Global Outlook

June 2017

Global Outlook is a monthly publication that contains a series of articles examining markets and key investment trends. In this edition, we focus on an important global theme, climate change, and consider how asset managers are doing more to help investors and clients understand that managing climate change risk in portfolios is beneficial for future returns. Other articles focus on emerging markets, as we update our 'heat map' of vulnerabilities across the largest issuers of emerging market debt, and examine the development of the electric vehicle industry in China. Lastly, we consider our positions in two markets away from the mainstream: Swedish government bonds and Korean equities.



This document is intended for institutional investors and investment professionals only and should not be distributed to or relied upon by retail clients.

House View

The following asset allocation is based upon a global investor with access to all the major asset classes.

	June 2017 House View							
Risk	The Global Investment Group retains a cautious medium-term outlook, as a variety of political, financial and economic drivers point to higher levels of financial market volatility. While there are particular areas of value, investors should be highly selective in asset allocation decisions.	NEUTRAL						
Government Bond	ds							
US Treasuries	Tighter labour markets, and rising wages and inflation, give the Federal Reserve the rationale to continue hiking rates. However, the potential for promised fiscal reforms to be delayed or limited in scope can support the market.	MOVED TO NEUTRAL						
European Bonds	Bonds are not as well supported as growth and inflation pick up. This means the ECB is considering how long to keep monetary policy accommodative. Political stress could periodically affect peripheral and core bond markets.	LIGHT						
UK Gilts	The Bank of England has delivered significant easing measures as the impact of rising inflation on household incomes is expected to cause the economy to slow. Long-term valuations are expensive, especially after the recent moves in sterling.							
Japanese Bonds	The central bank is attempting to reflate the economy with its QE and yield curve control policy alongside negative short-term rates. The absence of yield makes this asset class relatively unattractive.	LIGHT						
Global Inflation- Linked Debt	Inflation levels are expected to increase across developed markets as expansive fiscal policy in the US and Japan, currency weakness in the UK, and the rise in commodity prices all feed through into headline rates.	NEUTRAL						
Global Emerging Market Debt	Local currency yields are more attractive due to the sensitivity of emerging markets to the pick-up in global growth. US dollar-denominated debt is supported by cheap valuations and the protection from currency movements it provides.	HEAVY						
Corporate Bonds								
Investment Grade	QE supports UK bonds, but has driven European yields to unattractive levels. US credit spreads are less attractive as Treasury yields increase, and riskier assets are preferred.	MOVED TO LIGHT						
High Yield Debt	The hunt for yield has driven investors to this asset class, although overcrowding remains a risk in some sectors, especially in the US when monetary policy is being tightened or oil prices are under pressure.	MOVED TO NEUTRAL						
Equities								
US Equities	Equities have rallied on the back of improved global economic conditions and promised fiscal easing and deregulation. While dividends and buybacks are supportive, risks remain over the potential failure to implement expansionary fiscal policies.	HEAVY						
European Equities	Corporate earnings are improving on the back of a widespread pick-up in economic growth across the region, while investor sentiment is also positive. Concerns remain over some banking systems, the lack of strong credit growth and upcoming elections.	MOVED TO HEAVY						
Japanese Equities	The market looks more attractive as easy monetary policy and fiscal stimulus for 2017 are helped by a cheaper yen. This is driving forward corporate earnings, share buybacks and business investment.	NEUTRAL						
UK Equities	The UK economy has been resilient but uncertainty remains surrounding its future relationship with the EU. Sterling remains the primary driver of the relative attractiveness of UK companies with overseas exposure.	NEUTRAL						
Developed Asian Equities	The improvement in the global economy will have a positive feed through due to trade linkages. However, expected US interest rate rises, a stronger dollar and protectionist policies may all offset this effect.	NEUTRAL						
Emerging Market Equities	The outlook for Asia is dependent on US trade policy and the degree of monetary tightening or US dollar strength. More emerging markets are seen as attractive as the improvement in global growth feeds into commodity prices.	NEUTRAL						
Real Estate								
UK	The UK real estate cycle is at a mature stage and we expect limited further capital growth. Income remains attractive, although risks are elevated should conditions turn recessionary or political uncertainty persist.	MOVED TO NEUTRAL						
Europe	European property continues to perform well in a global context. Yield compression is beginning to become a smaller component of capital growth as spreads tighten, while stronger economic growth and low levels of supply are supporting healthy income growth.	HEAVY						
North America	The US market has low vacancies across most sectors and markets, and although supply is still mounting, construction is mostly in check, providing a prolonged window for rental growth.	HEAVY						
Asia Pacific	An attractive yield margin remains, but yields have bottomed in most markets. Income returns are driven by modest rental growth on the back of low vacancies, healthy tenant demand and resilient economies.	NEUTRAL						
Other Assets								
Foreign Exchange	The US dollar is supported by tighter monetary policy but faces valuation concerns. Europe looks less well placed than Japan to cope with the next phase of currency pressures, while sterling acts as a shock absorber after the EU referendum.	NEUTRAL\$, €, HEAVY¥, LIGHT£						
Global Commodities	Different drivers, such as US dollar appreciation, Chinese demand, Middle East tensions, OPEC decisions and climatic conditions influence the outlook for different commodities.	NEUTRAL						
Cash								
	The US election result may mean a faster pace of interest rate rises is necessary should fiscal policy expansion lead to inflationary pressures. Easy policy is still expected in Europe, Japan and the UK to revive economic activity.	MOVED TO LIGHT						

Foreword

Editor



Andrew Milligan
Head of Global Strategy

Successful investing for our clients often involves understanding the overall big picture at the same time as getting to grips with intricate details. The range and depth of expertise required, in terms of analysing companies and sectors across both developed and emerging economies, is demonstrated in this edition of Global Outlook.

What theme could be more important for the global economy, and therefore future investment returns, than climate change? According to the United Nation's Environment Programme 'The Adaptation Gap Finance Report', adapting to climate change could cost up to \$500 billion per year by 2050. In these circumstances, responsible fund managers have a major role to play; the article by Sophie Rahm, Responsible Investment Analyst, considers the various ways in which asset managers are doing more to help investors and clients understand that managing climate change risk in portfolios is beneficial for future returns.

Two of our articles examine the big and the small picture in emerging markets (EM). Every six months we carry out a 'heat map' exercise to examine the changing degree of vulnerabilities across the largest issuers of EM debt. Nicolas Jaquier, Economist, Emerging Markets, concludes that there has been a broad-based improvement in risk levels, although

he warns that there are exceptions where risks are rising, such as the Philippines, or remain elevated, as in Chile, Turkey and Malaysia. Recent political developments in Brazil should also be a reminder that a focused approach to investing often makes sense. Matt Williams, Investment Director, Emerging Market Equities, examines the supply chain implications of a seismic change taking place in the car industry, namely the rapid development of electric vehicles. In particular, Chinese firms are benefiting from a national priority to develop world-leading electric car expertise in that country.

We also consider our positions in two markets away from the mainstream: Korea and Sweden. Ross Hutchison, Investment Director, Multi-Asset Rates, re-examines his thoughts on the drivers of the Swedish government bond market, especially the muted outlook for inflation. He concludes that, although the bond market is historically expensive, exposure to Swedish rate positions still appears attractive. Jennifer Catlow, Investment Director, Multi-Asset Investing, explains our positions in Korean equities. The recovery in the global export cycle should sustain a reinvigoration of Korean corporate profits and unlock their operational leverage, but the flexibility of our investing toolkit allows for more sophisticated ways of including exposure in portfolios.

Responsible Investing

Climate change and opportunities in active management

Asset managers are doing more to help investors and clients understand that managing climate change risk in portfolios is beneficial for future returns.



Sophie Rahm Responsible Investment Analyst

Why should investors care about climate change?

Climate change is the shift in temperatures, precipitation levels and extreme weather due to the greenhouse gases prevalent in the atmosphere. The latest report published by the Intergovernmental Panel on Climate Change suggests that it is now extremely likely that humans have been the main cause of global warming over the past 60 years. Between 1970 and 2010, global greenhouse gas emissions due to human activity increased by 80%. The year 2016 was the warmest on record since the World Meteorological Organisation started tracking global temperatures. These changing conditions will have profound and longlasting consequences for the world population and for its activities. Accordingly, investors should consider how directing capital towards or away from such activities creates risks for investment returns. Investing should be done with as much knowledge as possible of the potential financial implications of climate change.

Although it is very difficult to quantify the time, probability and scale of the impacts from climate change, the range of risks should nonetheless be considered and help inform the various decisions needed to make an investment. The fact that this might need to be done outside the traditional financial analysis framework, and requires creative solutions to be applied, is no excuse to ignore the importance of what is

at stake. The effects of climate change disruptions are already being felt, slowly but surely sowing the seeds of change in many economies, industries and companies.

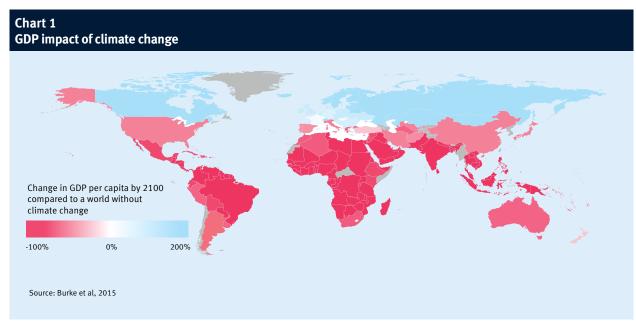
When environmental and social externalities, which too often fail to be priced correctly by the market, are taken into account, then the detrimental effects of climate change can start to be assessed. According to the International Monetary Fund, the 'true' costs that people pay for their consumption of fossil fuels include health-related problems, increased mortality, lower quality of life, damage to the environment and money unavailable for investments in other community goods due to hidden costs or the loss of capital invested in stranded assets

Adapting to climate change could cost up to \$500 billion per year by 2050, according to the UN's Environment Programme, while ignoring its impact potentially poses a threat to sustained economic growth. We expect governments across the globe to increase regulatory pressure in order to address the long-term impacts of climate change and ensure stable economic structures. Companies will need to adapt and demonstrate their climate resilience at both operational and strategic levels.

A fast-evolving international environment

At the 21st Conference of Parties held in Paris in 2015, world leaders agreed that greenhouse gas emissions must be curbed in order to keep global temperatures well below two degrees Celsius above pre-industrial levels. As a result of this meeting, countries have pledged to reduce their greenhouse gas emissions in ambitious national plans. But those plans are only enough to take the world beneath three degrees Celsius of warming. Even with the best intentions, the shortfall is significant. This is an enormous challenge for society. Until recently, the US was an influential proponent of climate change action. Under the Trump presidency, this commitment has since faltered. It is possible that the US, which accounts for nearly 15% of global greenhouse gas emissions, will pull out of the Paris Agreement. This would be a drawback for the international community, but it is unlikely to put a dent in the transition to a lower carbon economy.

If the US seems to waver on climate change, other climate giants like China and India have emerged. Even though both countries count on fossil fuels to meet increasing electricity demand, they are committed to growing the share of renewable energy in the electricity mix, and do not consider this detrimental to future economic growth. India, the world's third-largest carbon emitter, has put out an ambitious solar



plan, with a target to install 200 GW by 2050. Wholesale prices for electricity generated by solar and wind power reached a record low in early 2017. Reforestation and similar initiatives will also help to offset 11% of India's annual greenhouse gas emissions. China's 13th Five-Year Plan (2016-2020) introduces energy consumption reduction targets, and national carbon trading programmes based on a series of pilot schemes will be launched in 2018. It released an updated air pollution law, specifically targeting coal capacity.

Intervention by the international community has traditionally been considered the only way to steer economies on a lower carbon path. While political commitments help maintain necessary momentum, it is the economics of low carbon technologies (such as renewable energies or electric vehicles) that is currently supporting the shift. The technological advances and the cost competitiveness of non-fossil sources of energy should continue to drive change. Companies are also waking up to the notion that physical and regulatory disruptions related to climate change can have profound implications for business operations and may threaten the going concern. The challenge is now to articulate the relationship between climatic and business disruptions.

Making financial sense of climate change

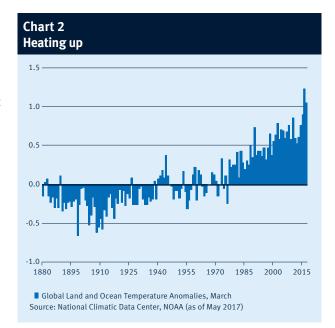
Both the corporate and investment communities are waking up to the financial materiality of climate change; however, making financial sense of it remains an extraordinarily complicated endeavour.

In the UK, Mark Carney, Governor of the Bank of England and Chair of the Financial Stability Board (FSB), stated that the scientific evidence combined with the dynamics of the financial system suggests climate change threatens financial resilience and long-term prosperity. The FSB subsequently established a Taskforce on Climate-related Financial Disclosure. The primary goal of this framework is to facilitate the integration of climate change into traditional financial analysis by encouraging greater disclosure from companies. It also provides guidance on how asset managers and owners can use this information to achieve better investment decisions for the benefit of their clients.

Moody's, the credit rating agency, recently announced that it would look to assess the credit implications of environmental and carbon transition risks. In particular, this analysis will put negative pressure on the credit ratings of oil and gas companies, many of which face lower demand for fossil fuels over time, combined with rapid technological changes and shifts in consumer preferences. Sovereign ratings were also amended to include an assessment of the exposure and resilience of a country to climate change risk.

Asset owner pressure with regards to climate change considerations is also mounting. A number of pension funds, particularly in Europe, are leading the way on understanding the financial implications of climate change risk. Initiatives like the Transition Pathway Initiative are also moving the needle on the issue and encourage investors to consider climate change risks in their models.

However, the lack of standardised and robust data on carbon usage and emissions makes it difficult to compare companies. Although carbon scenario analysis and stress-testing are turning into the new norm, the vast majority of companies' management teams are still unable to share how their businesses would fare under different carbon-constrained outlooks. This makes climate risk analysis at the portfolio level a challenge, while the variety of fund, asset classes and time horizons render the exercise arduous.



Climate change analysis as a value creation tool for investors

Asset managers can do more to help investors and clients understand that managing climate change risk in portfolios is a financial exercise that can help preserve, or indeed improve, future returns. As active investors at Standard Life Investments, there are number of ways we are looking to influence the wider uptake of climate-related considerations into the investment process. These include:

- improving the climate risk disclosure and publishing results of carbon footprint analysis, both at the asset class and portfolio level
- engaging with fund managers internally on the meaning of carbon analysis
- encouraging the companies in which we invest to recognise climate change risks and opportunities, as well as demonstrate to investors how they inform the business strategy

In our view, these actions will help preserve the value of investments and deliver improved performance at a time when the transition to a lower-carbon economy is likely to cause significant disruptions to many business models. Only by assessing and measuring exposure to climate change issues at investee companies and in portfolios will investors be in a position to manage the risks, identify the opportunities and ultimately be better placed to achieve superior risk-adjusted returns.

Emerging Market Debt

Stronger support for emerging market debt

A broad-based improvement in the fundamentals of most emerging market economies supports investments in emerging market debt assets - but there are some key exceptions.



Nicolas Jaquier Economist, Emerging Market Debt

Risks are decelerating

Risk continues to abate across most emerging market (EM) economies, according to our updated heat-map of vulnerabilities. The heat-map tracks indicators of macroeconomic risk using five pillars: external balances, domestic imbalances, public balance sheets, exposures to China, and the country's policy frameworks. Its latest iteration shows decreasing vulnerabilities in the majority of countries, with 14 out of the 23 major EM economies seeing a lower level of risk compared with October last year. Only five countries saw a rise in their overall risk score (see heat-map).

This improvement was broad-based and led mainly by improvements in external balances as current accounts continued their gradual adjustment. In addition, domestic balances seem to be improving due either to deleveraging in some countries or a slower pace of credit growth in others. The sustained build-up of leverage in the Chinese economy often conceals developments in other major emerging economies, which may be at a different point in the economic cycle. Indeed, our measure of credit extension does not flag 'red' for any country anymore, even if it remains elevated in Chile, Korea and Turkey. Corporate leverage ratios also recorded more declines than increases on balance over the second half of 2016.

Improvements and exceptions

At a country level, there were notable improvements in Latin America. Brazil has now made it into the lowest risk category, a remarkable turnaround from two years ago when the country was flagging at the second-highest risk level. Even if the falling inflation environment allows the Central Bank of Brazil to cut policy rates, monetary policy has remained tight for a long period and has dampened the excessive credit extension of past years. In another sign of reduced domestic imbalances, home prices are now experiencing deflation. Despite these improvements, the public balance sheet is still the key weakness. In this regard, recent political developments have jeopardised the outlook for the all-important pension reform, which is key to regaining long-term fiscal sustainability. Without passage of the pension reform bill, we would expect Brazil's vulnerabilities to start rising again.

With still a lot of uncertainty about the future of trade policy relations across North America, it is encouraging that Mexico recorded one of the largest improvements in our heat-map. Its adjusting external balance, a depreciated real exchange rate and sustained pace of fiscal consolidation have strengthened much needed buffers in case of a policy shock. Growth remains





elusive in Mexico, while tighter financial conditions as well as cuts in public capital expenditures will take their toll on already sub-par economic activity. However, the trajectory is supportive for debt investors.

Argentina is the exception in Latin America, with an apparent increase in vulnerability. The change was related primarily to a rise in corporate leverage, which was expected after years of being shut out from international capital markets. As corporate balance sheets are still only moderately levered and credit penetration is low, raising debt to fund projects should reasonably be expected to spur higher growth later this year and next. It is likely that the rise in debt relative to earnings will prove temporary.

The increase in risk in the Philippines is more pronounced. The economy now shows early signs of overheating and the country was raised to the second-highest risk level in our heat-map, from the second lowest only a year ago. External balances have deteriorated quickly (see Chart 1). The current account is now in deficit after a decade of sustained surpluses as booming domestic demand is pulling in imports. The hot state of the economy is also reflected in rapidly rising real estate prices. Fiscal sustainability is not an issue in the Philippines, which has run small deficits for a number of years. However, President Rodrigo Duterte plans to increase state spending, which adds to concerns as it comes at a time when the economy already seems to be running above potential.

Our strategy within emerging market debt

The continued reduction in risk is a broad-based trend which has underpinned the strong performance of EM debt assets so far this year. The House View is Heavy in hard currency and to a lesser extent local currency EM debt. However, there are exceptions where risks are rising (the Philippines) or remain elevated, such as in Chile, Turkey and Malaysia. Our hard currency and local currency strategies are Light in these countries. We favour exposure to EMs that have seen important improvements in reducing vulnerabilities, such as Indonesia and Thailand.

Table 1
Heat-map of emerging market countries' vulnerability to a crisis

Thailand	Philippines	Malaysia	Korea	Indonesia	India	Ukraine	Turkey	South Africa	Russia	Romania	Poland	Israel	Hungary	Egypt	Czech Rep	Venezuela	Peru	Mexico	Colombia	Chile	Brazil	Argentina		
5.1	-3.9	5.1	8.7	0.5	0.6	1.7	-1.8	-2.1	4.4	-0.6	1.1	4.1	6.7	-6.5	1.4	-10.3	1.8	1.2	0.1	2.0	2.2	-1.7	Basic Balance (% GDP)	
231	207	97	144	117	172	35	118	83	232	201	147	247	106	69	284	17	249	119	146	110	243	94	FX Reserves (% Reserve Adequacy Measure)	External
-14	-9	-13	-25	6	5	11	19	28	-9	-13	ů	-24	-35	13	-16	1	-2	10	7	-1	-0	1	Net non-FDI Capital Flows (5y sum, % GDP)	rnal
2	11	-12	11	-6	1	-29	-9	-23	-21	-6	\$	6	-9	-1	-11	709	2	-21	-23	-7	-20	NA	Real Effective Exchange Rate (REER) (Sychange)	
7.2	11.9	11.3	14.4	6.0	0.6	-20.9	13.7	5.9	13.1	-10.8	3.2	-6.5	-35.8	3.3	4.5	5.8	9.4	4.0	11.9	16.6	2.8	0.0	Credit % GDP (5y change)	
-1.5	-5.3	-2.5	-2.6	-1.1	-1.9	-3.4	-3.4	-0.3	4.7	-5.0	-2.0	-4.6	-3.7	-2.4	-3.9	-165.7	-3.4	-3.4	-1.7	-2.5	7.9	-11.0	Monetary Policy Gap	Don
-1	21	23	-8	⇔	21		13	-0	-16	-25	-11	13	-4		-3		34	4	16	24	-16	31	House Price to Income (5y change %)	Domestic
1.8	2.5	1.9	1.3	1.6	2.8		2.1	1.0	1.3	-0.2	1.3	4.1	0.9	1.1	1.2		1.5	2.1	2.2	2.5	2.7	2.4	Corporate Net Debt / EBITDA	
-0.9	0.8	-1.1	0.0	-0.8	-1.6	1.2	-1.3	0.1	-2.1	-2.3	-1.2	-0.9	0.0	-2.8	0.5		-1.2	-0.3	0.2	-2.8	-2.3	-4.8	Primary Balance (% GDP)	Pul
6.3	9.4	6.3	6.2	8.4	9.7	6.0	6.2	12.9	7.1	5.3	5.1	5.9	3.8	2.7	1.7	9.4	5.8	9.1	8.9	9.5	6.8	9.3	Average maturity of debt (years)	Public
4.2	3.0	7.5	5.0	2.7	1.2	1.2	0.4	3.4	1.6	0.5	0.5	1.2	1.3	0.3	1.1	4.4	3.7	0.6	0.7	3.9	1.3	0.8	Value-add exported to Chinese Final Demand (% GDP)	China e
22	15	33	13	59	29	45	21	51	79	22	21	7	15	49	11	98	85	17	82	86	62	71	Commodity exports (% of total exports)	China exposure
N/N	N / N	Υ/Υ	N/Y	Y / N	N/Y	N/N	N/Y	N/Y	Y / N	Y / N	Y / N	Y / N	Y / N	Z / Z	Y/N	N / N	Y / N	Υ/Υ	Y/N	Υ/Υ	Y / N	N/Y	Fiscal Rule / Countercyclical	Po
Managed Float / IT	Float / IT	Managed Float / Other	Float / IT	Managed Float / IT	Managed Float / IT	Managed Float / Other	Float / Discretion	Float / IT	Managed Float / Other	Managed Float / IT	Float / IT	Managed Float / IT	Float / IT	Managed Float / Other	Managed Float / IT	Peg / ER Anchor	Managed Float / IT	Float / IT	Managed Float / IT	Float / IT	Managed Float / IT	Managed Float / Other	Foreign Exchange / Monetary	Policy Framework
2.79	3.21	3.07	2.43	2.79	2.93	2.92	3.00	2.86	2.07	2.21	2.36	2.71	2.43	3.31	2.36	4.27	3.00	2.29	3.07	3.00	2.43	3.14	Aggregate Risk	

Source: Standard Life Investments (as of May 2017)

High Risk

Moderate Risk

Neutral

Very Light Risk

Emerging Market Equities

Seismic change in the car industry

The shift towards the age of the electric car promises a superior driving experience, a more cost-efficient business model and a new set of winners.



Matthew Williams
Investment Director, Emerging Market Equities

Changing gear

Offering enhanced performance and a better cost structure, electric cars will encourage a new wave of competition that will threaten the traditional car industry. This will likely catalyse a change in leadership. Traditional manufacturers, constrained by heavy fixed costs and meagre cashflow, will be able to migrate only slowly to electric vehicles.

While Tesla leads the field in electric car technology, the potential rewards extend further. Both new and traditional car manufacturers are now rapidly developing their own electric vehicles, hoping to be fast followers. The technology ushers in a new group of suppliers, with expertise in fields such as lightweight materials, electronics, software and battery technology.

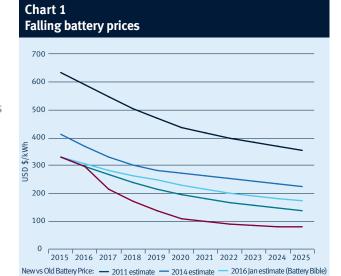
Leaner, cleaner electric

Electric cars present a disruptive force that threatens the very survival of traditional car manufacturers. Conversely, it presents a rich opportunity for disruptive entrepreneurs to seize a slice of the trillion-dollar global car industry.

At the forefront of this change is Tesla Motors, which has pioneered electric car technology and overhauled the traditional industry business model – from design, parts procurement and assembly through to marketing, distribution and aftersales service. Many consider Tesla the exception rather than the rule but it has pioneered a product that offers a superb driving experience. This is encouraging new car manufacturers, particularly in China, to adopt a similar approach.

The electric vehicle offers additional space and, more importantly, performance is outstanding with acceleration in larger-battery cars rivalling most 'supercars'. Particularly noticeable are the superior consumer entertainment and safety features that can be readily designed into this technology. Range anxiety has deterred many potential buyers of electric cars, particularly given thin charging-station coverage and slow charging times. However, coverage is continually improving and larger batteries mitigate the problem by offering a range of up to 300 miles. This is estimated to cover 95% of journeys and 99% of city journeys. Considering also that cars are left idle for over 23 hours a day on average, there is ample time to recharge the battery.

The biggest obstacle to mass adoption is price, with the large battery packs the main culprit. However, like other technologies, electric car technology is continually advancing and becoming cheaper. Chart 1 illustrates how battery pack costs have been declining faster than consensus expectations.



Following discussions with leading battery manufacturers including LG Chem and Samsung SDI, we believe costs will continue to decline far more rapidly than the market predicts, catalysed by scale increases, energy-density improvements, advances in materials composition and process enhancements.

2016 Nov estimate - Standard Life Investments estimates

Source: Bernstein, Standard Life Investments (as of May 2017)

To give an idea of scale, at end-2016, the estimated battery pack cost was \$300/kWh. Our analysis suggests by end-2017, it will be circa \$200/kWh, and by end-2020 just circa \$100 kWh – well-below the consensus estimate of \$200 by 2020. Using a 60kWh battery, c250-300mile range, the cost to a car manufacturer falls from US\$18,000 to just US\$6,000. This matters because today's traditional engine costs around US\$5,000 and with more stringent fuel efficiency and emission standards is forecast to rise to around US\$6,000 by 2020. So, by 2020, we estimate the electric car will reach parity with a traditional-engine vehicle.

Beyond 2020, we believe the cost structure of electric vehicles will surpass traditional vehicles. As well as substantial fuel savings, repair and maintenance costs will be cheaper because there are 90% fewer mechanical moving parts, resulting in less wear and tear. This reduces the need for an extensive repair network. Additionally, the change towards internet-based consumer researching habits warrants a smaller sales footprint. This significantly lowers distribution costs for pure electric vehicle manufacturers, but will prove difficult for incumbent carmakers to adopt.

Investing in change

Alongside electric vehicle manufacturers, companies in the new supply chain will be among the winners in this industry transformation. Chinese manufacturer Minth supplies structural and decorative auto parts. The company specialises in lightweight materials that are particularly suitable for electric vehicles where surplus weight impedes range and battery life. Samsung SDI is distinguishing itself in battery development, which is being recognised through important new customer wins including VW and BMW.

We also like Australia-listed Syrah Resources. Syrah is the world's only end-to-end supplier of high-grade coated spherical graphite, used in lithium-ion batteries. Crucially, the structure of this form of graphite improves energy density and substantially reduces battery cost. It is therefore of prime importance for electric vehicles, and will hasten the eventual affordability and adoption of the technology.

Government Bonds

Riksbank redux

Muted inflation pressures suggest Swedish bonds are attractive despite a continued improvement in the economy.



Ross Hutchison Investment Director, MAI Rates

The inflation conundrum

The apparently strong economic fundamentals in Sweden mask an uncertain inflation trajectory. We analysed the Riksbank's policy last year, and our conclusion remains unchanged. While policy settings are rightly aimed at ensuring a sustainable return to the 2% inflation target, the Swedish government bond curve remains the steepest in the G10 as investors price in a fast pace of policy tightening. We think optimism is priced in, and the risks remain for a more expansionary policy to last for longer than many expect. We continue to hold Heavy positions in Swedish bonds in portfolios; these have performed positively throughout the period, yet we continue to see value.

A broad range of economic indicators continue to point to a strong Swedish economy. Real GDP growth, although slowing somewhat towards year-end, was still an enviable 3.05% for 2016. Trends in production data for services and industry are accelerating. Traditional measures, such as resource utilisation, also point towards a closing of the output gap. Unemployment continued to decline (currently at 6.4%), despite structural immigration flows. Lastly, Purchasing Managers' Index business surveys and the economic tendency indicator of Sweden's National Institute of Economic Research show broad-based optimism.

Despite an upward trend in CPI inflation since 2015 and a strong reading in April, the sustainability behind this remains in question. CPIF (ex-energy) remains stubbornly below 2%, and forecasts by the Riksbank and other analysts have consistently been pushed back. There are reasons to believe that the strongest underlying driver of domestic inflation, wage growth, is not set to accelerate to a level consistent with 2% inflation in the near future. Negotiation rounds between social partners in the industrial sector, which set wage expectations for the broader economy, were disappointing by the Riksbank's own admission. It was surprising that a three-year deal resulted in the same 2.2% from last year's temporary deal, despite better broad economic data. Although this figure can increase over time due to wage drift, it is strong evidence that labour pricing pressure is still weak.

Policy has remained remarkably accommodative since last year, with the main repo rate held at 50 basis points. Consecutive Riksbank meetings have signalled prolonged easing, pushing back its repo rate path to signal later hikes, currently due to start in the third quarter of 2018 (see Chart 1). A decision



was taken at the April meeting to extend quantitative easing (QE) until end 2017, although a close vote reflects different interpretations of further QE. Three deputy governors voted against the decision, viewing QE expansion as additional easing. Two further deputy governors voted with Governor Ingves for the expansion, justifying it as maintaining current expansionary policy. We would caution against overinterpreting this split, which reflects two broad views of how best to maintain extremely accommodative policy. Crucially, no one rules out further action if necessary. The Bank continues to monitor the currency closely, but recent moves have been favourable. In extremis, the currency intervention mandate remains in place.

Risks around a lower-for-longer view

A clear risk would be strong data quickly leading to sustained inflation, requiring rapid policy tightening in response. Muted wage pressures, which are a global phenomenon, mean we judge the positive carry of the position to outweigh this risk. We also note continued strong household debt and house price growth. More is needed on the macroprudential front, and further clarity is required on the role of Finansinspektionen, the agency responsible for financial regulation in Sweden. However, the Riksbank remains unlikely to 'lean against the wind'. Past experiences of keeping policy tighter than was otherwise warranted to temper credit growth led to a need to reverse course. Lastly, the Riksbank recently announced a recommendation to change its target to CPIF (CPI with a fixed interest rate) from CPI, as well as introducing a +/- 1% variation band, subject to further stakeholder consultation. Although it specified that these changes will not affect monetary policy stance, there is a tail-risk that investors may perceive the illustrative band as a possible interval target in the future, reducing the need to ease.

While the Swedish economy has strong economic fundamentals, it is too soon for the Riksbank to change policy stance. The economic trajectory looks positive, but there remain risks to the positive inflationary trend. Although the bond market is historically expensive, as it is in the majority of developed economies, exposure to Swedish rates appears attractive. Pricing has converged in our favour since last year, yet the Swedish bond market still prices in a much faster and earlier hiking cycle than many other developed economies. We continue to hold a Heavy position, and actively trade Swedish rates on a cross-market basis from the long side.

Absolute Return Strategies

Political concerns and economic reassurance in Korea

Could a pick-up in Korea's export cycle reinvigorate Korean corporate profits and unlock operational leverage?



Jennifer Catlow Investment Director, Multi-Asset Investing

Economic expansion

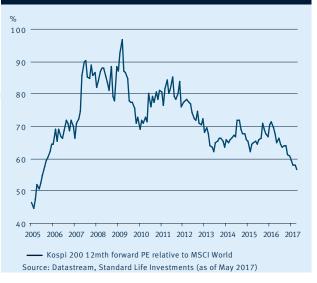
Over the past five years, the South Korean equity market has disappointed investors. In large part this can be attributed to the slowdown in global trade; about 60% of the sales of the companies which make up the Kospi 200 Index are derived overseas, hence it is particularly exposed to the health of the global economy. As a consequence of weak profit growth, the Korean stock market has traded within a relatively tight range over the period. From a relative valuation perspective, the Kospi 200 Index is currently trading at a one standard deviation discount on a price/earnings basis compared with its regional peers (see Chart 1). Over the past 10 years, this level of valuation discount has not been sustained for extended periods.

Since summer 2016, stronger activity in China and the US has sparked a turnaround in global growth. This recovery was evidenced by export growth returning to positive territory in late 2016 for several of the cyclical, trade-exposed economies in Asia, like South Korea. At first, Korea's recovery was led by the semiconductor and technology sectors; more recently this has broadened out to other sectors. This has triggered a turnaround in profits; furthermore, after several years of targeted cost-cutting and productivity improvements, there is the possibility of unlocking significant operational leverage.

Political concerns

Several political factors have encouraged investors to exercise caution on Korea. Fears around increased protectionism rose following the election of President Trump. Korea has benefited substantially from its free trade agreement with the US and there is concern that the Trump administration may take steps to try to 'balance the scales', although more recently concerns about a US blanket border adjustment tax appear to have reduced. Additionally, missile testing activity in North Korea has led to an escalation in regional tensions. Our view is that the most severe outcome (i.e. outbreak of war on the Korean peninsula) is unlikely and that sanctions will continue to be imposed as the tool of choice. Tensions with China have also risen as a result of the deployment of a US missile defence system in South Korea. China has responded by encouraging boycotts of Korean products and discouraging tourism to Korea. Ultimately, we expect these risks will remain in the background but should not disrupt the fundamental improvement in South Korea's economy.

Chart 1 Won attractive market



On the domestic front, politics have been a further source of uncertainty. After a corruption scandal culminated in the impeachment of President Park, Moon Jae-in won the election to become the 19th South Korean president. Removing uncertainty has already led to a rebound in consumer confidence. Moon Jae-in was one of several candidates who campaigned on reforms, in particular reform of the chaebols* which dominate the Korean corporate sector. Our global emerging market equities team estimates that the market attributes roughly a 30% discount for misalignment of interests in the quoted chaebol vehicles. If President Moon Jae-in is able to progress with much-needed reforms, this could present further upside for the Korean equity market.

Attractive valuations

Given the improving global environment and balance of risks in Korea, we believe there is a long-term opportunity to position our absolute return portfolios to benefit from a rise in the Korean equity market. Due to the flexibility of our toolkit, we can consider various methods of implementation. One way to express our upside view on Korean equities is through the option markets, by buying call options which are currently at historically attractive levels. Attractive pricing results from very low levels of market volatility, which can be observed in several global markets and, in Korea, are partly related to the range-bound nature of the market over the past few years. Through this method of implementation, the concentration risk associated with the Korean market (e.g. Samsung Electronics constitutes around 30% of the Kospi 200 Index by market capitalisation) is reduced. We believe that the return asymmetry is highly attractive, with limited downside and unlimited upside. Furthermore, if we were to see an associated increase in volatility if the Korean equity market breaks out of its historic range, this method of implementation would also benefit.

Overall, for the first time in five years, we believe that the corporate sector in Korea is fundamentally supported by a broadening trade recovery. Downside risks remain on the domestic and international fronts, however, the potential for a better corporate governance environment is one example of anticipated reforms that could produce meaningful upside risk. Even following recent strong returns, we believe that the valuation case for investing in Korean equities remains compelling.

^{*}conglomerates, usually under one family's control

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