data to the warehousing and logistics industry.

Temasek's large exposure to China – which now accounts for a quarter of its overall portfolio – has proved costly in 2016. The value of Temasek's portfolio fell by nine per cent, or $17.8 billion, in the 12 months to March 31, largely due to volatility in the Chinese stock markets. But in a statement on its performance, Temasek sounded a sanguine note. The fund said it was "comfortable" with its investment positions, pointing to annualized returns of six per cent over the last 20 years. The message was clear: when you invest over generations rather than years, you can afford to ride out short-term market peaks and troughs.

## The new liquidity providers

SWFs growing presence in emerging markets has some upside. These funds provide much-needed financing for governments and companies alike, and, crucially, this money is what is known in the industry as 'sticky.' SWFs are less likely than retail investors to sell out of emerging markets when economic conditions turn, as was the case in the 'taper tantrum' of 2013, when the Federal Reserve indicated it would tighten policy and wind down its bond-buying programme. That spooked investors, who quickly fled from emerging markets, leaving them starved of liquidity.

"Retail investors left the asset class in their droves after the taper tantrum," says Aaron Grehan, Senior Portfolio Manager in Aviva Investors' Emerging Market Debt team. "But recent flows have been driven by institutional investors, which are allocating more of their portfolios to emerging markets because they are attracted by longer-term drivers of economies, such as increased consumer spending and favourable demographics."

It would be a stretch to portray SWFs as the white knights of the financial markets, however. Questions remain over standards of governance in the wake of the 1MDB scandal, which has also shed light on another state-owned organisation, Abu Dhabi's International Petroleum Development Company, with which the Malaysian fund had close business ties. Many SWFs remain mysteriously opaque – some of the largest, including the Qatar Investment Authority, do not even disclose the value of their assets under management, leaving analysts to rely on estimates.

But a growing body of evidence suggests that SWFs are a stabilising presence. During the financial meltdown of 2008-09, for example, state-owned investors provided some $53 billion in capital to ailing Western financial institutions[8]. And SWFs played a role in the recovery from the crisis, too, stepping in to provide lending even as banks withdrew due to tighter capital requirements introduced by regulators in Europe and America. Singapore's GIC was particularly active in debt financing for real estate projects in Europe following the crash[9].

Lim Chow Kiat, GIC's CIO, has described how the fund is increasingly exploring opportunities involved in private debt, which involve anchoring bond deals for its investee companies. "Maybe we're aware that a company needs 'x' billion for its capital expenditure, so we do almost an investment banker's job," Lim said in a 2015 interview. "The whole process helps us to understand the company better and to build a good relationship[10]."

The efforts of the International Forum of SWFs and more recent initiatives such as the Long-Term Value Creation Index – a collaborative project between several SWFs and rating agency Standard & Poor's to identify sources of long-term value – have reaffirmed funds' commitment to intergenerational investment goals. Much work remains to be done to finally disperse the cloud of the suspicion that surrounds these giant institutions. But as more SWFs provide capital to finance companies and infrastructure projects across the world, they may begin to win headlines for the right reasons ●

> *"A growing body of evidence suggests SWFs are a stabilising presence"*

1 'IMF Survey: Wealth Funds Group Publishes 24-Point Voluntary Principles,' October 2008
2 See for example: 'Sovereign wealth funds may sell $404 billion of equities,' Bloomberg, February 2016
3 'The sky did not fall: sovereign wealth fund annual report 2015,' Sovereign Investment Lab, Bocconi University, 2016
4 Part of SAMA is run like a SWF, but the organisation blurs the lines between assets invested for returns and the remainder of its foreign exchange reserves. Saudi tacitly acknowledged the need to ring-fence more of its savings when it retooled the Public Investment Fund, a state-owned holding company, as a conventional SWF in 2015.
5 'Hedge fund crowd acts like Chinese retail traders, says CIC,' Bloomberg, May 2016
6 'NZ Super Fund confirms sale of private equity real estate funds to Partners Group,' fund statement, May 2016
7 '2015 review,' Abu Dhabi Investment Authority, 2016
8 Sovereign Wealth Center
9 In 2011, for example, GIC lent alternative-investment house Blackstone Group nearly $300 million to help fund its purchases of Chiswick Park, a 33-acre office complex in London, and hospitality group Mint Hotels.
10 Lim Chow Kiat discusses external manager relationships,' Sovereign Wealth Center, December 2015

# GUESS WHO'S BACK? THE FALL AND RISE OF CREDIT RISK

**A credit boom has presaged previous economic downturns, so with corporate debt issuance breaking records, should investors fear the worst?**

Fuelled by ultra-low interest rates, the appetite of borrowers to tap the bond market seems insatiable. Global issuance from companies and governments had exceeded $5 trillion by the end of September[1], according to Dealogic, and the full year total could go past the all-time high of $6.6 trillion in 2006.

The corporate credit market is the source of much of this activity. In recent months we have seen a record August for the US-marketed corporate investment grade sector with $58.9 billion of completed transactions[2], while the $547.4bn of deals issued in the first eight months of 2016 is the second highest year-to-date total on record.

Three of the ten largest global corporate bond deals ever have been issued this year. The world's largest brewer, AB InBev, got the year off with a bang in January with a $46 billion blockbuster; while US technology giants Dell and Microsoft respectively completed £20 billion and $19.75 billion deals in May and August[3].

Borrowing conditions couldn't be much better, but policy-makers are already starting to get twitchy about the debt binge. During the September meeting of the Federal Open Market Committee, the office of the Federal Reserve that sets US monetary policy, "a few participants expressed concern that the protracted period of very low interest rates might be encouraging excessive borrowing and increased leverage in the nonfinancial corporate sector[4]".

It might not be time to press the panic button just yet, but credit risk is back and investors do not need reminding of the financial catastrophe that followed the last major credit glut at the start of the century.

## Free money?

If you tried to explain today's bond markets to the proverbial man from Mars, it might sound ridiculous. We pay some governments to borrow our money. And not a small amount; we are paying them to borrow nearly $13 trillion. And not just governments: many European companies, from washing powder manufacturers to medicine makers, also don't need to pay interest on their bonds. Meanwhile, US technology companies, sitting on hundreds of billions of dollars of cash, choose to borrow money for 40 years and use the proceeds to buy back their own stock.

To an outside observer, the cost of credit has plummeted to a level that no longer makes any sense. It seems we have entered into the world of quantum credit, where the more you issue, the cheaper the cost.

This description sounds fanciful, and it is. If you look behind the breathless headlines of negative rates, soaring issuance levels and central bank bond buying, the credit markets are still doing what they are supposed to do; pricing the probability of default. That probability – the credit risk of debt – has not gone away. Indeed, it is silently building in a way that could come back to haunt investors who are blinded by the technical strength of the market.

"Global debt is at record highs and rising," said Vitor Gaspar, Director of the Fiscal Affairs Department at the International Monetary Fund, speaking at the launch of its latest Fiscal Monitor Report[5]. "Excessive private debt is a major headwind against the global recovery and a risk to financial stability."

In the report, the IMF revealed total global non-financial sector debt now stands at $152 trillion or 225% of global GDP, and has been relentlessly increasing since 2000 (see figure 1). Of this, nearly $100 trillion is private sector debt issued by companies.

This debt is not spread uniformly around the world, with most built up in advanced economies. But the IMF also noted "easier financial conditions have led to a sharp increase in nonfinancial corporate sector debt in a few emerging markets".

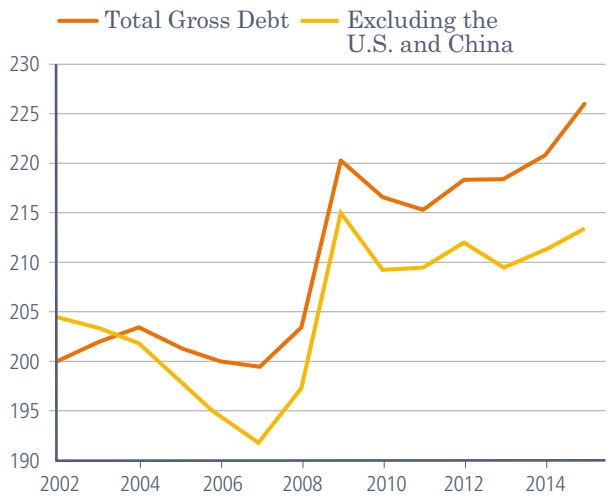
Given the persistent low growth environment, particularly in the developed world, it will be extremely difficult to reduce the debt overhang. In a stark warning, the IMF claims the sheer amount of debt that has been issued by companies "could set the stage for an unprecedented private deleveraging process that could thwart the fragile economic recovery".

> *"Investors do not need reminding of the financial catastrophe that followed the last major credit glut"*

# CREDIT RISK

*continued*

Figure 1: **Global Gross Debt**
(Percent of GDP; weighted average)




Sources: Abbas and others 2010; Bank for International Settlements; Dealogic; IMF, International Financial Statistics; IMF, Standardized Reporting Forms; IMF, World Economic Outlook; Organisation for Economic Co-Operation and Development; and IMF staff estimates.
Note: U.S. = United States.

Figure 2: **CREDIT SPREAD MOVEMENTS**

| Rating | Dec. 31, 2015 | Sep 30, 2016 |
|---|---|---|
| AAA | 30 | 33 |
| AA | 93 | 86 |
| A | 122 | 112 |
| BBB | 233 | 179 |
| BB | 417 | 323 |
| B | 653 | 473 |
| CCC | 1350 | 946 |

Source: Aviva Investors Research.

> *Investors need to turn their attention to avoiding the losers during the next downturn*

## Technicals beat fundamentals

When contrasting the huge increase in debt issuance with the price, it is evident that something has gone awry. All things being equal, when more debt is issued the price should fall, but in nearly every class of bond, the price has actually risen over the past three years. This is classic bubble signalling.

The bond buying programmes undertaken by the central banks of the US, UK, Europe and Japan are certainly the primary cause of the low yields we see today. Their impact can be felt in a number of ways. Firstly, investors see that as there is a guaranteed bid, bonds are unlikely to go down in price. Given this supportive backdrop, it has made sense for investors to maintain or add to their holdings even if they are already expensive, as they are unlikely to lose – at least in the short-term.

Moreover, by positioning accurately in bonds the central banks are buying, investors have been able to make money due to the sacred laws of supply and demand. Despite pretty much every single investing model screaming sell, being long bonds in this market has worked well.

The question is whether central bank bond buying is destroying the notion of credit risk; the idea that some borrowers and issuers are more likely to be able to repay their debts than others. If everything is being bought, and all prices rise and yields fall, the concept of credit risk is devalued.

Moreover, credit risk is as much a comparative as an objective concept: investors look at the likelihood of repayment of a number of bonds in comparison; not just the outright, objective cash flows of individual credits.

"Central banks have been fairly indiscriminate in the names they are looking to buy as long as they meet their broad criteria," says James Vokins, Senior Portfolio Manager, Multi-Strategy Fixed Income at Aviva Investors in London. "And this buying is causing a relentless driving down of spreads."

This indiscriminate buying is causing longer-term credit risks to rise. Companies that should not take on too much debt – or should pay more to borrow - are encouraged to do so while it is cheap. This is distorting the delicate balance between fundamental and technical analysis in the investment decision-making process, with many investors misallocating capital in their pursuit of yield.

## Negative energy

A recent example of how low credit costs can mask future credit risks was experienced in the US energy market. During a multi-year period of surging oil prices, US energy companies, especially those involved in new shale exploration, took on a massive amount of new debt. But the fundamentals changed when the price of crude oil went from above $127 a barrel to 2012 in just below $28 a barrel in early 2016. Suddenly, all the debt that had been issued could not be paid back. Today the sector is racked by credit risk.

Credit rating agency Standard and Poor's describes energy companies with a rating of B- or lower as its "weakest links". In a recent report, S&P wrote: "Based on the number of weakest links, the oil and gas and financial institutions sectors have the highest potential to default. The oil and gas sector accounts for the most weakest links at 57 (23% of the total)."

What happened in the energy sector could occur in other sectors, as cheap debt and the hunt for yield encourages companies to load up on debt. This can lead to excess capacity, which hurts the fundamentals of the underlying business and in turn limit the ability of these companies to repay their debts. Vokins sees this dynamic playing out in a number of sectors, including the US and European automotive sectors.

Of course, giving companies access to credit is not entirely negative. There are many arguments that directly link the overall growth of an economy to the availability of credit, regardless of whether it is likely to be repaid or not.

"Among the effects that loose monetary policy has, it can effectively force savers to invest in higher-risk assets when yields on traditional high-grade assets are not sufficient to meet investment goals," says Kevin O'Donoghue, Head of Research, Americas, at Aviva Investors in Chicago. "This gives lower-rated business access to capital, which is not a bad thing as it can help them grow and provide jobs – a net benefit to

1 http://www.telegraph.co.uk/business/2016/09/26/global-debt-climbs-towards-fresh-high-as-companies-and-countries/
2 http://www.dealogic.com/insights/record-august-us-corporate-investment-grade-issuance/
3 http://www.dealogic.com/insights/microsoft-taps-market-fifth-largest-corporate-bond-record/
4 https://www.federalreserve.gov/econresdata/feds/2016/files/2016055pap.pdf
5 https://www.imf.org/external/pubs/ft/fm/2016/02/pdf/fm1602.pdf

economic activity. It can also improve consumers' debt service to income ratios.

"However, one of the unintended consequences of loose monetary policy is it allows otherwise financially stable companies to lever their balance sheets for the benefit of shareholders in a way that makes the company incrementally weaker and less capable of withstanding a downturn," he adds.

## The art of differentiation

In the context of a credit market dominated by short-term technical factors, it could be easy to ignore the longer-term fundamental strengths or weaknesses that should be central to any investment decision. But while credit spreads have tightened significantly in 2016, particularly for lower-rated companies, it would be wrong to think that credit differentiation has disappeared completely.

One metric that illustrates this is the spreads investors receive for bonds with different ratings. At the top end, triple-A credits paid on average 33 basis points above the risk free rate as of the end of September, while the worst credits paid 946 basis points (see figure 2). Between those two, at each point along the curve where the ratings are worse, the spreads are higher.

As the risk free rate has fallen, demand for credit has increased and spreads have come in. Indeed, since the beginning of the year, the spreads for each rating bucket (apart from triple A) have contracted. The differences in spreads between the different ratings buckets still exist, but they have contracted at different rates, again showing some degree of differentiation.

"Clearly yields are low because of the central bank bond buying programmes and the risk free rate has gone down," says O'Donoghue. "But even allowing for this, investors are discriminating and the differentiation on spreads has not changed that much."

Moreover, he points out that credit spreads are actually wider today than they were when the ECB announced its expansion of asset purchases in January 2015.

When technicals are so robust, making the case for fundamentals can seem a lonely and expensive sideshow. But it is when credit is at its cheapest that risks start to rise. That is when rigorous credit risk analysis of fundamental factors such as earnings growth, leverage, interest coverage and financial policy becomes most important.

"The fundamentals of credit are likely to win out over time, especially as we reach the end of the QE dynamic," says Vokins.

Put it another way: with spreads so tight investors need to turn their attention to avoiding the losers during the next downturn. That requires fundamental credit analysis, not just of individual bonds, but also of whole sectors and regions.

"Active investment management can still generate outperformance versus the market through sector allocation and security selection," says O'Donoghue. "We have seen how this can play out already in the US energy sector. It will pay to be wise to the fundamental challenges of other sectors as credit and credit risks build up"

# CREDIT RISK: AN EQUITY PERSPECTIVE

**Credit risk, particularly caused by the build-up of leverage on corporate balance sheets, is not solely a concern of bond investors. Equity investors, too, need to keep a close eye on increasing debt as it can erode a company's long-term value.**

According to Giles Parkinson, Global Equities Fund Manager at Aviva Investors, the low interest rate environment has resulted in some companies' share prices trading at more expensive levels than they should. However, he is quick to point out that the picture is more nuanced than often portrayed in the media.

"I don't subscribe to the view that corporate leverage is excessively high," he says. "What is apparent, however, is that leverage is concentrated among specific companies. You often see this with companies that are listed out of what were previously private equity holdings."

Equity investors have traditionally looked at a company's net debt to EBITDA (earnings before interest, taxes, depreciation and amortization) ratio as a yardstick of whether its leverage is too high. Parkinson believes this metric doesn't tell the full story; and believes net-debt to free cash flow is a more accurate gauge. Other liabilities such as a company's pension deficit or legal liabilities should be considered as debt-like obligations, too, not just bank and bond market debt.

"Free cash flow is what matters – from this you'll be able to better assess how long it will take for a company to pay off its debts," he explains.

Parkinson gives an example of two businesses - Global Corp Inc and Good Company Plc – that both have $150 million of net debt and $100 million of EBITDA. This equates to a net debt/EBITDA of 1.5 times for both. However, when the EBITDA number is broken down further, their stories diverge and this reveals their true debt level [see chart below].

"A third of Global Corp's EBITDA is D&A, which roughly approximates annual capital expenditure," adds Parkinson. "Good Company operates a different model only has to spend 10 per cent of its EBITDA maintaining the business. Moreover, not all of Global Corp's net income converts into free cash flow. Perhaps there is a recurring working capital absorption, or maybe the cash tax expense is above the profit and loss rate. For whatever reason, only 80 per cent of World Corp's net income becomes free cash available to pay down debt or make payments to shareholders.

"By contrast, Good Company converts 100 per cent of accounting earnings to free cash. The result is that World Corp's true debt level is actually relatively higher than that of Good Company," he adds

| GLOBAL CORP Inc | | GOOD COMPANY Plc | |
|---|---|---|---|
| EBITDA | 100 | EBITDA | 100 |
| Less: D&A | 33 | Less: D&A | 10 |
| EBIT | 67 | EBIT | 90 |
| Less: Net Interest | 3 | Less: Net Interest | 3 |
| Profit before tax | 64 | Profit before tax | 87 |
| Less: tax @ 25% | 16 | Less: tax @ 25% | 22 |
| Net Income | 48 | Net Income | 65 |
| Less: Cash conversion | 80% | Less: Cash conversion | 100 |
| Free cash flow | 38 | Free cash flow | 65 |
| Net debt/free cash flow | 3.9 | Net debt/free cash flow | 2.3 |

# EQUITY INVESTORS SHOULD CONSIDER THE DURATION OF THEIR PORTFOLIOS

**The difficulty in developing a model that accurately predicts equity duration means few managers pay attention to the concept. But it shouldn't be ignored, argues Giles Parkinson.**

The concept of duration – a measure of the sensitivity of an asset's price to a change in interest rates – is a familiar one to bond investors. That is for good reason, since movements in interest rates are often the primary determinant of a change in the price of a bond or portfolio of them. After all, the value of a bond, like that of any other financial asset, can be viewed simply as the 'net present value' of a series of future cash inflows. The higher the discount rate used to convert those future payments into today's money, the lower the value of the asset.

But the term is far less familiar to the majority of equity investors. That too is for a good reason. Whereas measuring a bond's duration is fairly straightforward, in the case of a share, or portfolio of them, it's an altogether trickier task.

The cash flows expected to accrue to the owner of a bond are pretty much known in advance, except in the relatively rare event of a default. That is because the issuer of a bond is contractually obliged to make pre-determined coupon payments and to repay the principal upon maturity.

## No obligation

By contrast, payments to shareholders, largely in the form of dividends, are not obligatory and as a result fluctuate. During good times they tend to rise in tandem with company profits. But when profits fall, they can be slashed or even stopped altogether. And if working out future dividend streams seems hard enough, how do you value a share in a young company that has yet to make any payouts, or value a firm that ends up being acquired?

These difficulties haven't stopped financial market practitioners and academics from attempting to find a method of estimating equity duration. Most have entailed using the dividend discount model – a widely recognised procedure for determining a theoretical valuation of a stock by estimating the sum of future dividend payments and discounting them back to the present.

It contends that the current price of a stock, or stock index depends on three variables: next year's dividend, the required rate of return – which can itself be broken down into a risk-free rate of interest and an equity risk premium – and the expected dividend growth rate in perpetuity – such that:

$$S_0 = \frac{D_1}{r - g}$$

Where $S_0$ = the current stock price; $D_1$ = next year's dividend; r = the required rate of return; and g = the expected dividend growth rate.

By inputting different estimates of r into the model while holding the other variables constant, it is possible to try to anticipate how sensitive a share price is likely to be to a given change in interest rates. Unfortunately, for a host of different reasons – not least the sensitivity of the model to the estimates of r and g, and the difficulty in estimating g in the first place – the model has not been a good predictor of the sensitivity of equity prices to changes in interest rates. Whereas it predicts most equities have extremely high durations, empirical evidence suggests they tend to be far lower.

## Equities and interest rates

Furthermore, while in reality there does appear to be some relationship between equity prices and interest rates as one might expect, the correlation between the two is quite low, very unstable, and can even be negative on occasion.

The difficulty in developing a model that accurately predicts the sensitivity of share prices to changes in interest rates means few equity fund managers tend to pay a great deal of attention to duration. And yet, just because it's a tricky task, doesn't mean it's a risk factor that should be ignored.

We believe duration warrants especially close monitoring in the current environment with record-low interest rates having significantly lengthened the duration risk attached to pretty much every financial asset, including shares. Equity investors should be no different to their bond market brethren in wanting to have an idea how sensitive their investment portfolio is likely to be to a change in interest rates. After all, just as falling interest rates have been a major factor behind the strong advance in equity prices over the past seven years, so a sustained rise in rates could send share prices sharply lower.

But since finding a precise measure of the duration of a share, or portfolio of them, is likely to prove elusive, it seems like a better idea is to settle for a rough and ready reckoner such as the price:earnings (P:E) ratio.

The rationale for this approach is intuitive when one considers that an alternative definition of a bond's

$$S_0 = \frac{D_1}{r-g}$$

duration is the weighted average time to maturity of all coupon and principal payments. After all, the P:E ratio is merely an estimate of the number of years' worth of profit investors are prepared to pay for up front when buying the share.

In the current environment, we believe there is a strong argument for investors to pay closer attention than usual to a share's P:E ratio when screening it for inclusion in a portfolio. Other things being equal, the higher the P:E ratio a share is trading on, the more duration risk it would appear to carry.

In the event interest rates do rise, equities trading on high P:E ratios ought to be more vulnerable. For instance, there has been no shortage of commentators warning of the danger of owning so-called bond proxies – shares in 'defensive' companies offering high yields such as utilities and 'consumer staples' firms.

As the chart below shows, US utility share price valuations – as measured by P:E ratios – have risen sharply relative to the wider market in recent years, as investors, including large pension funds, craved their predictable cash flows.

However, just as these shares have been driven up by the collapse in bond yields, any rise in rates has the potential to inflict heavy losses on shareholders. We were given a preview of this in the third quarter this year. Speculation that stronger economic data could lead to US interest rates rising faster than previously envisaged led to a sharp sell-off in utility share prices, which fell six per cent over the period.

Meanwhile, other sectors such as biotech and technology are widely seen to be far less sensitive to interest rates. This too appears a dangerous assumption to make. Many companies in these sectors make no money and furthermore are not expected to do so for a number of years. That means investors are pinning their faith in these firms making money long into the future.

As such, investments in these shares should typically be seen to involve a high level of duration risk. At least from a theoretical perspective, any rise in interest rates ought to lead to investors bidding down the value of the sum of these companies' future dividend payments.

At the same time, it's important to recognise that biotech and technology companies tend to have low levels of debt. As such, their profits are less vulnerable to any increase in interest rates than in the case of many other types of company. So in attempting to assess an individual stock's duration, it's vital to simultaneously estimate how much impact higher interest rates could have on a company's profitability.

In contrast, shares in many industrial companies look attractive. They tend to trade on low P:Es due to investors' scepticism over these firms' ability to maintain, let alone grow, profits. Although once again, one should recognise that at least in the US, industrial companies tend to be more indebted than the average company.

## Bond proxies?

Investors also need to distinguish between those shares that are indeed bond proxies and others that offer growth potential. For example, some commentators have labelled consumer products maker Unilever a bond proxy. We believe this is wrong as the company's focus on emerging markets means the shares offer strong growth potential.

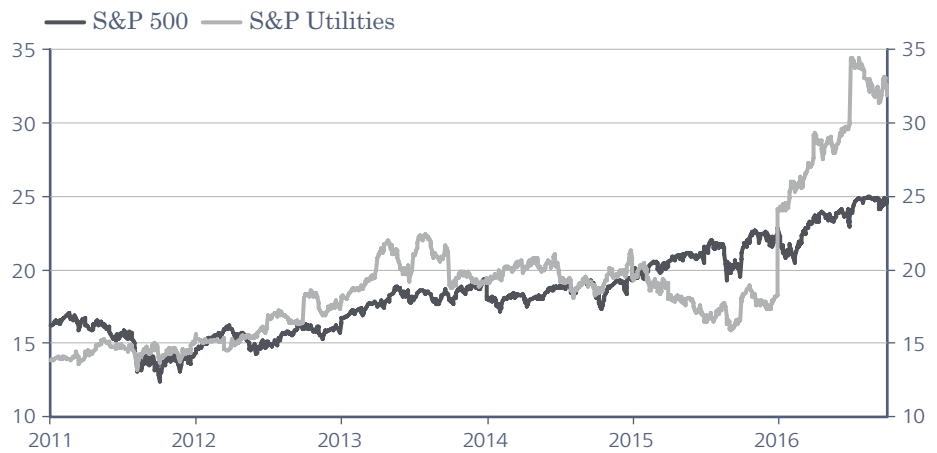
Of course, financial markets often don't behave in the way theory suggests they should. One only has to look at the fact that in the third quarter – just as utility and real estate stocks sold off sharply – biotech was the best performing sector, returning 13 per cent.

That is understandable. In an environment of rising rates, it's no surprise to see that investors' first move was to switch out of defensives into what they perceive to be 'growth' stocks. But just because a stock has a growth label, it doesn't mean its future stream of dividends shouldn't be valued at an appropriate discount rate. After all, it's highly likely that many of today's growth stocks will become tomorrow's income investment ●

> *Any rise in rates has the potential to inflict heavy losses on shareholders*

**Giles Parkinson is Global Equities Fund Manager at Aviva Investors**

**Utility P:E ratios relative to wider US market**




Source: Bloomberg.

The chart shows P:E ratios based on 'trailing GAAP' earnings. But even if one were to use a forward P:E ratio based on adjusted earnings, the utility sector has re-rated from a 14 per cent discount relative to the market at the end of 2009 to a two per cent premium at the end of September.

# UNIVERSAL APPEAL?

**The concept of a Universal Basic Income is gaining traction across the developed world as a potential solution to widening inequality. It could also have a significant impact on the investment industry, as one of its leading proponents, US policymaker Andy Stern, explains.**

In 2010, Andy Stern was riding high. He was the President of the Services Employees International Union, the largest and most influential union in the US with around two million members. He was a close confidante of President Obama and sat on the Simpson Bowles commission looking at ways to tackle the US deficit.

Stern was deeply troubled, however. Despite being a union boss, he could not see the future of organised labour. So he resigned, and in his own words: "I embarked on what became a four-year journey to discover the future of jobs, work, and the American Dream".

The answer he found was a Universal Basic Income (UBI). Since then, Stern has become one of the most forceful advocates of the idea that governments should pay their citizens an equal monthly basic income, regardless of their employment status, savings, or personal needs. He saw from his post that the link between work and income was stressed as never before, primarily because new technologies were automating many tasks, reducing the need for full time jobs. With the world of work in a state of flux, he now believes something radical is needed to supplement the traditional weekly wage and monthly salary.

The notion behind a UBI is not new: the 18th century political theorist Thomas Paine was an early adherent. But it has gained more traction in recent years as a jobless recovery, stagnating wages and rampant inequality have caused policymakers to search for solutions. Previous experiments in applying a UBI in places as diverse as Canada and Namibia show that it has many benefits. Poverty is all but eliminated, and crime and dissipation appear to fall.

Counterintuitively, a UBI appears to offer no disincentive to work, apart from for new mothers and adolescents. It could potentially offer a simple way to reboot dysfunctional government benefit programmes, which seemingly get more complex and less effective with each new attempt at reform.

## Back on the agenda

In the United Kingdom, the concept found its way onto the agenda at the Labour Party Conference at the end of September 2016. John McDonnell, Labour's shadow chancellor, told delegates that a basic income was "an idea to explore" and may even be one "whose time has come".

But could a UBI also have an impact on the asset management, savings and pensions industry? The asset management industry works by allowing people to turn their labour into financial assets. For many people, the ability to work is their most important asset. If the value of work diminishes because of slowing wages and less secure jobs due to the rise of automation, logically this could reduce the amount of money that individuals are able to put aside for savings and investment.

In fact, recent evidence suggests this may already be happening: a study by GoBanking found that 69% of Americans have less than $1,000 in savings. Moreover, weak returns and low interest rates are eroding the ability of defined benefit and defined contribution pension schemes to provide a secure retirement. For policymakers such as Stern, a UBI is a solution that the asset management industry should embrace (see interview below).

Nevertheless, while a seemingly simple concept, a UBI comes with some issues. Any cursory look at the numbers suggests taxes would likely rise, and for some people benefits would fall. Stern has worked out the numbers for the US in his recent book *Raising the Floor: How a universal basic income can renew our economy and rebuild the American dream* (Public Affairs, 2016). He estimates the cost of providing all Americans aged 18-64 with an annual income of $12,000 would be between $1.75 trillion and $2.5 trillion a year. This would include ensuring all those over 65 received $1,000 a month. He proposes this could be funded by eliminating current spending programmes, shutting tax expenditures and raising new sales taxes. He acknowledges this is more expensive than current programmes, but it would be much simpler to administer, and less open to political tinkering.

Two real life studies into the mechanics and effects of a UBI will take place next year in Finland and the Netherlands. In Finland, a group of 5,000 to 10,000 citizens will receive a monthly income of €500 to €700 a month, regardless of their earnings. In Utrecht in the Netherlands, a more complex study will look at how a UBI compares with existing welfare programmes. Proponents of the idea are watching closely, especially after a referendum in Switzerland rejected such a plan earlier this year.

## Redistribution

Whatever the mechanics look like, there is no getting away from the fact that a UBI is redistributive: it would take away from companies and rich individuals. But as it redistributes to everyone, not just the poor, a large portion of the money could get saved, especially by those who are in work but finding it hard to save for their retirement. And it is this key demographic where there are the biggest questions over whether they are adequately served by the asset management industry.

Moreover, the workplace is rapidly changing. According to the Brookings Institute, a US think-tank located in Washington D.C., nearly one in six Americans does not have a traditional job, where they are a permanent employee of a company. They are consultants, freelancers, temps; they drive for Uber in their lunch hour and rent out rooms in their house on AirBnB. This so-called gig economy is growing rapidly. According to Stern, having a UBI would allow those people who are working but not saving to fund a secure retirement and in the process create huge new pools of capital, which could be channelled to investment products.

This is one of the most interesting aspects of the concept of the UBI: it has a broad appeal, to both the left and the right. Its appeal to those on the left is understandable. But increasingly it is those on the right who are coming around to the idea. It could cut government programmes and would provide a basic level of income to allow people to start businesses and enjoy productive work.

"I do think that we are heading toward a world with fewer overall jobs," wrote Stern in his book. "In that world, the jobs that are left will either be extremely well paying and secure, or contingent, part-time, and driven largely by people's own motivation, creativity, and the ability to make a job out of nothing. The current social contract puts this second category of worker at a disadvantage."

A UBI could also potentially become a new engine of growth for the investment industry, helping it redefine its social and economic purpose and put it at the heart of the new, contingent, economy ●

> *A jobless recovery, stagnating wages and rampant inequality have caused policymakers to search for solutions*

# Q&A WITH ANDY STERN

***How is the concept of UBI catching on?***

I think it is now a viable policy option. Bloomberg News asked the President of the United States about UBI in a recent interview. [They get] a limited number of questions and would not have asked that question a year ago. Also there is the impending decision of the Trudeau Government on the experiments in Quebec and Ontario. And in the UK, two trade unions, Unite and Unison, adopted resolutions at their congress supporting the concept. So, it is now a considered policy option and it is becoming more and more contemporary.

***The nature of work is changing. Jobs used to come with benefits, one of which was the expectation of a defined benefits pension, which is no longer the case. Presumably UBI is popular with companies?***

Well, certainly any pension that requires a defined benefit guaranteed by the employer has become extraordinary unpopular [for companies]; no new ones are being created and many existing ones are being closed. It is a market with no growth and lots of shrinkage. So companies are looking at other ways for people to save for their retirement. In the US for instance, some states are opening some of their benefits plans for investors. But I would say the era of employers providing guaranteed benefit pensions is over.

***Are pensioners really the best people to take market risk via retirement investment plans?***

I think that everyone - particularly working class people - needs one defined benefit. If it is not going to come from the employer, then the only appropriate place is the government to ensure that everyone has a basic benefit. At the same time, I support governments creating universal accounts in addition to social security, which would allow people to contribute individually regardless of your employer's decision about retirement. There is a definite need in the absence of employers providing defined benefits to have one guaranteed benefit and one benefit tied to market decisions that individuals could make.

***How would UBI affect the economics of this retirement system you envisage?***

It will fundamentally affect the economics for a number of different groups of people. One is people who live substantially above the poverty line but who have not had the income for savings. All of a sudden, they are getting a monthly check: they would see this as an opportunity to save and be prepared for retirement. People who have a higher level of income might see it as an opportunity to invest in somewhat riskier investments.

***So UBI could be positive for the savings and the investment industry?***

Right, it could be. If we just take the US as an example, I think the investment industry should support this. We are looking for more investment capital in the country. The trillion dollar, defined benefit pension pools will not necessarily be here forever, so there is a need to create new investment pools.

***Have there been any studies on how much of a UBI might get saved versus how much might get spent?***

The Roosevelt Institute is at the earliest stages of researching this. It is an interesting question and one which may motivate a different group of people to get something done with UBI.

***Should UBI be seen as a replacement for existing retirement schemes such as social security in the US?***

No. See how little money is currently saved: about 50 per cent of all Americans have nothing other than social security. So it is hard to imagine eliminating that and not getting into huge issues of poverty amongst the elderly.

***More broadly, how do you see technology disrupting the world of work?***

What we are seeing is jobs being broken into tasks and tasks being directed towards lower cost markets through globalisation. This means research done in India, transcription and programming being done all over the world. Then, according to McKinsey, 45 per cent of those tasks can be eliminated by the deployment of existing technology. For instance, companies that once had a thousand people doing human resources now have a third of that number doing the same work because those tasks have been computerised as people become more productive.

***And in this new world of work does organised labour have any future?***

As the world gets more globalised and technology-infused, labour has no future as we traditionally understand it as the collective bargaining agent. So the question is how are they are going to adjust to create a new business model? Existing institutions such as unions are under stress in a world that is in constant change. It is impossible to imagine that they are not going to have to change and provide new services, new value, new kinds of advocacy that are not as job-based and employer-based as they were before ●


part one

# THE INCREASING RISK OF GOING LONG

**In the first of a two-part series exploring the flight to safety versus the quest for yield in fixed income, we focus on the appetite for duration in government debt. The low-yield environment is fueling demand for long-dated bonds, but the benefits of this approach are already starting to wane.**

It's not an easy time to be in bonds. Against a challenging backdrop of sluggish economic growth and resurgent political risk, global investors have sought safe havens such as triple-A rated government debt. But safety doesn't come cheap, especially in an era of extraordinary monetary policies by global central banks, which have contributed to rising bond prices and falling yields.

Some investors have consequently moved into riskier assets, such as emerging-market debt, in search of better returns. But others are adopting a different approach – they are going long. By loading up on government bonds with decades-long maturities – which tend to offer better yields than shorter-dated debt – these investors hope to improve returns without adding more credit risk to their portfolios.

The demand for long-dated government bonds has traditionally been strong among institutional investors such as pension funds and insurance companies, which use these securities to match their long-term liabilities. However, in recent months a wider range of market participants, including retail investors and sovereign wealth funds, have started buying more long-dated bonds as they chase yield.

Long bonds have offered impressive capital gains in 2016. But they also bring duration risk, which refers to the increased sensitivity of long-dated bonds to fluctuations in interest rates and inflation. If the economic outlook changes, the prices of these securities could fall significantly, says Michael Grady, Senior Economist and Strategist at Aviva Investors.

"Many investors that have lengthened the duration of their bond-holdings recently are likely to go to the exit door pretty quickly in an event where you do see a genuine reflationary environment. We believe inflation will rise materially over the next six months, and that could be the trigger for a fairly significant re-pricing of longer-duration bonds," says Grady.

## Gimme shelter

The large flows into long bonds reflect the dwindling pool of 'safe' assets, a problem that can be traced back to the global financial meltdown of 2008-09 and the ensuing sovereign debt crisis. During the turmoil, assets previously regarded as gold-plated, such as triple-A rated securitisations, were downgraded.

When the dust settled, high-quality government bonds were left as one of few asset classes regarded as truly safe, and risk-averse investors consequently increased their allocations to these securities. For example, British pension funds have increased their allocation to gilts from 28 per cent in 2005 to 48 per cent as of December 2015, according to the Pensions Regulator[1].

Meanwhile, new regulation designed to improve the resilience of the financial markets further boosted demand for government bonds. The Dodd-Frank Wall Street Reform and Consumer Protection Act in the US and Basel III in Europe, along with mandatory central clearing of over-the-counter derivatives, force banks to hold an greater proportion of high-quality liquid securities on their balance sheets and to post the bonds as collateral on derivatives trades.

"The financial crisis and the regulation that followed brought about a reduction in the range of assets regarded as safe at the same time as demand for them increased," says Grady.

## Appetite for duration

Since the financial crisis, central banks in Europe, Japan and the US have kept benchmark rates unprecedentedly low – even negative, in some instances – in an effort to spur corporate investment and economic growth. And this policy has indeed fostered renewed demand for riskier assets, such as US high-yield bonds or emerging-market debt. Emerging-market debt funds received record inflows of $4.9 billion in the week ending July 20, 2016[2].

> *The options available to boost returns in fixed income are narrowing*

But the demand for the perceived safety of developed-market government bonds lingers on, reflecting continuing fears as to the health of the global economy. "Investors are looking for yield in a world where none is available in safe havens," says Grady. "But they're not prepared, or maybe not able, to go out along the risk spectrum."

The options available to boost returns in fixed income are narrowing. Many institutions have bought more US Treasuries, which offer better yields than government bonds from Europe or Japan. As of October 21, the 10-year benchmark Treasury yield was 1.73 per cent, compared with 0.28 per cent for 10-year French government bonds and negative yields on German and Japanese bonds. However, the relative attractiveness of Treasuries for non US investors has recently faded somewhat as the cost of hedging the currency risk has risen[3].

Other investors are focusing on a different strategy: extending the maturities of their government bond holdings. For insurers and pension funds, this strategy has the twofold benefit of bringing higher yields and enabling them to match their long-term liabilities.

"Investors are cautious about moving down the credit spectrum," says Aaron Grehan, Senior Portfolio Manager in Aviva Investors' Emerging Market Debt team. "There has definitely been a preference for duration risk over credit risk as a way to find yield. But you are being forced into taking on ever-greater duration in an effort to achieve some return."

## Gilt yields

Governments are issuing ever longer-dated debt to take advantage of the strong demand; both Belgium and Spain have issued 50-year bonds for the first time this year. According to research from Goldman Sachs, the average maturity of syndicated debt issues from euro zone governments was 15 years in 2015; this is expected to rise to 25 years in 2016, based on current levels of issuance.

The performance of gilts after the UK's EU referendum on June 23 illustrates the appetite for long-dated government bonds. Britain's long-term borrowing costs have fallen even after the rating agency Standard & Poor's downgraded the Treasury's triple-A credit rating to AA in the wake of the 'Brexit' vote. The Bank of England has contributed to that performance, by re-launching its quantitative easing programme, putting downward pressure on gilt yields.

Since the beginning of the year, the price of 30-year gilts has increased 30 per cent. With the interest included, these securities have returned more than 34 per cent in 2016 – outperforming almost every other major asset class, including emerging-market stocks and US high-yield debt[4].

This striking performance can be explained by the way price changes are amplified on long-dated bonds. A general rule of thumb is that a one percentage-point change in yields results in a percentage change in the bond's price equal to the number of years left until the bond matures. Therefore, the price of a bond with a duration of 30 years will rise 30 per cent if yields fall by one percentage point. Of course, the opposite also holds true: If yields rise rather than fall, investors will be vulnerable to losses.

## Duration risk

With oil and commodity prices stabilising, headline consumer price inflation will start rising more quickly in many countries over the coming months.

A rise in inflation could send yields higher and prices lower, and create unwanted volatility in longer-dated government debt. James McAlevey, Senior Fund Manager, Fixed Income at Aviva Investors, says the higher yields on offer may not compensate investors for this risk. "Take Japan: yields on 30-year Japanese government bonds are getting down to almost zero. You're not being compensated as well as you used to be for taking on the extra duration – especially in a world where volatility is higher," says McAlevey.

The recent behaviour of German and Japanese government bonds – assets usually prized for their stability – demonstrates how the interplay between price and yield can wreak havoc on long-dated bonds. Over two weeks in May 2016, the yield on 30-year bunds increased 53 basis points. While that might seem a modest move, the bunds' price consequently fell 12 per cent, an amount equivalent to 25 years' worth of accumulated yields on the same securities[5]. Similarly, the price of Japanese 40-year government bonds fell 10 per cent after a marginal rise in yields in July.

## Room for manoeuvre

So what can investors do to navigate this tricky landscape? Hedging fixed-income portfolios using derivatives can help managers benefit from higher yields on long-dated bonds while mitigating the attendant volatility risk. These might include swaps that contain a 'strike price', which limits potential gains on the underlying bonds while capping potential losses. Such instruments have become relatively cheap because of the widespread market view that yields will remain stubbornly low.

Orla Garvey, Sovereign Fund Manager at Aviva Investors, says inflation-linked bonds, such as Treasury Inflation Protected Securities (TIPS), also offer benefits. "Expectations of low growth and inflation have become entrenched to such an extent that we believe the market is under-pricing the risk of higher future inflation. This makes inflation-linked bonds very attractive. Thirty-year TIPS provide exposure to duration as well as some protection against rising inflation. If we do start to see stronger growth and inflation come through, these bonds will perform better than thirty-year Treasuries."

Garvey says that strategies that combine some exposure to duration with protection against inflation make sense in the current environment. While central bank policies are likely to keep bond yields low for the time being, governments' fiscal policies could spur growth – and rising consumer prices – in the future. "We're in a strange world where markets are driven by expectations of future central bank policy and further quantitative easing, rather than underlying fundamentals. But over the longer-term, as inflation slowly rises from its current low levels, these depressed yields are unlikely to persist" ●

1 The Purple Book, Pension Protection Fund/Pensions Regulator, 2015
2 Bloomberg
3 The 3-month US dollar Libor rate has increased to its highest level since 2009, making currency hedges more expensive. The rise in the Libor rate is widely attributed to impending US Securities and Exchange Commission (SEC) regulation over money-market funds, which among other things enable these funds to charge investors for withdrawing capital. Anticipating the new rules, which come into effect in October, investors have shifted capital into funds that buy only government debt, which are exempt from the regulation. Those funds seeing outflows are consequently buying fewer short-term securities from banks; this has in turn pushed up Libor. In addition, the cross-currency basis against the US dollar has also widened, further raising the cost of hedging.
4 30-year gilt prices rose 29.3 per cent between December 31, 2015 and August 11, 2016. Source: Bloomberg
5 Bloomberg

*FLIGHT TO SAFETY vs HUNT FOR YIELD*

part two

# BEWARE THE CROWDED YIELD TRADE

**In the second of a two-part series exploring the flight to safety versus the quest for yield in fixed income, we look at how fund managers are scouring riskier parts of the bond market for returns.**

> *There are signs the hunt for yield is creating distortions*

These are strange days for the bond markets. Global sovereign debt yields $500 billion less annually than five years ago, according to Fitch Ratings – good news for governments, perhaps, but bad news for investors. Meanwhile, corporate bond yields have also plunged at a time when the European Central Bank (ECB) and its peers in the UK and Japan are implementing credit-easing programmes to kick-start economic growth.

With yields scarce – and risks abundant – investors are short of options. Rather than vacate the asset class altogether, however, many fund managers are exploring new ways to eke more yield from their portfolios. While government bond investors are extending the maturities of their holdings, corporate bond investors are taking on more credit risk. They are moving into high-yield and emerging-market debt, as well as more esoteric instruments such as hybrid bonds and volatility trades.

While these strategies can deliver results, there are signs credit investors are increasingly chasing returns indiscriminately, without paying enough attention to the underlying risks. Indeed, the current situation echoes the peaks of previous credit cycles, where low yields in 'safe' assets led to capital flowing into ever-riskier debt instruments, fostering dangerous asset bubbles.

Are we seeing history repeat itself? And how might investors position themselves to gain access to yield while avoiding the risk of a sudden market correction?

## Emerging-market flows

Emerging markets have been among the chief beneficiaries of the hunt for yield in fixed income in 2016. The average yield on debt issued by emerging-market governments this year was 5.4 per cent as of September 15, 2016 down from 6.7 per cent at the beginning of the year[1]. Emerging-market debt funds received record inflows of $4.9 billion in the week ending July 20, 2016[2].

In certain respects, this trend is reminiscent of the years between 2009 and 2013, when emerging markets received almost half of all global capital flows, according to data from the Bank for International Settlements (BIS). When the Federal Reserve indicated it would tighten policy and wind down its bond-buying programme in the summer of 2013, emerging markets suffered big outflows in what became known as the 'taper tantrum'.

Emerging-market corporate bonds actually outperformed emerging-market sovereign bonds during the turmoil, partly because the average duration on this type of debt was shorter. But a repeat of the 'taper tantrum' would likely be more damaging to emerging-market companies, because the amount of emerging-market corporate bonds maturing between 2016 and 2018 is set to rise 40 per cent on the previous three years[3]. If liquidity becomes constrained, it will be more expensive for companies to refinance their debts, putting them under increasing pressure.

But while the large cash inflows to emerging-market debt may suggest a bubble risk, examining the composition of those flows reveals a more nuanced picture. After the financial crisis, the appetite for emerging-market debt was largely driven by retail investors, but now it is dominated by institutions such as insurance companies, sovereign wealth funds and pension funds, which tend to invest over the longer-

term and may be less influenced by short-term bouts of market volatility.

"Retail investors left the asset class in their droves after the taper tantrum and that money has only just started to come back," says Aaron Grehan, Senior Portfolio Manager in Aviva Investors' Emerging Market Debt team. "Recent flows have been driven by institutional investors, which are allocating more of their portfolios to emerging markets because they are attracted by longer-term drivers of economies, such as increased consumer spending and favourable demographics."

According to research from the International Monetary Fund (IMF), capital flows to emerging markets between 2009 and 2013 far exceeded what might have been expected based on fundamental factors. The 'overflow' totalled some $500 billion[4]. By contrast, recent demand appears to be supported by strengthening emerging-market fundamentals: commodities prices have risen and stabilised, while fears of a sharp slowdown in the Chinese economy have receded. More importantly, perhaps, the IMF expects the pace of GDP growth in emerging markets to increase every year for the next five years as developed economies stagnate.

Nevertheless, there are signs that the hunt for yield has begun to create distortions at the riskier fringes of emerging credit markets. The average yield on sub-investment grade emerging-market debt has plunged to a two-year low of 7.3 per cent, even though default rates are at a six-year high of four per cent, according to Bank of America Merrill Lynch data.

Grehan says emerging-market debt still offers value – especially in local currencies – but he is keeping an eye on the risk that the strong appetite for the asset class could distort valuations. "At the moment we're not concerned that the value has eroded. But if strong capital inflows continue, we could see indiscriminate buying return to the asset class. We're wary of that."

## 'Herd mentality'

One market that looks particularly overpriced at current levels is Europe, where the European Central Bank's corporate sector purchase programme (CSPP), introduced on June 8, has contributed to a plunge in yields. A striking example came on September 6, when investors started paying two big companies for the privilege of lending them money: German consumer goods company Henkel and French pharmaceutical producer Sanofi both sold debt at a yield of minus 0.05 per cent.

As central bank intervention sends corporate bond yields to new depths, investors are looking to riskier parts of the market for returns – and this at a time when European companies look weaker. Sluggish growth and vulnerabilities in the continent's banking sector – not to mention heightened political risk in the wake of the UK's vote to leave the European Union – all present significant threats to credit markets.

"Central banks' bond-buying programmes have contributed to a herd mentality in bonds. Investors are hunting yields in a complacent way, and not paying proper attention to the underlying risks," says Chris Higham, Head of Credit Multi-Strategy Fixed Income at Aviva Investors. "Slow economic growth – and a potential recession in the UK following the Brexit vote – means there are likely to be more corporate defaults in Europe. But the technical indicators remain strong because of central bank policies. This divergence between technicals and fundamentals is not sustainable."

As in the government bond markets, credit investors are taking on duration risk; buying longer-dated debt because it tends to offer higher yields than shorter-maturity bonds from the same issuer. In August, telecommunications firm Vodafone was able to sell a 33-year sterling bond at a yield of 3.4 per cent – the lowest-ever recorded on a sterling bond of more than 30 years from a triple-B-rated issuer.

But credit investors are also moving down the rating spectrum. They are looking at securities that combine equity and debt-like characteristics, such as contingent convertible (or 'coco') bonds issued by financial institutions. Designed in the aftermath of the financial crisis to transfer bank risk from taxpayers to investors, these hybrid instruments offer relatively high yields but convert to equity – or absorb losses – when the issuer's capital ratio falls below a specified amount, leaving investors exposed.

"Investors need to keep an eye on corporate hybrid issuance," says James Vokins, Senior Portfolio Manager, Multi-Strategy Fixed Income at Aviva Investors. "Companies are issuing debt that from a fixed-income perspective looks like a debt-like instrument, while credit ratings and accounting principles treat it partly like equity. If you're going to invest in those bonds, you should be aware of the risks."

The hazards involved in the illiquid coco bond market were illustrated in February. Yields on Deutsche Bank's coco bonds spiralled from 7.5 per cent to 13 per cent over the space of a month after its capital ratio fell below the defined threshold (although it later made the interest payments on the bonds). The large price swings on these securities suggested they had been targeted by pro-cyclical investors who dumped them in a hurry when the risks became apparent, demonstrating how the rapid departure of 'hot' money from an asset class can generate damaging volatility.

## Explosive correction

Some investors, however, believe that volatility will remain low – and have spotted an opportunity to profit from that prediction. Known as 'selling vol', this strategy involves selling options that pay out if the price of the underlying asset moves by a defined amount. It's not a new approach by any means, but the range of participants in such trades is expanding as the hunt for yield pushes investors into unfamiliar territory.

Taiwanese insurance companies, which were recently freed to invest in overseas assets by the domestic regulator, are among the institutions that have started deploying this strategy, which used to be the preserve of big banks and hedge funds. Facing average weighted liability costs of 3.8 per cent – far higher than their average investment yield of 2.8 per cent[5] – these institutions are under pressure to increase returns, and have turned to selling volatility on long-dated corporate bonds as a way of boosting profits without taking on more credit risk. But it's a dangerous game.

"The cheapest and easiest way to get yield at the moment is to sell volatility. But the new entrants to this market are inexperienced and it can be a dangerous strategy – you're effectively picking up pennies in front of steamrollers. If the cycle turns and yields suddenly rise, we could see a pretty explosive correction in the marketplace," says James McAlevey, Senior Fund Manager, Fixed Income at Aviva Investors.

Such investment behaviour demonstrates how central bank policies are creating distortions – and may even be contributing to instability in the financial markets. "Because there's no yield in bonds, investors are reaching into new, potentially risky areas. That's calling into question the wisdom of central bank policies. If US Treasuries yielded three per cent, do you think investors would be selling volatility on long-dated bank credit? Probably not," says McAlevey.

If central banks increased interest rates to 'normal' levels, the mania for duration risk, hybrid debt and volatility trades would cool, bringing normality to a distorted market. Then again, such a policy would also leave those investors who have piled into these strategies vulnerable to losses. Such is the tightrope central bankers must walk.

The possibility that central banks might change tack spooked markets on September 9, amid widespread rumours the Bank of Japan would taper its purchases of longer-dated corporate bonds. The global 10-year US Treasury bond yield rose by eight basis points; not an extreme move, but evidence that sentiment remains fragile.

## History doesn't repeat – but it rhymes

Given the uncertain market backdrop – and the difficulties of second-guessing central bank policy decisions – Grehan believes it is increasingly important for fund managers to pay attention to both fundamental and technical factors to insulate portfolios from the negative impacts of volatile capital flows. "What you don't want to own is a poor credit in an expensive market. If the market turns you're going to get hit on all counts. If you own a resilient, fundamentally-supported credit then you can be comfortable that your downside is going to be limited, even if the wider market is overpriced."

But return-generating opportunities are also arising. McAlevey points out that fund managers could take the other end of insurers' volatility trades, a strategy that would deliver profits if the market turns and yields rise. Investors can also boost their returns by keeping an eye on policy decisions and anticipating where capital will flow next. Holders of US bonds, for example, have realised capital gains as new investors moved into the market in search of relatively higher yields after the ECB introduced the CSPP. The average yield on sub-investment grade debt in the US fell from a high of 9.4 per cent in February to just under six per cent in early September[6].

## BEWARE THE CROWDED YIELD TRADE

*continued*

"You need to look at which markets will be the secondary derivative benefactors of policy decisions," says Vokins. "It stands to reason that if central banks are buying corporate bonds in Europe then yields will fall in the US too, because investors will cross the Atlantic in search of yield."

The clamour for US high-yield bonds has persisted despite relatively high default rates, which hit a six-year high of 5.1 per cent in the second quarter of 2016, up from 4.1 per cent in the first quarter[7]. The US of high-yield sector was one of the worst hit during the last cycle, when the precipitous fall in oil prices in 2014 forced many energy issuers into defaults. But current defaults remain below the market's historical average default rate of 5.4 per cent, suggesting there remains value in US high yield for the time being.

Problems may be mounting in the ostensibly safer environs of US investment-grade debt, however. According to research from Morgan Stanley, these companies are increasing leverage even as earnings stagnate: US investment-grade firms carry debt loads that amount to 2.5 times their collective earnings, and this figure has climbed for the last five consecutive quarters. (By comparison, in 2010, as the US economy began to recover from the financial crisis, the ratio was 1.7 times[8]).

Despite these escalating debt levels, the average yield on US investment-grade debt had fallen to 2.75 per cent as of October 21, down from a high of 3.5 per cent in February 2016.[9] This illustrates how the historical correlation between leverage and credit spreads has broken down amid the hunt for yield.

"You need to look at where the reach for yield has been occurring and the factors that may change the balance of supply and demand," says McAlevey. "In markets that have a high percentage of retail ownership compared with historical patterns, a catalyst could change the environment very quickly. You saw that happen in emerging markets during the 'taper tantrum,' and in US high yield after the oil price collapse. The catalyst is likely to be different next time, and may occur in a different area of the market. But the result will be the same."

As central bank policies distort markets and cash flows toward riskier assets, credit investors would do well to keep in mind a piece of wisdom attributed to Mark Twain: History doesn't repeat itself – but it does rhyme

1 JPMorgan Chase & Co.
2 Bloomberg
3 'International Capital Flows and Vulnerabilities in Emerging Economies,' Bank for International Settlements, August 2016
4 The IMF factored GDP growth, domestic interest rates, and exchange rate misalignments into its analysis of fundamental strengths and compared historical patterns of demand for emerging-market debt. 'Emerging Market Volatility: Lessons from the Taper Tantrum,' IMF research note, September 2014
5 Bloomberg
6 S&P U.S. Issued High-Yield Corporate Bond Index
7 'Leverage Soars to New Heights as Corporate Bond Deluge Rolls On,' Bloomberg, September 2016
8 Bloomberg
9 S&P US Issued Investment Grade Corporate Bond Index



# IS GLOBALISATION GOING INTO REVERSE?????????????

**Recent political developments are threatening to send globalisation into reverse. As such, they could have major ramifications over the long run for economic growth and investment markets, writes Michael Grady.**

The anti-globalisation movement in the West has often been dismissed as little more than a fringe group. Governments, companies and investors alike did little more than pay lip service to the complaints that came their way.

Indeed, the opening up of the world to freer trade after World War II – through the General Agreement on Tariffs and Trade – accelerated in the 1990s and 2000s. It was almost universally viewed as a key economic policy aimed at increasing comparative advantage (national specialisation), integrating global supply chains and ultimately increasing the wealth of those countries that 'opened up'. The 'gains-from-trade' proposition was largely undisputed in academic and official circles.

Few are taking the anti-globalisation movement so lightly now. In the wake of the UK referendum, and with a growing tide of populism sweeping across North America and Europe, it is clear large segments of the population in many countries feel disenfranchised by globalisation. It is perhaps no surprise that so many, especially in former industrial heartlands in the West, should call into question the benefits of an increasingly integrated economic system they perceive has done nothing for them. But it begs the question: does this mark the end of globalisation as we know it? And if so, what does it mean both for the world economy and the investment landscape?

## In retreat

In one respect, globalisation has actually been in retreat for a number of years. As can be seen in the chart, trade growth has fallen behind global economic growth since the financial crisis of 2008. That is in stark contrast to the preceding decades, which saw a period of rapid growth in global trade, in part driven by China joining the World Trade Organisation (WTO) in 2001. In the 18 years leading up to the financial crisis, world trade grew at an annualised rate of 6.5 per cent and economic output at 3.8 per cent. In the eight and a half years since, trade growth has averaged just 1.2 per cent and economic growth 2.9 per cent.

The decline in the growth of trade has had little to do with any anti-globalisation sentiment, however. Rather, it has been the result of first the financial crisis – which among other things led to a sharp contraction in the availability of credit to facilitate trade flows – and then a sharp drop in the growth of trade between emerging

> *There is an obvious risk increasing protectionism will depress global trade*

economies. In particular, the rebalancing of the Chinese economy away from manufacturing and investment towards consumption resulted in a sharp slowing in imports of capital goods and components, often sourced from other parts of Asia[1].

Given the rebalancing of growth in China is seen as an essential element of that country's economic development, the recent slowdown in global trade growth may be less worrying than it appears. To the extent it reflects the steady transformation of China and other emerging nations into wealthier, more service-based economies, it could help to address some of the global trade imbalances that have built up in recent years.

Looking further ahead, however, there is an obvious risk increasing protectionism will depress global trade, and with it economic growth, further still. As Bill Gross recently claimed, 'Brexit' marks "the end of globalisation as we've known it". These fears have been compounded by the direction of the debate in the US Presidential election. The Republican Party's presidential nominee Donald Trump has argued the economic problems of the US are the result of a leadership class "that worships globalism over Americanism". On the other side of the political spectrum, Bernie Sanders, in his run for the Democratic Party's nomination, also railed against free trade.

Despite the rhetoric, politicians are likely to tread warily before resorting to more extreme forms of protectionism. There is an obvious risk that such an approach would lead to retaliation from trade partners, leaving both sides worse off.

## Hard times

That said, support for the policies espoused by Trump, Sanders and others is unlikely to go away in a hurry as it reflects the real economic hardship being felt by those who have lost out in an increasingly globalised world. While numerous empirical studies have shown that increased trade increases the size of the economic pie, they also show that the losers (employees in industries that suffer from increased competition) should be compensated by the winners. A recent academic paper by David Autor, David Dorn and Gordon Harrison suggests that in the case of the United States, that has not happened[2].

In their study, the authors claim much of the "received empirical wisdom" about how labour markets adjust to trade shocks has been challenged in light of the massive shifts in world trade induced by China's emergence as a great economic power.

"Labour-market adjustment to trade shocks is stunningly slow, with … local unemployment rates remaining elevated for a full decade or more after a (trade) shock commences," the report states.

The authors find that while employment has fallen, as expected, in US industries more exposed to import competition, offsetting employment gains in other industries have yet to materialize. The scale of the difficulties being felt across large swathes of Western societies was starkly demonstrated in a recent report by the think tank of American consultancy McKinsey & Co. It found that 65 to 70 per cent of households in 25 advanced economies had flat to falling incomes – ignoring the effect of taxes and transfer payments – between 2005 and 2014, up from less than two per cent between 1993 and 2005. It is clear policymakers in the West are facing stiff challenges that they need to confront head-on to avoid the risk of more serious social unrest. Among their priorities are likely to be increased spending on re-training and steps to make it easier for workers to relocate.

Most countries have for some time been clamping down increasingly hard on tax avoidance and evasion. But with the imposition of higher taxes on the rich still a political hot potato, it seems likely corporations will bear the brunt of any efforts by countries to lift their total tax haul, especially those headquartered overseas. As for other investment implications, they are less evident and will take longer to emerge. Nonetheless, it will be important to watch out for any evidence of an increase in protectionism which would favour companies focused on their home marketplaces relative to exporters. This would probably spell particularly bad news for emerging nations' economies and their currencies since these countries have been the main beneficiaries of freer trade

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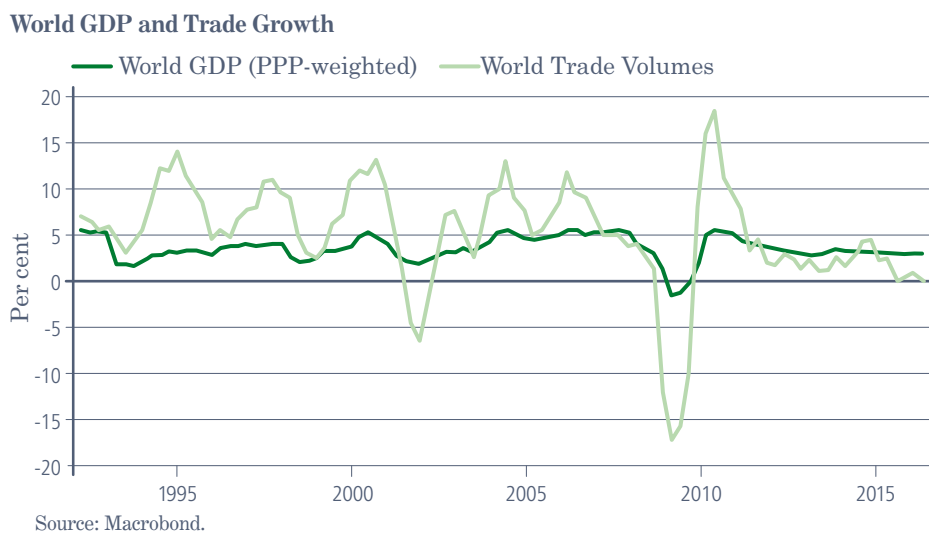



1 See IMF World Economic Outlook, April 2016, pp. 54-56
2 See Autor et al (2016), The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade.

# SHARE BUYBACKS – SHORT-TERM GAIN, LONG-TERM PAIN?

**RICHARD SALDANHA**
Fund Manager,
Global Equities

**With earnings hard to come by in a low-growth world, American companies offering sustainable revenue and earnings growth, rather than short-term fixes like share buybacks, are likely to be rewarded, argues Richard Saldanha.**

The amount of share buybacks by US companies has surged since 2009 (see figure 1), fuelled by healthier corporate balance sheets with increasing levels of cash (see figure 2) and easy access to cheap debt. The low-growth environment has also played a part. With many companies struggling to find opportunities to boost revenues organically, buying back stock has become a popular means of deploying excess capital, helping prop up earnings as a result.

This may be a sensible strategy in the short-term, but is likely to be to the detriment of the longer-term prospects of businesses. Whilst companies will likely continue to generate significant amounts of cash and debt markets will remain accessible, it is questionable how much longer this buyback boom can continue. Long term investors, in particular, want to see firm evidence capital is being used productively.

## Losing their lustre?

For much of the past decade, companies that have engaged more actively in share buybacks (as defined by the S&P Buyback Index) have tended to outperform the S&P 500. Indeed, the Buyback Index outperformed the broader market gauge every single year between 2008 and 2014. This all changed in 2015, when the index underperformed by around six per cent; suggesting buybacks are beginning to lose some of their attractiveness. It indicates investors are less willing to reward companies that announce buybacks, and are focusing more on whether they allocate capital in the most efficient manner.

## Long-term damage

There are instances where buybacks can be detrimental to the long-term aspirations of companies. Among the more noteworthy examples is US tech giant IBM, which for many years has engaged in large-scale buybacks. In the ten year period prior to the start of this year, the company spent $125 billion on buybacks alone; $15 billion more than it spent on capital expenditure and research and development (R&D). Although its share price performed well for the large part of this period – more than doubling in value between 2005 and 2011 – the stock has underperformed the S&P 500 by almost 100 per cent since 2011, with IBM left behind by the slowdown in sales of PCs and the shift to cloud-based platforms. Investors have been left wondering if this $125 billion would have been better spent on investing either within the business or via mergers and acquisitions to position the company better.

## Turning up the heat

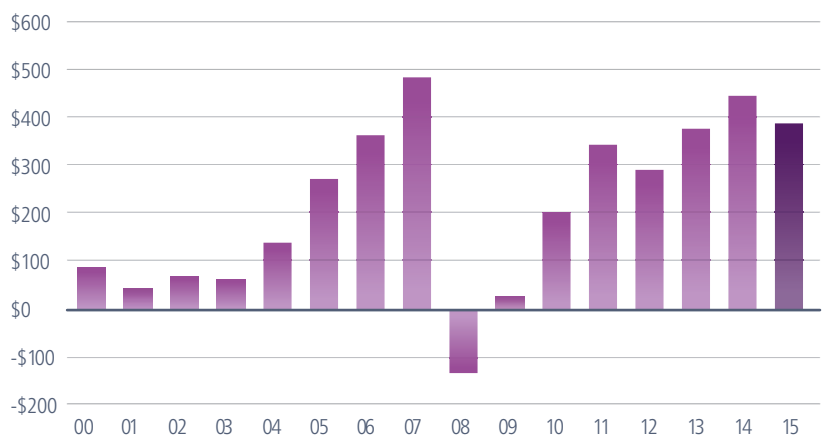
There also appears to be a significant relationship between the level of activist investor activity in US stocks and the level of buyback activity/capex reductions. An analysis conducted by S&P Capital IQ[1] for the Wall Street Journal showed that in the period 2003-2013, S&P companies targeted by activists reduced capex in the five years after activists bought their stock from 42 per cent to 29 per cent of operating cash flow. The same companies boosted spending on dividends and buybacks in the year after being approached to 37 per cent of operating cashflow from 22 per cent.

Hedge funds run by activist investors have long claimed some listed companies squander money that should be returned to shareholders instead through dividends and buybacks. Carl Icahn was extremely vocal about wanting Apple to increase its stock buybacks, writing an open letter to CEO Tim Cook in October 2014[2]. Despite Apple increasing the pace of buybacks, Icahn is now out of the stock completely, citing concerns over China. One could argue that given the worries over declining revenues from iPhones, Apple would be better off investing its surplus capital to diversify its business model rather than buying back its own shares.

## Capital efficiency

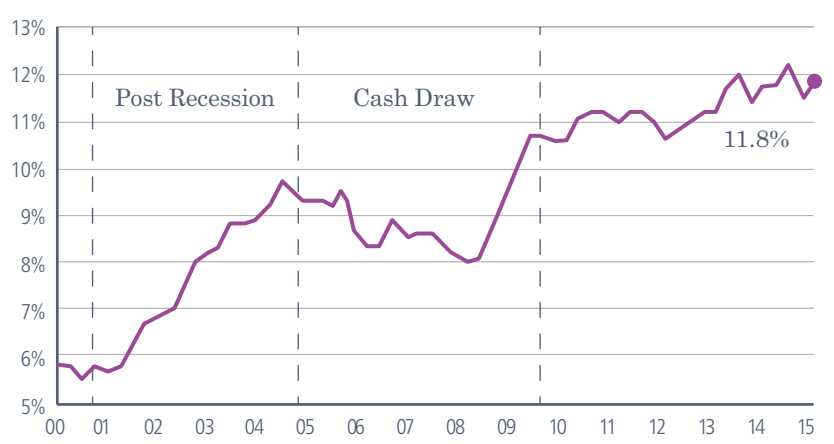
While buybacks are undoubtedly an important part of the capital allocation toolkit for companies; recent evidence suggests the benefits of this strategy are starting to wane. To generate sustainable long-term growth, companies need to focus on re-investing further in their own businesses. Investors have a key role to play in forcing the issue, however. Ultimately it is up to long-term shareholders, as stewards of capital, to demand companies allocate capital in the most efficient way ●

**Figure 1: S&P 500 annual buybacks net of issuance ($bn)**




Source: FactSet, UBS (Note: 2015 as of Q2 2015 but data annualised for FY).

**Figure 2: S&P 500 cash (excluding financials) as percentage of total assets**




Source: FactSet, UBS.

1 http://blogs.wsj.com/moneybeat/2015/07/20/clinton-to-put-activist-investors-in-campaign-spotlight/
2 http://carlicahn.com/carl-icahn-issues-open-letter-to-tim-cook/

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