CREDIT SUISSE

Investment Outlook 2016

Global Economy and Markets
Subdued growth, still low inflation, moderate returns

Portfolio Review
Strategic asset allocation health check

By the Numbers
Key long-term investment trends in charts

Themes in Portfolios
Our most impactful investment ideas in action

Risks 2016
Known and unknown unknowns

Emerging Markets
What will drive performance in 2016?

Liquidity Matters
Investment strategies as markets become less liquid

Untapped Opportunities
How to identify “hidden investment gems”

Table of Contents

“Our people and resources at Credit Suisse are focused on providing the best stewardship and advice for our clients’ investments.”

Letter from the CEO

It is a privilege for me to provide a foreword for the Investment Outlook 2016. Like every year, the Investment Outlook is the result of collaboration by our teams across the bank.

We hope that this document, which provides an assessment of the risks and uncertainties in today's world and contains proposals for portfolio strategies, will help you to make decisions as you are looking into 2016.

The following 12 months will most likely not be easy for investors. We believe it is an important part of the value we bring to our customers to help them navigate through today's short-term challenges, to name a few: uneven global growth, divergent monetary policies and the risk of illiquidity in some markets. Through the Investment Outlook 2016, we aim to identify strategies that meet a range of time horizons and cover different risk profiles for our clients.

Our people and resources at Credit Suisse are focused on providing the best stewardship and advice for our clients' investments. This document is evidence of our commitment and determination to help you achieve your financial objectives for 2016 and beyond.

I wish you a successful and prosperous 2016.

Tidjane Thiam
CEO Credit Suisse AG

Foreword

Iqbal Khan

"We remain steadfast on anticipating and reacting quickly to developments in the global economy and capital markets."

I am delighted to present to you our Investment Outlook 2016.

Designed to help you successfully navigate the year ahead, this publication brings you in-depth research insights on a wide range of topics, regions and asset classes, underscoring our commitment to providing you with timely and actionable investment ideas for your portfolio.

Drawing from our extensive global network, our team of experts has compiled a carefully curated selection of articles focused on key aspects of portfolio decision-making in 2016. We highlight our outlook for capital markets globally, our views on strategic and tactical asset allocation, and provide our unique take on the most pressing issues affecting investors today, including key risk factors in 2016, liquidity and the future of emerging markets.

I trust you will enjoy reading the Investment Outlook 2016 and will find it to be an extremely useful tool to help you separate market signals from noise, especially in our information-saturated investment world.

We remain steadfast on anticipating and reacting quickly to developments in the global economy and capital markets, and, as always, stay dedicated to providing you with superior solutions, products and advisory services. We will complement the rich content of this publication in the coming months with exclusive Market Outlook seminars across the region.

Sincerely,

Iqbal Khan
CEO International Wealth Management

Editorial

Michael Strobaek

Giles Keating

"Temporary traumas could come from the Fed, lower bond liquidity, China or geopolitics. But the underlying picture is of global expansion."

Through all the market traumas of recent years – the crises in Greece, slowdown scares in China, US political gridlock, the collapse in oil prices, the wars and the migrant flows – investors prepared to weather short-term volatility have seen handsome returns on developed economy equities since the depths of the financial crisis in 2008, with euro and US dollar investors seeing only one modestly down year in 2011. There has also been good performance from high yield and investment grade corporate bonds, the laggards (since 2011) being investments connected to commodities and emerging markets.

Our analysis, set out in this Outlook, suggests that 2016 may deliver a fairly similar pattern. Temporary traumas could emanate from Federal Reserve tightening, reduced bond liquidity, renewed growth scares in China or geopolitics, but behind these is an underlying picture of ongoing expansion. The global economy is neither pushed up against capacity limits nor facing severe slack (except for commodities and energy), banking systems are healthy and debt levels seem more amber than red. Rapid growth seems unlikely, given aging populations (bar Africa and India) and sharing economy technologies that do not generate much Gross Domestic Product, but sensibly priced assets do not need a booming economy to generate reasonable returns. At the time of writing (in late 2015), high yield and investment grade credits have spreads just above their quarter-century averages, giving them scope to weather gradual Fed tightening. Developed equities have valuations somewhat above historic norms on a price-earnings basis, but not on a price-book basis, and operational leverage (especially in the Eurozone) and consolidating oil prices should allow earnings growth to move from last year's negatives into the mid- to high-single digits. In short, we think developed equities and credits are well placed for another year of reasonable returns, with the dollar likely to be strong again as the Fed leads the monetary cycle. As for emerging markets, and the commodities on which many depend, a convincing general recovery looks some time away, but there is scope for some to move ahead of the pack, as discussed in a special article.

Of course there can always be risks that are not visible and Fed tightening has a habit of teasing these out, although usually not within its first year. But, equally, there could be upside surprises, if the USA finally moves toward solutions on taxing repatriated corporate cash and infrastructure spending or, more simply, the signals of rising confidence already visible in US and European consumer surveys translate into faster spending. We trust our readers will find the Investment Outlook 2016 to be of considerable interest for the coming year.

Michael Strobaek
Global Chief Investment Officer

Giles Keating
Deputy Global Chief
Investment Officer

Spotlight

Global Economy and Markets
Subdued growth, still low inflation, moderate returns

Portfolio Review
Strategic asset allocation health check

By the Numbers
Key long-term investment trends in charts

Themes in Portfolios
Our most impactful investment ideas in action

Global Economy and Markets
Subdued growth, still low inflation, moderate returns

Oliver Adler
Head of Economic Research

Joe Prendergast
Head of Financial Markets Analysis

John Woods
CIO Asia Pacific

Anja Hochberg
CIO Europe & Switzerland

Michael O'Sullivan
CIO UK & EEMEA

Most developed economies are likely to exhibit trend-like growth in 2016, while in many emerging countries, the adjustment of domestic and external imbalances is likely to continue to depress growth. The resulting subdued picture for global growth suggests that inflation will generally remain low. With the US Federal Reserve gradually hiking rates, core government bonds are likely to generate meager returns. We foresee better, albeit moderate returns for credit and equities, and believe the US dollar will make further gains.

At the beginning of 2015, our forecast for real global growth stood at close to 3.5%, but we gradually had to lower this to below 3% (using purchasing power parity weights). Factors weighing on growth include both long-term forces such as demographics and also the short- to medium-term impact of tighter policies and deleveraging in emerging markets in response to previous credit excesses. Slower growth has continued to exert downward pressure on commodity prices, with additional disruptive effects for some countries that rely on raw material exports.

In our 2016 forecast (see Table 1), we have tried to take account of the slower long-term growth trend, while assessing to what extent the fallout of the shorter-term forces will either persist or reverse.

"Fed tightening suggests meager returns on US Treasuries."
Joe Prendergast

Trend changes: Declining labor force and reduced participation in developed markets

The most important demographic trend has been a slowing growth rate and in some cases an actual decline in the working-age population in developed markets. This is most apparent in Japan and is also visible in some European countries, notably Germany. However, here the cyclical recovery has been stronger than expected and, over the next year or two, the significant influx of refugees could boost growth, first via the necessary expenditure and then by improving labor supply. In contrast, growth has been stronger than expected in Switzerland over the past years due to strong immigration, but that is likely to abate over coming years. Possibly more surprising has been the marked downtrend in labor force participation, notably in the USA, as a result of the retirement of the baby-boom generation and reduced female participation. Until these retirement "waves" abate, US trend growth is likely to decline to somewhere around 2%. Meanwhile, the Japanese government is trying to raise labor force participation of women to boost growth, but the impact will probably be limited because the participation rate is not that low. In some countries, such as Italy, measures to liberalize the labor markets may be more successful in that regard.

Table 1

Forecasts for growth and inflation

	GDP			Inflation				GDP			Inflation		
	2014	2015E	2016E	2014	2015E	2016E		2014	2015E	2016E	2014	2015E	2016E
Global	3.2	2.9	3.3	3.0	3.0	3.6	**Non-Japan Asia**	6.3	6.0	6.1	3.2	2.4	3.0
G-3	1.5	1.9	1.9	1.3	0.2	1.5	**China**	7.4	7.1	7.0	2.0	1.5	2.1
BRIC	6.0	5.0	5.7	4.1	4.4	3.9	**Hong Kong**	2.3	2.6	3.0	4.3	3.5	3.2
EM-8	5.8	5.3	5.6	3.9	3.4	3.7	**India (fiscal year)**	7.4	6.9	7.3	7.0	5.4	6.0
USA	2.4	2.5	2.3	1.6	0.1	1.9	**Indonesia**	5.0	4.7	5.1	6.3	6.7	5.2
Canada	2.4	1.2	1.6	1.9	1.2	2.2	**South Korea**	3.3	2.6	3.1	1.3	0.8	2.0
Eurozone	0.9	1.5	1.7	0.4	0.1	1.0	**Singapore**	2.9	1.8	2.1	1.0	-0.5	0.6
Germany	1.6	1.6	1.6	0.8	0.2	1.1	**Thailand**	1.0	2.5	3.0	1.9	-0.5	2.0
Italy	-0.4	0.7	1.5	0.2	0.2	0.7	**CEE & Russia**	1.3	-0.6	1.7	6.4	10.6	6.1
France	0.2	1.1	1.3	0.6	0.2	1.1	**Poland**	3.5	3.5	3.5	0.0	-0.5	1.3
Spain	1.4	2.9	2.7	-0.2	-0.4	1.0	**Russia**	0.6	-3.5	0.5	7.8	15.4	7.5
United Kingdom	3.0	2.5	2.5	1.5	0.1	1.2	**Turkey**	2.9	3.2	2.8	8.9	7.7	7.2
Norway	2.2	1.2	1.5	2.0	2.0	2.0	**Latin America**	1.1	-0.5	0.7	11.3	16.3	18.1
Sweden	2.3	2.7	2.7	-0.2	0.3	1.6	**Argentina**	0.5	0.5	0.8	32.5	25.0	28.0
Switzerland	2.0	0.8	1.2	0.0		0.0	**Brazil**	0.1	-3.2	-1.2	6.3	8.8	6.4
Japan-Pacific	0.5	0.8	1.4	2.6	1.0	1.3	**Mexico**	2.1	2.6	3.0	4.0	2.7	3.5
Japan	-0.1	0.5	1.1	2.7	0.9	1.0	**Middle East & Africa**	3.2	3.1	3.0	5.1	5.6	5.7
Australia	2.7	2.2	2.4	2.5	1.8	2.3	**GCC**	3.4	3.4	2.8	2.8	3.1	3.4
New Zealand	3.3	2.3	2.4	1.2	0.5	1.9	**South Africa**	1.5	1.5	1.8	6.1	4.8	6.0

G-3: EMU, Japan, USA. EM-8: Brazil, China, India, Indonesia, South Korea, Mexico, Turkey and South Africa.
GCC: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE. Regional figures are PPP-weighted.
Source: Datastream, Credit Suisse

Demographic transition has reached emerging economies

Emerging markets are facing demographic challenges too, especially China, whose population will probably peak at the end of this decade and where working-age population is already declining. The decision by the 5th plenum of the Communist Party in October 2015 to abolish the one-child policy will at best affect that trend within about a generation. More decisive for the growth trend in the next decade will be whether labor productivity can be maintained, or even increased by guiding labor from lower to higher productivity areas, and through reforms which improve efficiency. In other parts of the emerging world, notably in many Latin American countries, demographic factors will also be much less supportive than in past decades. Turkey and parts of the Middle East are in a less unfavorable position as regards demographics, while India and most of Africa will see a continued rise in population in the coming decades.

Weak productivity growth due to restrained investment spending

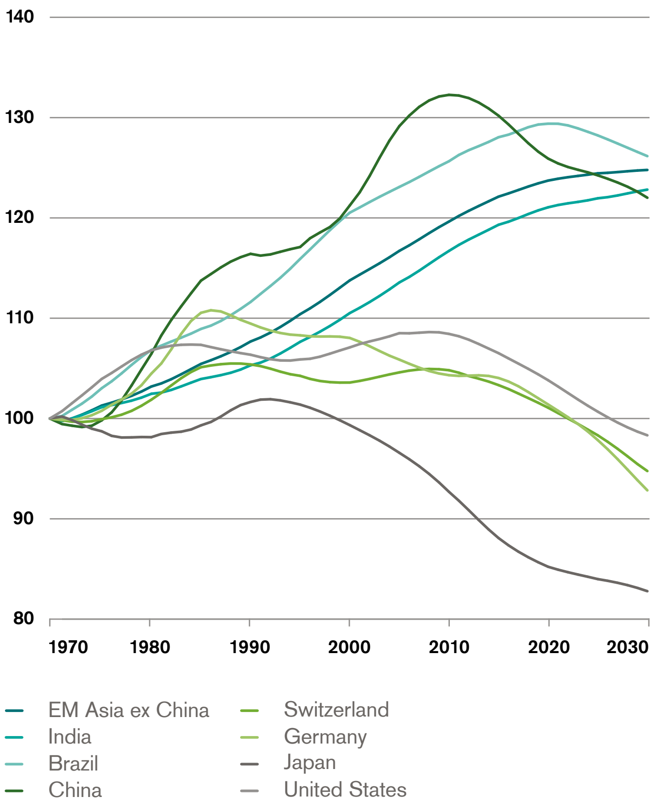
An apparent second structural trend, less definitive than the demographics, has been the marked slowdown in productivity growth in most economies in the aftermath of the financial crisis. This has persisted even as the economic recovery took hold in the United States and other developed markets.

"In the USA, weak productivity may partly reflect poor measurement of the sharing economy."
Oliver Adler

Weak productivity growth seems to largely reflect a downshift in corporate investment spending since the crisis, although other forces such as the rise of sharing economy activities not fully measured within GDP may play a role. There are some factors suggesting that these trends may persist, including the continued shift to a services-based economy where the capital-labor ratio is by its nature lower. Rapid advances in IT and the spreading of low-cost internet-based services are likely to reduce needed investment volumes as well. In China, overcapacity in some sectors may also restrain investment spending.

Figure 1

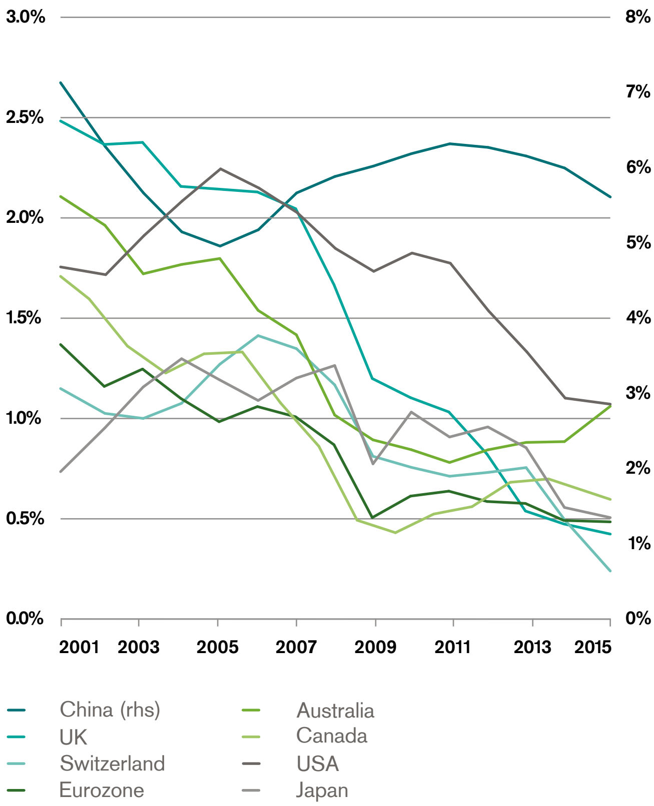
Share of working-age population (15–64 years old; 1970=100)



Source: United Nations, Credit Suisse
Last data point: 2015 (E)

Figure 2

Productivity growth in selected countries (YoY in %)



Source: OECD, Credit Suisse
Last data point: 2015

The shocks: Emerging Market slowdown, commodity price decline and financial stress

On top of these secular trends, a series of economic shocks has slowed economic growth in the past 2–3 years: the second leg of the Greece-triggered crisis led to recession in the Eurozone in 2012–13, the "taper tantrum" in the US Treasury market probably slowed growth in H2 2013, and the Ukraine crisis set back European growth in mid-2014. Going into 2015, the weakness in oil and commodity prices, and the slowdown in China were arguably the main factors slowing global, and especially emerging markets, growth.

> **"In Latin America, Brazil's recession is set to continue as interest rates stay high."**
> **Oliver Adler**

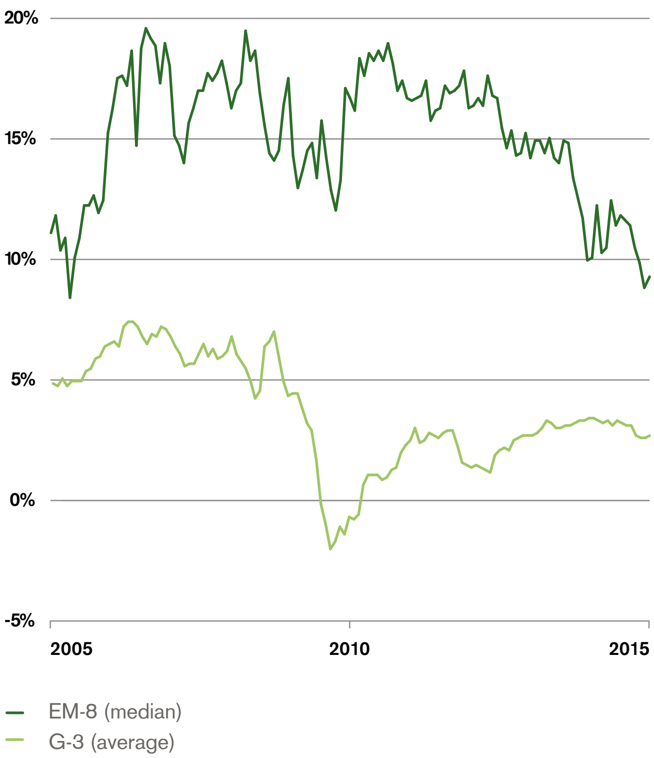
The weakness in raw material and energy prices generated real income gains for commodity consumers and lowered input costs for industry in countries where currencies were more or less stable. But on the other side of the ledger, it resulted in significant income losses for many commodity-exporting countries, both in emerging markets and developed markets. This, in turn, lowered their demand for industrial goods from China and elsewhere. Moreover, currencies of these countries depreciated sharply, further undermining their purchasing power. In some cases, most notably Brazil, the depreciation set off a vicious cycle in which the drop in the currency boosted inflation, triggered monetary tightening and led to financial stress. The higher interest rates combined with weak currencies raised doubts over the sustainability of domestic as well as hard currency-denominated debt.

Emerging market rebalancing process has advanced

Commodity exporters and others faced with income losses and currency depreciation have reduced their imports. Combined with improving exports, this has led to an improvement in current accounts across most emerging markets, reducing their reliance on capital inflows. But the improvement seems to be insufficient in a number of countries, including Brazil, Turkey, South Africa and Indonesia. In these countries, central banks will need to maintain a fairly tight stance. High structural fiscal deficits have also significantly reduced the external surplus of major oil exporters Russia and Saudi Arabia.

Figure 3

Growth of bank credit (YoY)

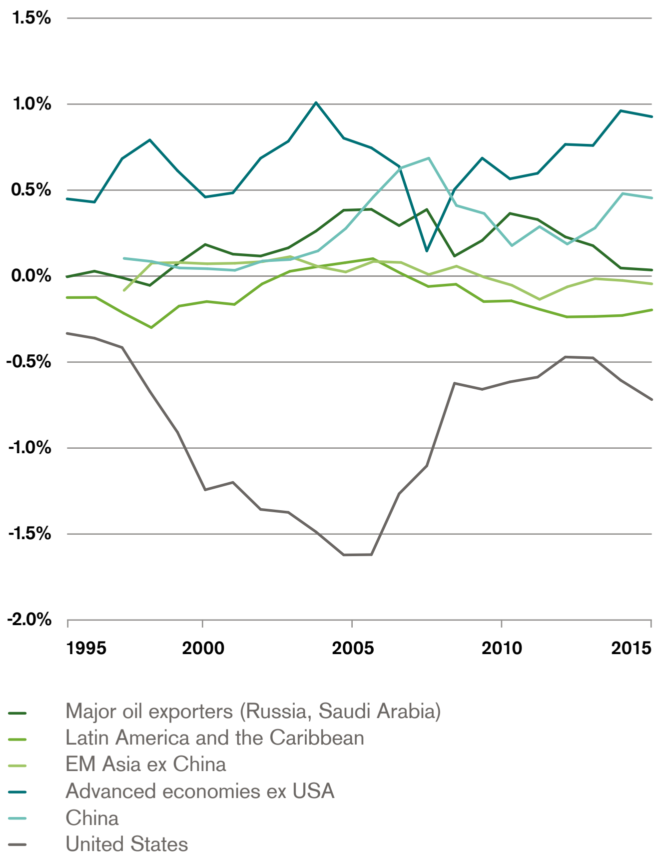


EM-8: China, India, Indonesia, South Korea, Brazil, Mexico, Turkey, South Africa
G-3: USA, Eurozone, Japan

Source: Datastream, Credit Suisse
Last data point: 10 November 2015

Figure 4

Current account balances (in % of global GDP)



Source: International Monetary Fund, Credit Suisse
Last data point: 2015 (E)

Financial stress is still the risk case

The risk case is that weak growth, high debt, high local interest rates and capital outflows, at a time when the Fed is starting to raise US rates, leads to a full-fledged financial crisis in some of the fragile emerging markets. But we think this is unlikely because, compared to previous times of crisis, external debt of governments is generally low, foreign exchange reserves are high and monetary policy is focused on maintaining financial stability. Continued financial vulnerabilities will, however, tend to delay the easing of monetary policy in these countries that would be necessary to boost growth.

> **"In EMEA, Russia's recovery from recession can continue while central Europe stabilizes. In South Africa and Turkey, politics may still weigh on assets."**
> **Michael O'Sullivan**

Asia Pacific economies: Growth sustained as China's consumers, services and policy offset weak industry

In contrast to emerging markets with fragile external financial positions, China's trade and current account balance moved back into significant surplus in 2015, largely due to lower imports. Meanwhile, exports have been weak due to lackluster external demand and the rising real exchange rate appreciation, causing overcapacity in some industries. And, the post-crisis construction boom led to slack in residential real estate. In response, the Chinese authorities have gradually eased policies, excess real estate inventory has been reduced, and prices have stabilized or risen. Looking into 2016, with demand for urban labor strong and wages rising at high single digits, consumer spending – especially on services – should in our view allow GDP to grow at around the government's target of close to 7%. Moderate fiscal expansion will be an added stabilizing force. Overall, given its financial strength, we continue to regard a "hard landing" of the Chinese economy as unlikely, although domestic demand seems insufficient to boost growth in APAC or other emerging markets much beyond recent subdued rates.

> **"Pan-Asian growth should expand modestly. But the risk is that any temporary slowdown, especially in China, could be punished by markets."**
> **John Woods**

Imbalances largely corrected in advanced economies

On the whole, our outlook for the majority of developed markets is more settled, because imbalances generally appear more limited. Fiscal deficits have declined markedly since the global financial and euro crises, reducing financial vulnerability and even opening some space for moderate fiscal easing. This is most clearly the case in Germany and the USA, but the likely persistence of extremely low borrowing costs should even give countries such as Italy some fiscal breathing space. Also, low energy prices, low borrowing costs and better capitalized banks should support consumer spending and real estate markets. Corporate investment is likely to remain a weak point, but momentum is unlikely to deteriorate.

Further acceleration in continental Europe and Japan, USA stops accelerating, Australia and Canada sub-par

Among developed markets, we believe momentum will remain strongest in continental Europe because of the potential for consumers to boost their spending with monetary policy and the weak currency being supportive. Much of Eastern Europe remains competitive due to low wage costs and will benefit from the improvement in Western Europe. In Greece, bank recapitalization, easing capital controls, and funds from the Juncker plan suggest potential for a strong turnaround.

> **"The Eurozone recovery should broaden on consumption and exports, supported by an easy ECB and weak EUR. But the migration crisis raises political risks."**
> **Anja Hochberg**

The UK is also likely to remain on a fairly robust expansion path as real wages rise, but policy tightening will provide some constraint. We also do not expect the US economy to accelerate further in 2016, as gradual monetary tightening, a stronger US dollar and reduced labor market slack act as constraints. Given some fiscal easing and a cautious Fed, the risk of a sharper slowdown, or even recession, seems very limited.

Meanwhile, growth in Japan should rise from low levels as the negative impact of the Chinese growth slowdown abates, the yen stabilizes at competitive levels, wages rise and corporate investment improves slightly. The Trans Pacific Partnership (TPP) would, if implemented, support the economy in principle, but the effects are likely to be gradual. In Australia and Canada, growth will continue to be depressed by low commodity prices, while service-sector expansion, currency depreciation and immigration will provide a buffer.

> **"Japanese fiscal stimulus is likely in early 2016 to counter the drag of a further consumption tax hike. Medium term, TPP should offset weak demographics."**
> **Soichiro Matsumoto, Chief Investment Strategist Japan**

After-effects of currency shock to continue depressing growth in Switzerland

The outlook for the Swiss economy is more subdued than other developed markets in our view. The key headwind for the economy remains the overvalued franc, which has seriously harmed exports. With domestic investment weak and many companies even in services (including banking), outsourcing activities, job losses are likely to creep up. Meanwhile, uncertainty regarding the bilateral treaties with the EU and the future corporate tax regime is likely to further limit foreign direct investment. Finally, it seems increasingly likely that the construction boom of the past years has peaked.

> **"The Swiss economy is challenged by the strong CHF but helped by an improving Eurozone."**
> **Anja Hochberg**

Global growth too weak to raise inflation trend, but headline rate may rise slightly

Putting the picture together suggests that the global economy will most likely remain on a moderate growth path in 2016, in the absence of any unforeseen and major geopolitical shocks or significant policy errors. However, growth will remain too weak, in our view, to trigger any significant rise in inflation and we expect prices of traded manufactures to keep falling. That said, commodity prices should gradually be supported by cutbacks in investment and production, so that headline inflation should rise somewhat in the course of 2016.

In the USA and UK, where the recovery has been underway for some time, domestic core inflation should also rise gradually toward the central banks' 2% target as unemployment falls and service providers regain some pricing power. But inflation is set to stay below target in Japan, the Eurozone and Switzerland. Inflation is also likely to remain low in China as well as emerging markets in APAC and Eastern Europe. Finally, countries which have suffered bouts of inflation in the past two years as a result of either sharply depreciating currencies (such as Brazil) or high government spending (such as India) should see inflation abate as currencies stabilize.

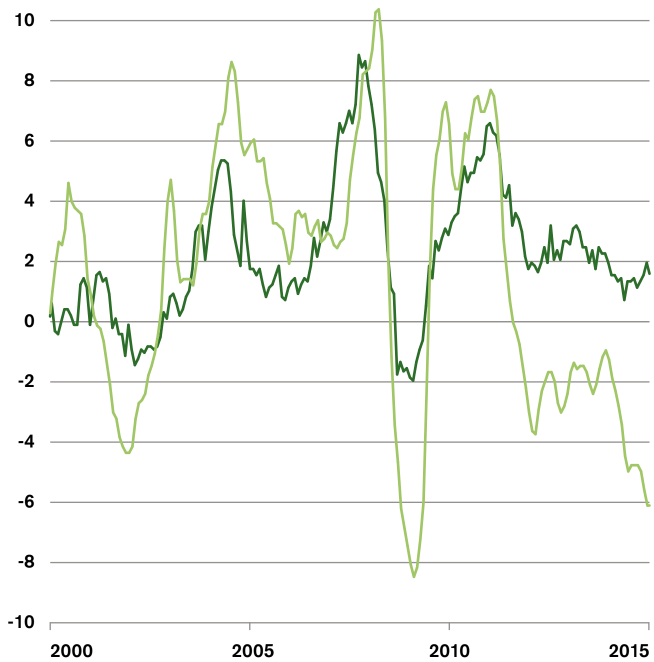
Monetary divergence to remain pronounced

The outlook for growth and inflation will essentially determine the monetary policy outlook in developed markets. Most importantly, it seems likely that the US Fed will be the first major central bank to tighten its reins. Meanwhile, we expect the Bank of Japan to remain on hold for some time, not least to avoid a renewed round of currency devaluation. Should inflation fail to rise toward the target, however, added quantitative easing (QE) or a move to negative interest rates cannot be ruled out. With inflation well below its target and a smaller balance sheet, the European Central Bank (ECB) will, in our view, pursue a fairly aggressive easing policy.

Continued ECB expansion suggests that the Swiss National Bank and the central banks in Scandinavia and Eastern Europe will follow suite, with negative interest rates likely remaining the norm. Monetary policy divergence is also likely among emerging markets. Some, like Mexico, may need to raise rates in response to the Fed and so we see MXN stabilizing sooner than many other EM currencies. Others with very high interest

Figure 5

Inflation rates in China (YoY in%)

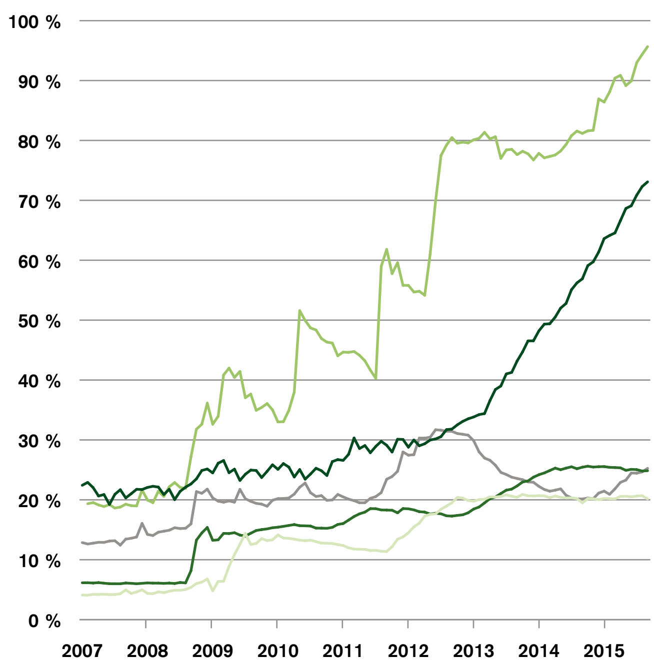


— Consumer Price Index
— Producer Price Index

Source: Datastream, Credit Suisse
Last data point: 10 November 2015

Figure 6

Central bank balance sheets (in % of GDP)



— ECB
— SNB
— Fed
— BoE
— BoJ

Source: Datastream, Credit Suisse
Last data point: 10 November 2015

rates, such as Brazil, may be able to ease gradually as inflation abates. The People's Bank of China and some other Asian central banks are likely to ease policy further given persistent disinflation, but we do not expect China to allow the currency to depreciate meaningfully.

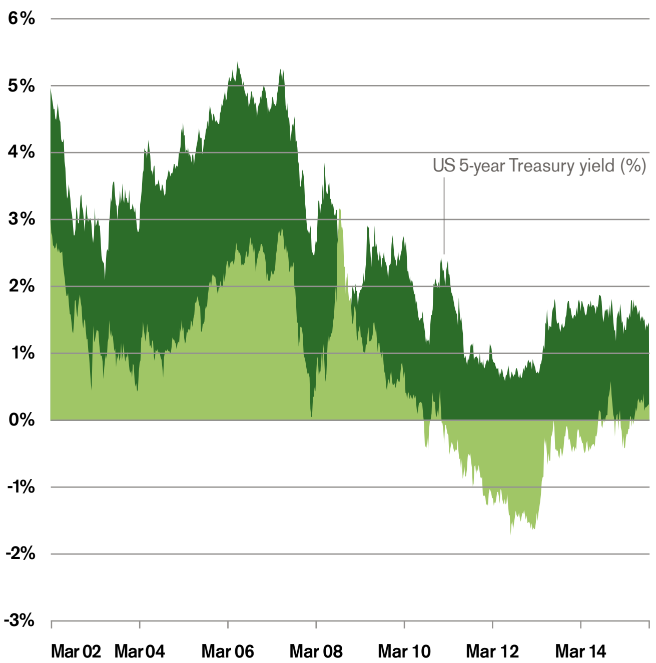
Fed tightening set to reverse the decline in global yields and boost the dollar

Regionally, bond yields may still be pulled in opposing directions by diverging central bank policy moves, but the scale of divergence should be lessened by USD strength. There is of course a risk that unexpected negative growth surprises could push some central banks to explore increasingly radical measures, including pushing rates further into negative territory. But current bond yield levels already appear to be pricing in some of this risk. In the extreme case of Switzerland, faced with potential further ECB easing, the 2-year government yield is already near –1.0% and the 10-year around –0.3%, essentially pricing in sub-zero interest rates for at least the next four years.

"For CHF-based investors, selective foreign credit exposure can mitigate the impact of negative yields."
Anja Hochberg

Figure 7

Real US bond yields



Source: Bloomberg, Credit Suisse / IDC
Last data point: October 2015

There thus appears to be little upside potential for core government bond returns in 2016, but quite some downside potential, as coupon contributions are insufficient to absorb the impact of even gradual yield increases. This is consistent with our Capital Market Assumptions (CMAs, discussed in more detail in the next article), which suggest unattractive or even negative returns for core government bonds over the coming 3–5 years. Investors seeking either yield or capital gain will need to look elsewhere in 2016.

Tactical, thematic, regional and sector strategies to beat a moderate growth trend

Among the major asset classes, we see the greatest potential in global equities. Based on an elevated but not extreme price-to-earnings ratio of 15, a dividend yield of nearly 3% and a price-to-book ratio of 1.9 in late 2015, equities compare favorably with bonds in all but the weakest of growth scenarios for the coming year. However, although attractive against bonds, by historical standards returns may be limited given that valuations are no longer cheap, economic growth is moderate and interest rates may be rising.

"Eurozone equities should benefit from economic recovery, margin growth, and a weak EUR. Germany can outperform and Spain is back in focus as Italy fades."
Anja Hochberg

To maximize potential, investors can adopt an active tactical approach, seeking to deploy capital in the case of setbacks and rising volatility, whether caused by economic news, rising rates, illiquidity or geopolitics. The early stages of Fed tightening (and any resulting rise in bond yields) could trigger such an opportunity soon. Thematic, regional and sectoral selections are also likely to prove critical for equity outperformance. High corporate cash balances and still relatively low earnings payout ratios should provide ongoing support for specific themes related to mergers & acquisitions (M&A) activity, stock buybacks and cash-flow-driven dividend increases. Among alternative investments, the same theme should favor M&A arbitrage-oriented hedge funds.

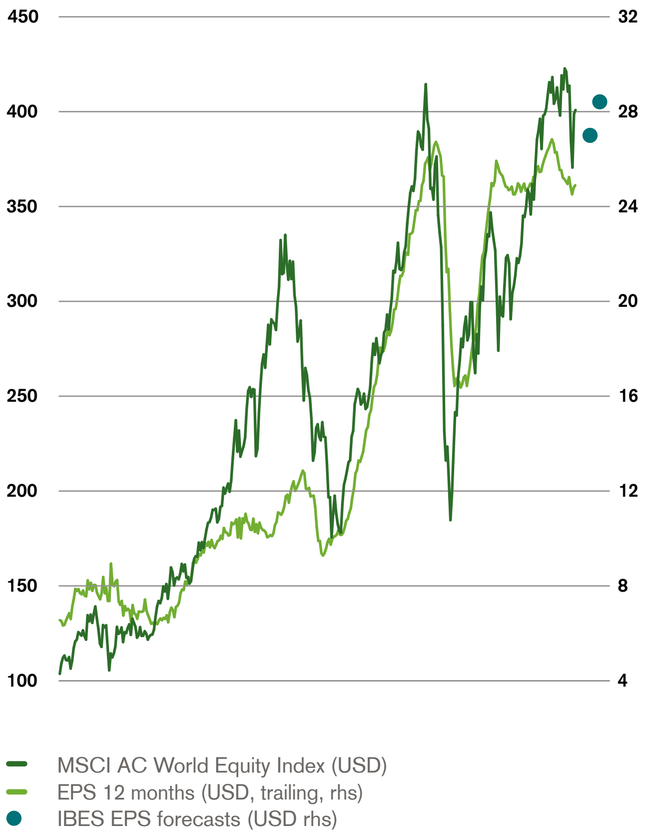
"Swiss equities exhibit an attractive mix of defensives, global recovery exposure and dividend yields."
Anja Hochberg

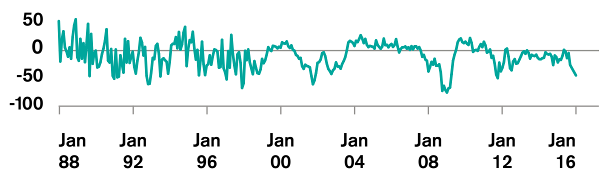
Regionally, equities most closely affected by unconventional policy easing appear most likely to outperform, notably in the Eurozone and Switzerland, with a focus on stocks most directly exposed to domestic European consumers (benefiting from recovering consumer sentiment and credit growth). Eurozone equities are among those with the highest potential for earnings growth, in our view, and the possibility of the ECB extending its QE program adds potential upside. Swiss equities remain attractive, particularly for their yield, especially for Swiss domestic investors who face negative bond yields as an (unattractive) alternative. In terms of sectors, there has been substantial divergence in recent years, driven by both structural and cyclical headwinds, which do not affect all equally. Modest global growth, aging populations and weak productivity growth suggest a bias toward service sectors where demand is growing, most notably in healthcare – which suffered a sharp setback of sentiment (but not revenue growth) in 2015; as well as the large cap technology companies, which drive and in part benefit from broader deflation in traditional goods markets. Both the healthcare and technology sectors look set to outperform, particularly compared to the more traditional industrial sectors and the more interest rate sensitive ones like utilities.

"Asian equities are still cheap, offer value, and can attract value hunters in 2016. We favor IT, healthcare and some telecoms."
John Woods

Figure 8

Global equities, earnings per share (EPS) and earnings revisions





Source: Datastream, IBES, Credit Suisse / IDC
Last data point: 30 October 2015

Return of risk premia may generate opportunities in credit as 2016 unfolds

With core bond yields set to rise gradually, investors are likely to struggle to find yield and capital gain opportunities in fixed income that compare favorably with the global equity market. But the trend toward higher risk premia in corporate credit in 2015 may provide opportunities as 2016 progresses. Unlike government bonds, corporate yields now have better prospects of offsetting at least a slow trend rise in interest rates, assuming no surge in default risk. Among investment grade credits, floating rate notes (FRNs) are an appealing alternative to the duration risk presented by longer-dated (USD) fixed-rate bonds, and so offer a hedge against a tighter Fed policy trajectory.

For yield, lower-grade credits offer the only credible alternative to equity assets but even here, care should be exercised in timing and in choice of bonds. As of late 2015, aggregate corporate credit spreads are just above their quarter-century averages, reflecting the deterioration in credit fundamentals particularly pronounced in the US energy sector and more generally the prospect of Fed tightening. There is little doubt that a Fed tightening cycle, representing a tightening of global credit conditions, would raise the corporate default rate in coming years, most notably within the high-yield sector. While a further rise in the credit risk premium is possible in 2016, this would open interesting long-term investment opportunities in lower-rated corporate bonds.

Our CMA projections foresee trend returns to global high yield of around 6%, consistent with only a moderate pick-up in default rates as the cycle slowly turns. We see the key to extracting value from the high yield sector as a carefully diversified selection of credit risks, especially as the cycle turns. Senior loans, which are secured credits, offer a similar expected return, made up of a lower coupon but a typically higher recovery rate in the event of default. Regionally, we particularly favor European high yield, where the ECB's ongoing commitment to purchase assets suggests returns in line with the 5.5% trend return expected in our CMA analysis. Convertible bonds are also an appealing source of yield and capital gain for the current cycle.

Hedges against inflation

Given current low yields, one of the primary risks in fixed income would be a surprise acceleration of inflation, demanding more aggressive Fed tightening and less or no easing elsewhere. An attractive hedge for this scenario is in the form of inflation-linked bonds. Although this market sector also suffers from low yields, and would be vulnerable to any sharp rise in real yields, it offers a direct and effective hedge against the rise in inflation, which would likely precede any aggressive central bank reaction.

Commodities are a notable exception from the expected key trends and hedges for 2016. Although the asset class now appears generally cheap, supply and capacity overhangs are expected to limit upside potential at least early in the year. An unexpected acceleration to strong global growth would trigger a much higher trajectory of returns to commodities, suggesting that this sector can provide a hedge against upside growth surprises. But, equally, the sector would be most vulnerable to a recession risk scenario. Similarly, gold could swing severely with the actual Fed trajectory and its associated US dollar consequences.

"The EU referendum may weigh on sterling, though the Bank of England's rate 'liftoff' will likely prove more telling."
Michael O'Sullivan

Currency considerations

While we expect the US dollar to return to strength in 2016, this path may not of course be equal among all major currencies. The Bank of Japan's apparent reluctance to either move to negative interest rates or to pursue further quantitative easing in late 2015 means that the Japanese yen is less vulnerable than the euro or Swiss franc, whose central bank rates have broken the zero barrier. The pound sterling may lag the US dollar trend as the Bank of England lags the Federal Reserve, and the specter of an "in-out" referendum on EU membership by end of 2017 also limits potential.

But both the yen and the pound should outperform the euro and Swiss franc in 2016. The franc itself is likely to remain in a range versus the euro, based on the assumption that renewed ECB easing is met by ongoing intervention and possible further policy actions from the Swiss National Bank to avoid a return of the EUR/CHF rate toward 1.00.

Our implied asset-allocation biases

From an asset allocation perspective, we see the greatest potential in favoring global equities relative to global bonds. Within equities, we favor exposures where the source of liquidity is likely to be most consistent, most notably the Eurozone, and where the sector uptrends appear to have the most structural support, i.e. healthcare and technology. Among credits, the widening of spreads in 2015 has created significant risk premia that appear to overestimate aggregate corporate default risks in 2016 and thus offer potentially attractive expected returns – but selectivity at a regional, sectoral and issuer level is key, as the default cycle is turning and continued Fed tightening would amplify corporate event risk in coming years.

Investors should maintain a high degree of diversification, focus increasingly on selectivity of sources of yield, and pursue a tactical bias for deployment of capital. Pockets of volatility may emanate from Fed tightening, economic shocks, illiquidity or geopolitics, but an underlying picture of ongoing growth is expected to see investor patience rewarded.

Portfolio Review
Strategic asset allocation health check

Nannette Hechler-Fayd'herbe
Global Head of Investment Strategy

Georg Stillhart
Head Asset Allocation Advisory

Many private and institutional investors conduct a regular portfolio review, usually once a year, to see if their portfolios still fit their strategic return and risk parameters, or whether adjustments are needed due to fundamental shifts in the environment. This article focuses on these strategic reviews, which are complementary to the more frequent tactical adjustments that may be needed to reflect shorter-term changes in markets and economies, and which we address regularly in our "Investment Committee" and "Investment Monthly" publications.

The strategic mix of assets in a portfolio is one of the most important determinants of performance and risk. This is why a regular review is advisable for most investors, especially in present times given extreme monetary policies, and with many assets having enjoyed several years of good cumulative performance, thus making valuations more demanding than before.

At Credit Suisse, we advise all our investors to perform such a check annually. We also undertake this task ourselves on behalf of those clients who entrust us with the management of their wealth using the bank's discretionary investment solutions. Among the important working tools we use for this purpose are our Capital Market Assumptions (CMAs).

Credit Suisse's CMAs are a comprehensive set of total return estimates, volatilities and correlations for 75 asset classes. They are prepared to support our base case view of the world over the next five years, and also for two risk scenarios (strong and weak). The CMAs are built on our bank's longer-term macroeconomic growth forecasts, as well as inflation and central bank rate projections, and are used to test our recommended portfolio allocations and simulate realistic wealth projections beyond just a 1-year horizon.

Cyclical recovery longer than usual

In our Capital Market Assumptions October 2015 update, which is intended for use in portfolios during 2016, we undertake a comprehensive review and conclude that the economic world over the next five years will likely remain one in which most developed economies converge toward their potential growth over a more drawn-out cyclical recovery than usual. This would be accompanied by low inflation and real interest rates that continue to be mainly zero to negative. We continue to forecast unattractive or even negative returns for core government bonds as coupon contributions are increasingly insufficient to absorb the impact of even very gradual yield increases. Within fixed income, we expect the best performance from lower-rated credits and convertibles. While equity returns compare favorably to both bonds and cash, we anticipate lower emerging market equity returns than previously assumed. Within alternative investments, hedge funds and Asian real estate should perform better than commodities, gold and global real estate. In currencies, there is generally less upside potential for the US dollar compared to our previous CMAs.

Feeding these assumptions into our current strategic asset allocations, we have found that only minor adjustments are necessary compared to the position twelve months ago. Back then, we decided to reduce recommended allocations to government and investment-grade corporate bonds and include sub-investment grade (high yield) bonds and emerging market debt, while raising the suggested equity allocations. We recommended avoiding foreign exchange risk in fixed income, hedge funds and real estate by systematically hedging international investments back to the investors' home currencies. In contrast, we recommended leaving equities largely unhedged as the diversification benefits outweighed the currency risk. However, in our more frequent tactical adjustments, we sometimes feel it is appropriate to temporarily recommend hedging currency risk for some equity positions.

For 2016, we recommend another modest increase in equity allocations for investors with intermediate risk profiles, reducing real estate allocations instead. In addition, we propose a slightly greater home bias in equities, partly to reduce foreign exchange risk. For investors focused on fixed income assets, where we see the outlook as challenging, we make significant adjustments to our recommendations, eliminating real estate and reducing commodities and introducing convertibles and inflation-linked bonds instead.

Main reasons for changes

Our recommendation to reduce real estate and raise equity allocations is because often the only practical way for many investors to take on real estate exposure is via real estate investment trusts (REITs). These are correlated with equities, and yet more vulnerable to the potentially adverse effect of trend rises in interest rates. So we prefer raising our direct exposure to the broader equity market.

Our suggestion to reduce currency risk by increasing equity home bias is because many currency pairs have moved closer to fair value based on our estimates, making strategic currency exposures less compelling. For many investors, a cost-effective way to reduce currency risk in portfolios is to increase the equity home bias in strategic asset allocations. In our recommendations, all other asset classes except commodities are either in the investor's reference currency or currency-hedged.

For investors focused on fixed income investments, we recommend eliminating real estate exposure via REITS because, although the latter are sensitive to interest rates, the link can vary over time in ways that are difficult to predict. So to manage the impact of expected rate rises on portfolios, we believe it is easier to use direct holdings of bonds. As for commodities, with negative carry and high volatility, these do not seem as attractive as before compared to fixed-income-related investments. To balance our recommended elimination of real estate and the reduction in commodities, we suggest buying convertibles (which diversify the fixed income universe without increasing direct interest rate sensitivity) and inflation-linked bonds (which are likely to offer better returns than core nominal government bonds, while playing a similar diversification role).

Portfolio health checks

In summary, the current review has shown that our recommended strategic asset allocations were broadly in line with the risk and return expectations and the various investor profiles of our clients. We have thus made minor, rather than major changes to recommended strategic weights. The main shift is for investors focused on fixed income, where our changes aim to reduce risk and increase diversification. We believe our clients should undertake similar portfolio health checks with their advisors as the new year begins, and compare their allocations to those recommended. Our tools and specialists can help improve the portfolio fit to clients' actual needs and expectations. And our regular Investment Committee and Investment Monthly publications will provide updates on shorter-term tactical recommendations throughout the year.

"For 2016 strategic asset allocations, we recommend another modest increase in equity allocations for investors with intermediate risk profiles, reducing real estate allocations instead. In addition, we propose a slightly greater home bias in equities, partly to reduce foreign exchange risk."

By the Numbers
Key long-term investment trends in charts

Giles Keating
Deputy Global CIO

Here we show a small selection of charts from the Credit Suisse Global Investment Returns Yearbook 2015, published in February 2015. These charts illustrate some of the long-term evolution of investment returns, showing for example that equities have handsomely outperformed inflation over the long term. We believe these data provide a useful background for portfolio construction and medium- to long-term investors.

One possible criticism is that the nature of the economy has changed dramatically over the last two centuries, but there is some evidence that underlying market dynamics exhibit remarkable similarities across long time gaps, with for example boom-bust cycles in technology occurring in the 19th as well as the 21st century.

Over time, the structure of the economy and the stock market changes dramatically, although with a few areas of relative stability. The dominant position of railway stocks in 1900 has now completely disappeared, while totally new sectors like technology have appeared. But the share of banks and utilities has shifted relatively little.

Figure 1

US: Industry weights, 1900

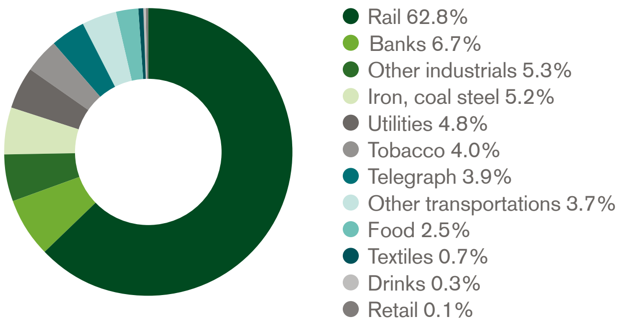


Figure 2

US: Industry weights, 2015

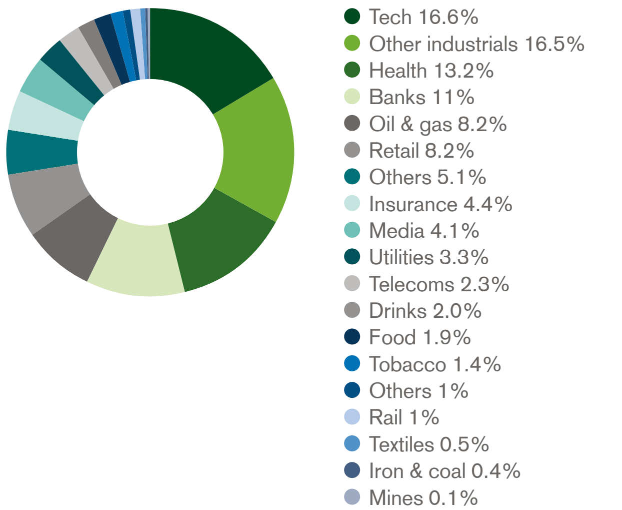


Figure 3

UK: Industry weights, 1900

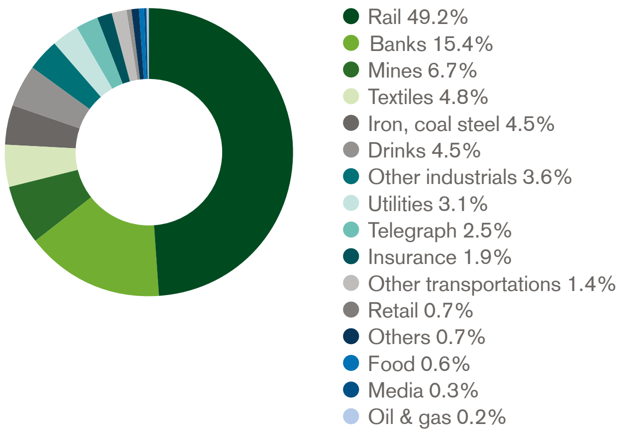
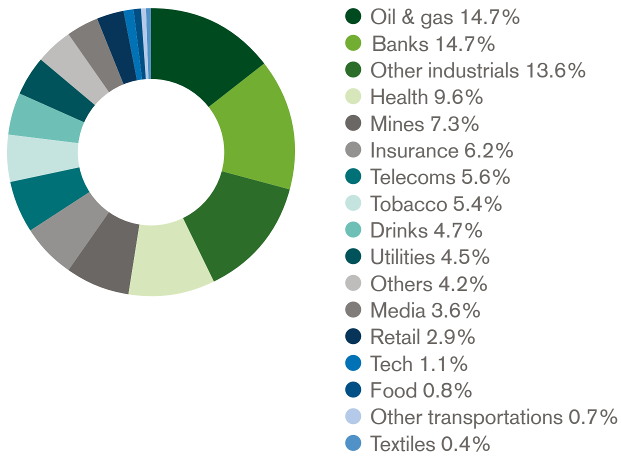


Figure 4

UK: Industry weights, 2015



The history of UK canal and rail stocks in the 19th century has possible lessons for today, with the new technology (rail) delivering good returns over time at the expense of the old industry (canals), but with several burst bubbles along the way. Modern-era technology stocks show remarkably similar patterns.

There is some evidence that so-called "sin" stocks (e.g., those related to alcohol, tobacco, weapons and gaming) outperform over time, perhaps because ethical investors shun them so they sell at a relatively low price compared to the income stream they generate. However, the impact seems to be generally small.

Figure 5

Performance of UK canal and railroad stocks, 1811–51 (1811=100)

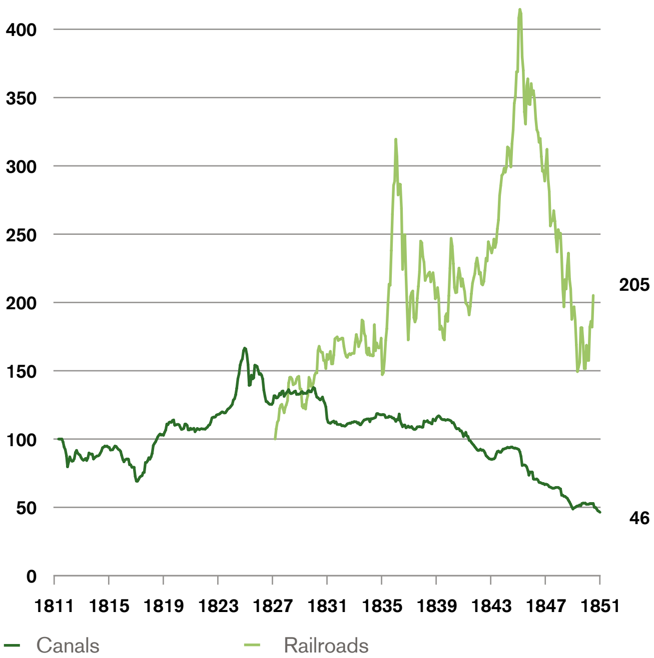
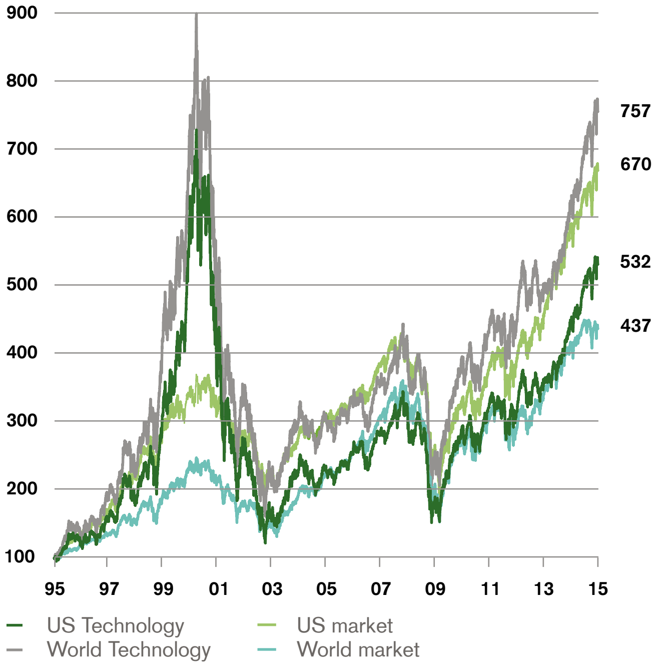


Figure 6

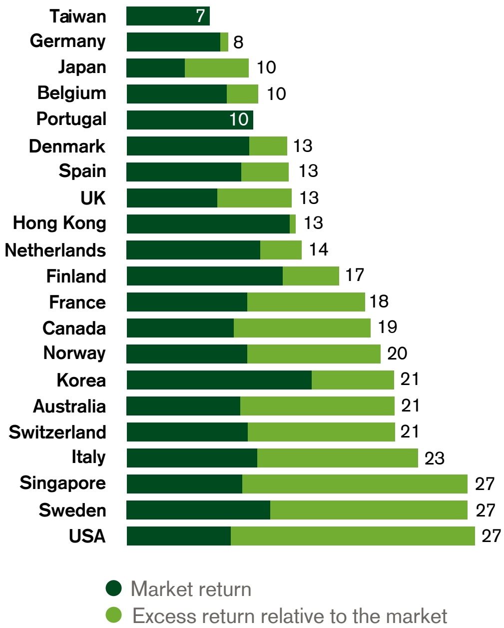
Performance of technology stocks, 1995 to date (1995=100)



Last data point: 2015

Figure 7

Annual returns on "sin" stocks in 21 countries, 1970–2007



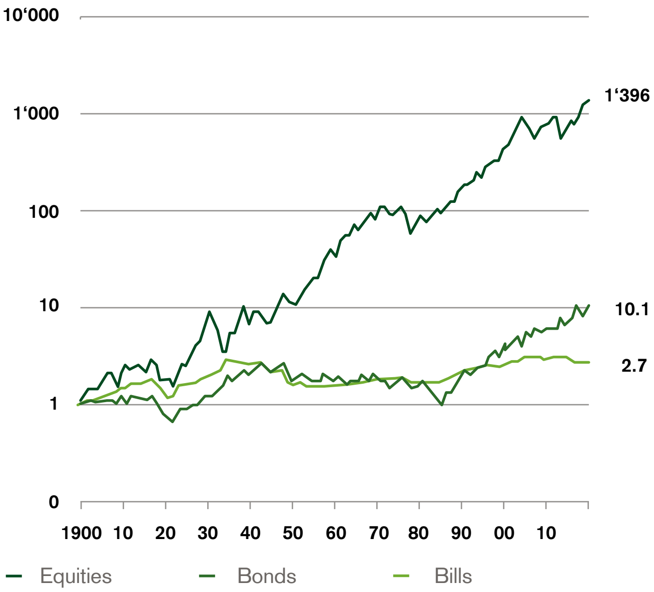
Source pp. 26/27: Credit Suisse Global Returns Yearbook 2015

Investors (and their descendants) who have stuck with US equities for the very long term since 1900, through crashes and volatility, have been rewarded with an excellent return that has beaten inflation by an average of 6.5% a year, compared to just 2% for government bonds.

Equities outside the USA have beaten inflation by an average 4.4% per annum since 1900, some two percentage points behind the USA. Switzerland was almost on the non-US average; the UK outperformed it while Germany lagged, hurt by wartime destruction. The 1.6% annual real return on non-US government bonds also lags the USA somewhat.

Figure 8

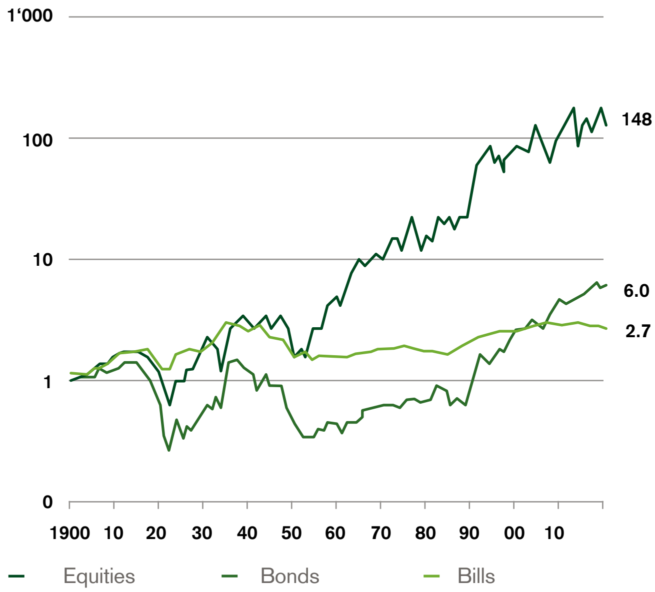
US: Cumulative real returns on equities, bonds and bills, 1900–2014 (Logarithmic Index 1900=1)



Last data point: 2014

Figure 10

World ex-US: Cumulative real returns on equities, bonds and bills, 1900–2014 (Logarithmic Index 1900=1)



Last data point: 2014

Figure 9

US: Annualized real returns on equities, bonds and bills (in %)

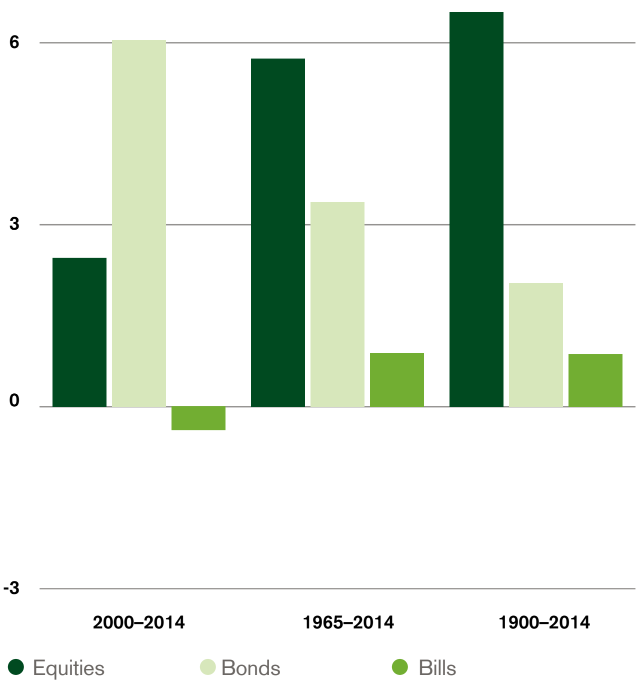
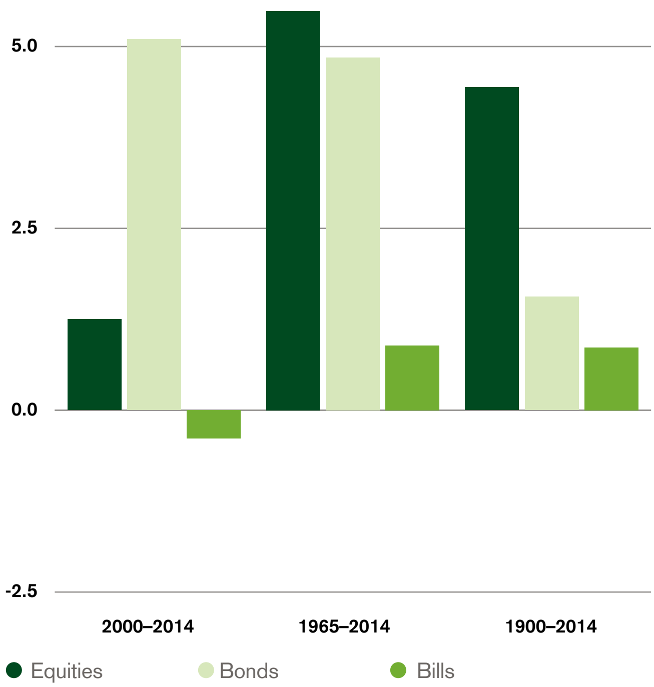


Figure 11

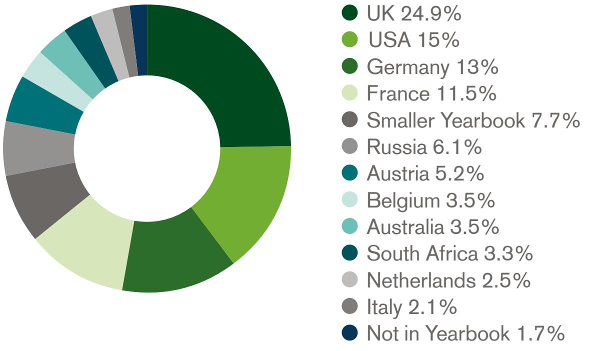
World ex-US: Annualized real returns on equities, bonds and bills (in %)



Long-term investment returns helped the USA rise from just 15% of global market cap in 1899 to over half at the end of 2014. Germany and Austria saw their shares ravaged by wartime destruction, while Switzerland benefited from having the world's strongest currency over the long period shown.

Figure 12

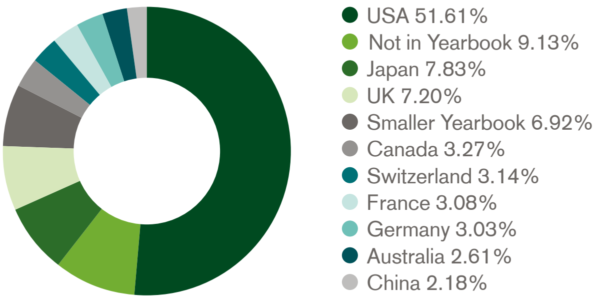
1899: Share of countries in global stock market valuations



"US equities since 1900, through crashes and volatility, have given an excellent return that has beaten inflation by an average of 6.5% a year, compared to just 2% for government bonds."

Figure 13

2014: Share of countries in global stock market valuations

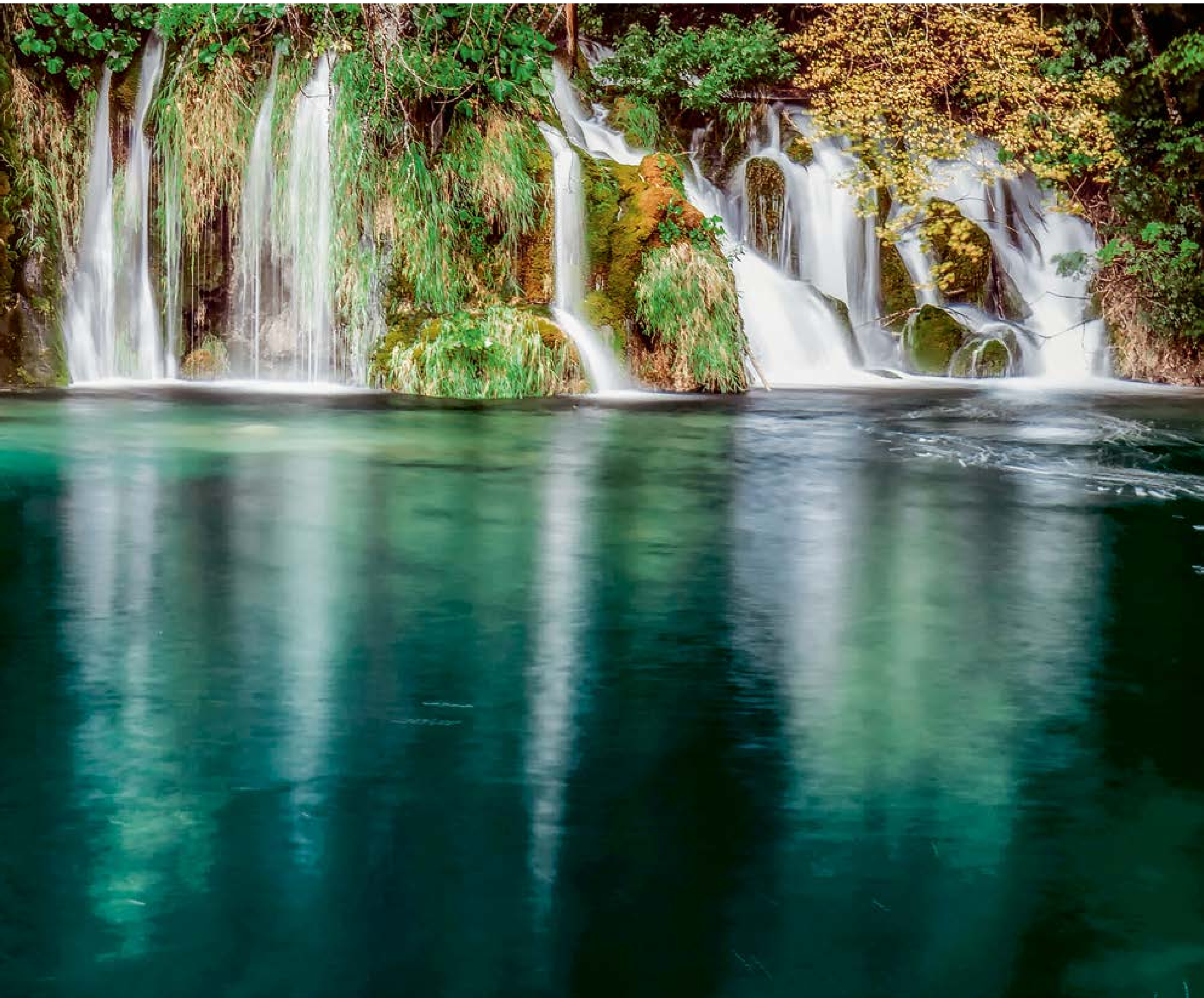


Source pp. 28/29: Credit Suisse Global Returns Yearbook 2015

Themes in Portfolios
Our most impactful investment ideas in action

Loris Centola
Global Head of Private Banking Research

Markus Stierli
Head Fundamental Micro Research



Themes in Portfolios describe Credit Suisse's most impactful investment ideas in an easy to understand overview

Themes in Portfolios explained

Our Themes in Portfolios allow investors to populate their portfolios with ideas that we expect to outperform within each area. So, within equities, we expect stocks linked to European economic recovery to outperform, reflecting reasonable valuations, ongoing easy monetary policy and signs of gently accelerating economic growth. We also have a number of other themes including Swiss small and mid-cap stocks and US technology stocks. Within fixed income, our themes include floating rate bonds, as well as some of the more defensive high yield bonds. These are chosen to help avoid the adverse effect of rising bond yields, the first by their nature of having almost no duration and the second by offering a credit spread that should offset the impact of higher rates on capital values. We include a number of other fixed income themes including senior loans and hybrids. Among alternative investments, given our outlook for commodities to trade without major up- or downtrends, we believe active commodity strategies that take advantage of short-term movements should be well placed to deliver returns, and we also focus on other ideas including selected real estate investments in some of the European markets where recovery is still at a relatively early stage.

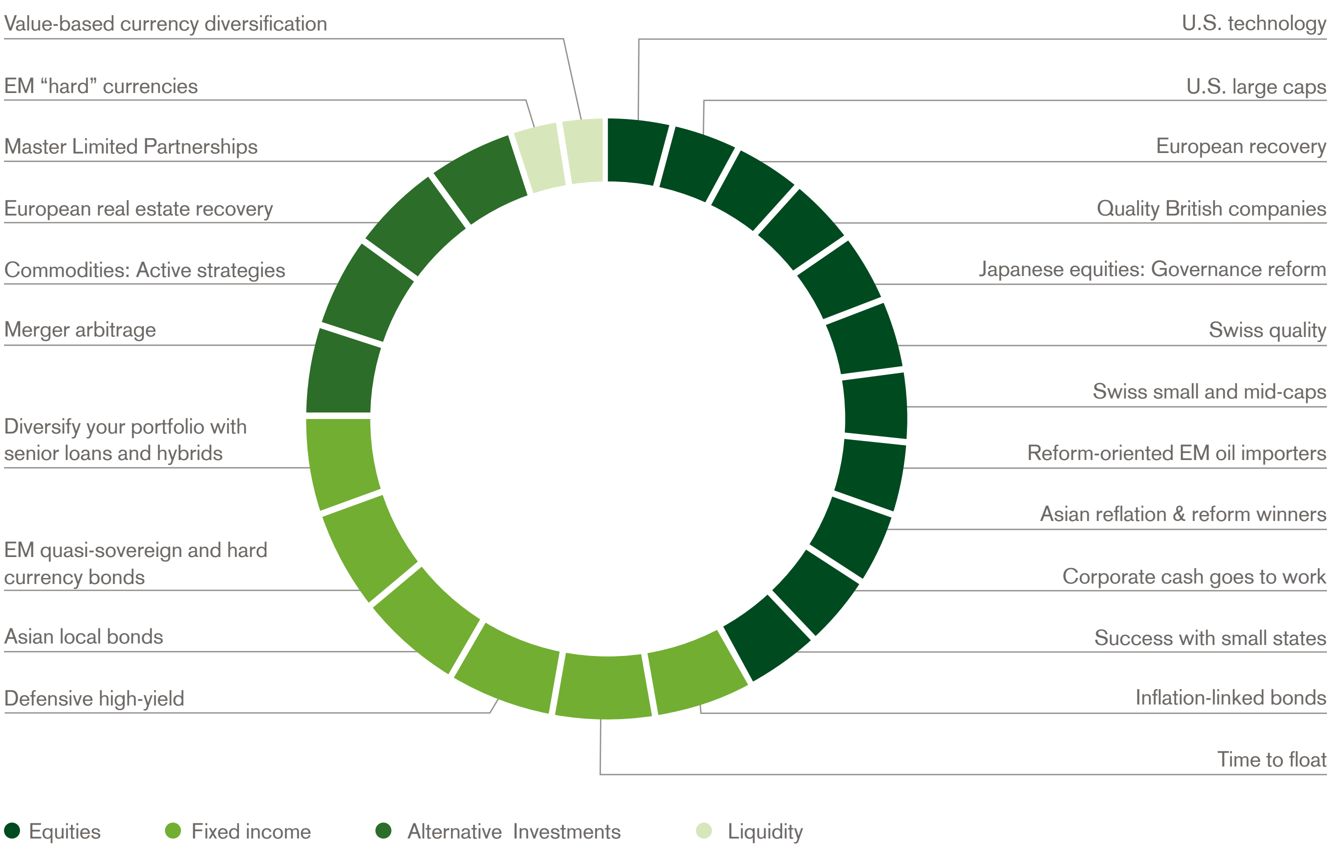
We select our themes and set our asset allocation in a single investment process, with all decisions being taken by our Investment Committee, which meets regularly to review and, if necessary, update the recommendations. We also ensure that specific solutions are available so that investors can implement these ideas.

A theme for every asset class

Themes in Portfolios capture all asset classes in a portfolio. Special attention is given to themes that align with asset classes that have been overweighted in the asset allocation. We call those Top Themes.

Figure 1

Our thematic ideas at work (as at 15 November 2015)



Features

Risks 2016
Known and unknown unknowns

Emerging Markets
What will drive performance in 2016?

Liquidity Matters
Investment strategies as markets become less liquid

Untapped Opportunities
How to identify "hidden investment gems"

Risks 2016
Known and unknown unknowns

Giles Keating
Deputy Global CIO

In this article, we set out some of the potential risk areas relative to our central scenario that we feel investors should focus on for 2016, based both on our own analysis and on the views expressed by investors when we asked them late in 2015.

We focus on four broad areas: (1) deeper-than-expected economic weakness; (2) the opposite risk of stronger-than-expected growth, leading to less friendly monetary policies; (3) geopolitical and similar risks; and (4) issues originating within financial markets themselves. In each case, we give our view of the likelihood and also of the expected market impact. We then comment on how these risks can be taken account of as investors adjust their portfolios for 2016. Of course, we can only write about risk areas that we have identified – beyond those lie the "unknown unknowns."

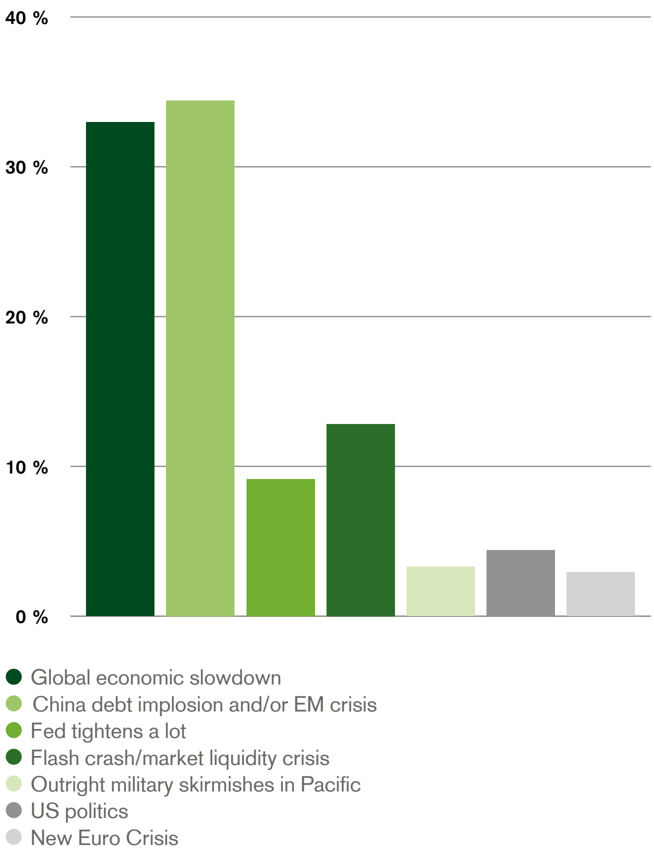
Deeper-than-expected economic weakness
We divide this area into two sub-scenarios.

First sub-scenario with a medium likelihood – intensified weakness in emerging markets, spreading to a limited extent to developed countries, but not causing outright global recession. Some emerging countries are clearly vulnerable, while others seem more robust, and we discuss this in detail in an accompanying article. If it happens, we think it would be good for most government and corporate bonds in developed countries and gold, and broadly neutral for global equities, as easier monetary policies offset most of the effect of poorer corporate earnings. However, we think it would be bad for bank deposits and for financial sector equities as more developed countries adopt negative interest rates, bad for commodities, and bad for the currencies and hard currency bonds of the weaker emerging countries.

Second sub-scenario, with a low likelihood – a global economic recession too big for central banks to avoid. It could be caused by a slump in China's growth (which the authorities seem determined to prevent), but is unlikely to be triggered by weakness in other emerging markets given their relatively modest trade impact on developed economies. Among other potential causes of recessions, there are financial imbalances (rising corporate debt, slow progress in cutting government deficits), but their impact is blunted by company and government balance sheets generally being in reasonable shape. There has generally not been over-investment in recent years (other than in parts of China) and, conversely, few parts of the world economy seem to be running out of capacity. And deflation seems focused in narrow sectors (e.g. energy, commodities). A recession could also be caused by the Fed mistakenly tightening too much, which can never be ruled out, or by geopolitical or environmental interruptions to trade or oil supply, though we see a low likelihood of these (see below). If an unexpected recession did occur, we believe it would be good for long-dated quality government bonds and gold, but bad for most other assets, including corporate bonds and equities, as defaults rise and profits fall sharply.

Figure 1

What are the biggest risks up to end of 2016?



Source: Credit Suisse survey of APAC investors
As at September 2015

Stronger-than-expected developed economies
This would cause accelerated Fed tightening and faster-than-expected recovery in some emerging markets. We view this with a low-to-medium likelihood. It could come if companies start to spend more of their cash piles (perhaps helped by new US tax legislation), if consumers slowly spend more of the windfall from low oil prices, if Germany has to raise public spending in the short term to provide housing and support for the migrant influx (which should also help labor supply in the longer term), or if a rising sales volume in new technologies slowly dominates their tendency to depress prices. The market impact would likely be significantly positive for equities and mildly positive for both high yield and investment grade bonds as higher profits offset higher interest rates. It should be good for commodities and good for assets of accelerating emerging markets, but bad for longer-dated quality bonds, gold and for credits of some highly levered issuers, notably those in countries that do not benefit from the faster growth.

Geopolitics, national politics and environment
Risks abound in many parts of the world. Our view is that any one of these taken in isolation is a low probability, but taken together, we see a noticeable risk that one of them (or some other "unknown unknown") occurs. The migration crisis in Europe might get out of control, and could intensify support for nationalist parties, perhaps triggering a new Euro Crisis. In Switzerland, the debate over relations with the EU could unexpectedly start to favor a looser link.

Tensions could appear or escalate in the seas near China (possibly around January's Taiwan election), in Ukraine or the central Asian republics, and this (or fallout from Middle East tensions) could adversely affect trade relations between the West and China and/or Russia.

"We see weakness spreading from emerging markets as a medium likelihood, but a global recession as a low likelihood. And stronger-than-expected growth is possible, too."

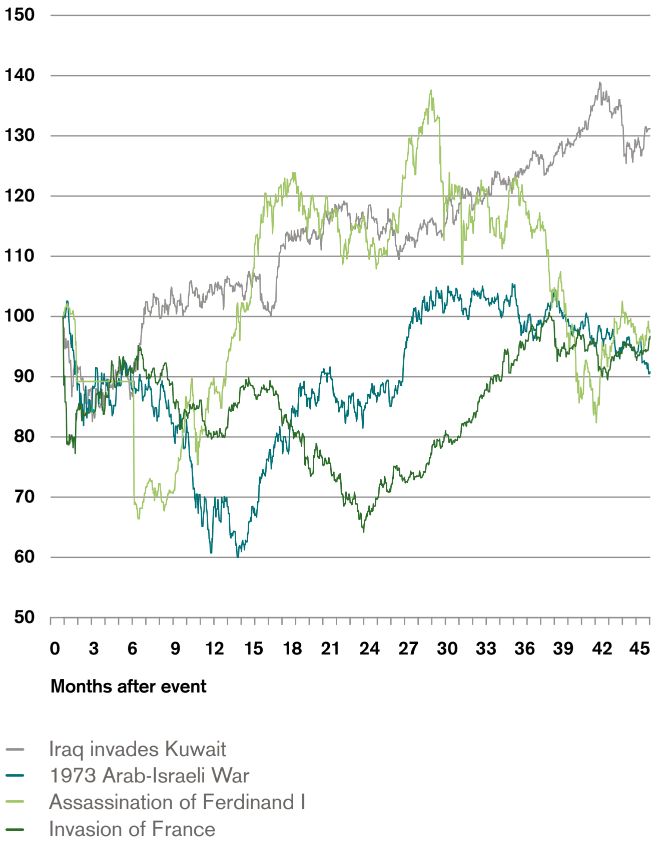
The 2016 US Presidential and Congressional elections (will it be Clinton versus Trump, or a different contest?) could lead to sector-specific scares, as recently seen for healthcare, although it could also encourage progress in infrastructure spending and tax rules for the repatriation of funds, giving a positive impetus to equities as often in past election years. Also, a major natural disaster, perhaps exacerbated by climate change, could disrupt a major economy or trade route. Historically, (geo)political events can cause generalized market selloffs, but these tend to fade rapidly and be replaced by a focus on the individual assets most affected. Our analysis suggests that only the very deepest geopolitical shocks (the two world wars and the 1973 oil embargo) had very large and long-lasting effects on global financial assets.

Risks originating within financial markets themselves
First, we see a medium-to-high likelihood of rising market illiquidity, partly caused by tighter rules on bank capital reducing banks' capacity to hold the inventory needed to be able to continuously offer to buy and sell securities. This could cause brief disruptions like flash crashes and potentially more sustained difficulties for investors to execute desired trades, with the corporate bond universe and perhaps some small-cap stocks likely to be more affected than larger-cap equities. Second, we see a high likelihood of emerging countries and oil exporters like Norway continuing to sell assets accumulated in their foreign exchange reserves and Sovereign Wealth Funds to offset a capital outflow. This "quantitative tightening" reduces demand for assets like global equities and US bonds, but the capital flowing out of these countries must itself be re-directed somewhere else, most probably into exactly those assets being sold or close substitutes, so the net effect may be small.

Third, we see a low but rising risk of systemic-scale defaults in debt markets, following their very rapid growth during the low-interest-rate years. So far, they have been resilient, with successful restructuring of many energy bonds during 2015, but future strains are visible in the US student loan market, which the rating agencies are re-assessing after repayment rates unexpectedly fell. More generally, the likely start of Fed tightening may expose hidden weaknesses in the financial system, as the cost of financing rises and lenders discriminate more (or alternatively if the economy is weak, proliferating negative interest rates could also create other strains). Overall, we would warn that financial shocks often come from unexpected directions – unknown unknowns.

Figure 2

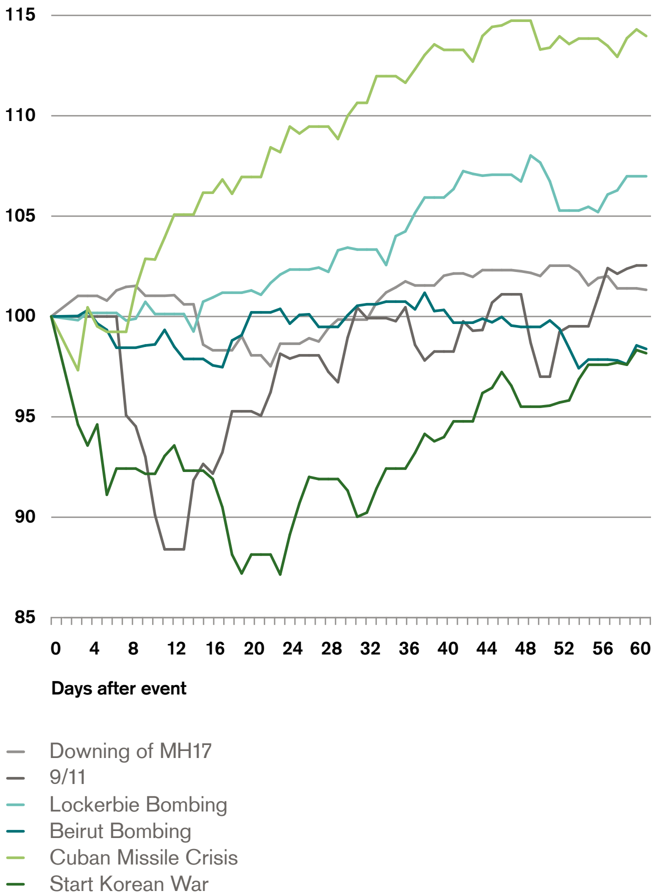
Stock market impact of major geopolitical events
DJIA indexed to 100



Source: Bloomberg

Figure 3

Stock market impact of less crucial geopolitical events
S&P500 indexed to 100



Source: Bloomberg

Implications for portfolio construction in 2016

If we leave aside for a moment those risks that we have classified as low, then the main ones to focus on are the slower global economy (but not a global recession), accompanied by significant extra monetary easing, the opposite risk of a faster global economy leading to tighter-than-expected monetary policy, and increased illiquidity in financial markets.

As described above, the impact of each of these relative to our central scenario would be neutral to positive for both global equities and for corporate bonds, and we believe this adds to the confidence with which investors can allocate to these major asset classes. However, these scenarios have divergent impacts on gold, longer-dated government bonds and most emerging market assets, so that holdings of these assets can play a diversification role. But investors should be aware that there is a significant chance that parts of this group will underperform. Also, the rising illiquidity suggests that the credit metrics applied when choosing any given bond should be tightened compared to the past, given that selling bonds at times of stress may be difficult.

Our analysis of historical events suggests that the geopolitical shocks discussed (other than an oil crisis triggered by a broad Middle East conflagration) might cause a brief negative effect on a broad portfolio of global assets, but this would be reversed rapidly, probably within weeks rather than months. However, narrower pools of assets could see larger effects, e.g. some UK assets might see larger and longer-lasting impacts if there was a vote to leave the EU, and investors should take account of such risks when assessing their risk-reward potential.

There is one pair of risks that would likely have a very different impact on asset performance from those mentioned above, causing equities and corporate bonds to fall while gold and long government bonds improve. This would be a spread of the Middle East conflicts that disrupted oil supply sufficiently to trigger a global recession. To have such a drastic effect, the conflict would have to be on a truly major scale, given the slack in global oil markets and the flexibility of US shale output, and this suggests a low likelihood. Given this, many investors may choose not to adapt their portfolios for this, but those who do could consider holding assets such as far out of the money call options on oil or US Treasuries.

"Rising illiquidity suggests the credit metrics applied when choosing bonds should be tightened, given that selling in times of stress may be difficult."

Deeper-dive analysis

In this article, we have offered a framework for considering likely risks in 2016 and their implications for portfolio construction. In the accompanying special articles, we offer a deeper dive into some of the risks, including the issue of rising market illiquidity and the risks of a deeper slowdown (or faster recovery) in emerging markets around the world. Other key issues such as the UK referendum are discussed in more detail in the regional sections of the economic and market outlook.

Emerging Markets
What will drive performance in 2016?

Mariano Arrieta
Emerging Markets Fixed Income Strategy
Luca Bindelli
Head of Foreign Exchange Strategy
Wenli Fei
Equity Analysis
Philipp Waeber
Economist, Global Macro Research
Nora Wassermann
Economist, Global Macro Research

For emerging market (EM) economies, our core scenario is for growth to stabilize in 2016 at close to the previous year's low levels. We believe this provides a reasonable background for investors to take advantage of low asset valuations after three years of underperformance against developed markets, but careful selection is needed given that some countries are set to suffer further economic, financial and/or political strains.

Among hard currency bonds, we favor Mexico, Peru and Russia, and investors could also consider South Africa, Malaysia and Indonesia. The local currency bonds of the first three countries on this list also offer a reasonable risk-reward proposal in our view, and investors could consider unhedged investments, especially in Mexico, given that recent weakness has now pushed these currencies to low valuations. In Brazil, we remain cautious about taking bond duration risk, but we would consider using any further bouts of weakness in the Brazilian real in the coming months to add short-term currency exposure, given how weak the unit has become. Within EM equities, we favor India and China (H-shares), and investors could also look at Taiwan and Korea. In Russia, low valuations provide some potential and there is a small but not negligible chance of a boost from improving geopolitics. In Latin America, meanwhile, we see performance of most of the stock exchanges held back by rising US interest rates. Key risks include the possibility that the Fed might tighten faster than expected, or that China might make a clear policy move to depreciate the renminbi. Although we see these as low-probability events, they would likely damage the performance of many EM assets if they did occur.

"We favor Indian and Chinese equities. In Russia, low valuations provide some potential, while, in Latin America, Fed action is likely to be a burden."

Base case for EM economies in 2016: Growth stabilization at subdued levels, moderating inflation and cautious monetary easing

Most EM assets had a disappointing year in 2015, especially when measured in US dollars, with performance generally even weaker than in 2014 or 2013, and continued underperformance versus developed markets. The main factor lowering returns was currency depreciation. Worst affected were commodity exporters and others dependent on exports to a slowing China, while countries with weak external balances also suffered. On the positive side, performance was better for both equities and bonds in countries with lower inflation and thus easier monetary policy.

In 2016, we expect EM growth to stabilize at subdued levels. Fiscal and monetary policy stimulus in China should help growth reach the government's target, although imports will remain weak. Korea and others in Asia will instead have to rely on recent policy stimulus to support growth through domestic demand. Meanwhile, economies dependent on commodities and/or facing high debt will likely remain weak, but in most cases we do not see things deteriorating and there may be some marginal improvement. For example, in Russia, the economy seems to have already largely absorbed the impact of lower oil prices and sanctions, so that we see recession giving way to stagnation, while, in Brazil, the pace of contraction should abate. One benefit of poor growth is that it tends to hold back prices, so that the very high inflation rates seen in many weak-currency countries should subside, thus allowing many central banks to move from tightening to cautious policy easing. Important exceptions are Turkey and South Africa (due to financial pressures) and Mexico (due to the growth impetus from the USA).

Scoring economic strength, vulnerability and policy flexibility

Economic growth is only one of the factors determining the performance of EMs. Equally important is whether a country is financially stable (allowing policy makers flexibility to respond to external shocks) or whether it has high debt and poor fiscal governance (making it vulnerable to global pressures). Table 1 provides a forward-looking "heat map" for these macro factors. Most economies in Asia (apart from Indonesia) and Eastern Europe tend to be more robust on this analysis, while Turkey, South Africa and many of the Latin American countries – Mexico aside – appear more vulnerable.

In the following sections, our asset class strategists derive their outlook for investment returns by asking whether markets have, or have not, fully discounted this macro picture.

Table 1

Macro scores for the main emerging markets

	Macro strength	Policy flexibility					External vulnerabilities			Overall score
Emerging Asia		Inflation	Public debt	Public deficit	Domestic credit	Aggregate score	FX reserves/ external debt	Current account balance	Aggregate score	
China										
Hong Kong										
India										
Indonesia										
Malaysia										
Philippines										
Singapore										
South Korea										
Taiwan										
Thailand										
EEMEA										
Croatia										
Czech Republic										
Hungary										
Poland										
Romania										
Russia										
Turkey										
Ukraine										
South Africa										
LatAm										
Argentina										
Brazil										
Chile										
Colombia										
Mexico										
Peru										
Venezuela										

Explanatory note: All indicators were ranked, and ranks attributed colors on a scale ranging from dark red (worst score) over yellow to dark green (best score). Macro strength relates to 2016 growth dynamics in reference to potential growth rates, with a neutral score (yellow) being attributed for growth broadly in line with potential in 2016; inflation scores reflect monetary easing potential in 2016; public debt (2016 projection by IMF) is grouped in 5 classes (a ratio above 60% of GDP is red); the public deficit (2016 projection by IMF) is grouped in 5 classes (a rate of 3% of GDP is red); the score on domestic credit to the private sector in % of GDP reflects both the level and the latest dynamics, with the worst score being given for a comparably elevated debt stock which is still rising; FX reserves (as of Q2 2015) and current account balances (2016 projections by IMF) are grouped in quintiles; aggregate scores and the overall score are unweighted averages.

Sources: OECD, IMF, Worldbank, Credit Suisse

Currencies: Valuations are not yet a robust anchor

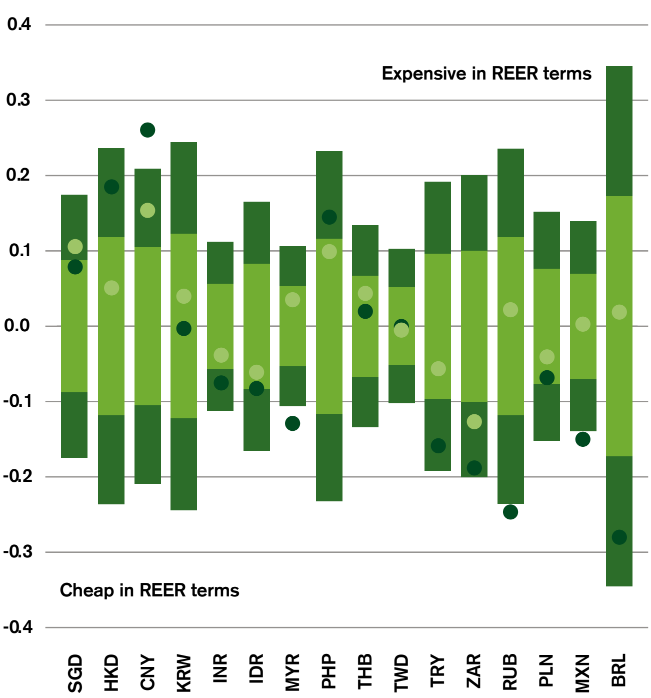
We believe most EM currencies are likely to weaken further against the US dollar due to still-weak economic fundamentals, and in spite of China's growth-supportive policies. On our calculations, FX forward markets are discounting a faster improvement in EM economic growth than seems realistic. We thus foresee a scenario in which EM currencies weaken further in the first half of 2016 and then range-trade for some time before fundamentals improve enough to support outright rebounds.

Latin American currency underperformance likely to reverse

Although Latin America, led by Brazil, remains the riskiest region based on fundamentals, the sell-off in 2015 has pushed currencies to extremely cheap valuation levels. At the time of writing BRL is down 30% versus USD, and MXN is more than two standard deviations below its 10-year average. While weak fundamentals and political risks could push BRL lower in coming months, we see good prospects for stabilization or even gains on a 12-month horizon. Given an annual carry of 12%, total returns versus USD should be positive. Meanwhile MXN is likely to prove resilient, especially if rates are raised in response to Fed action.

Figure 1

Valuation measures for emerging market currencies
Deviation in %

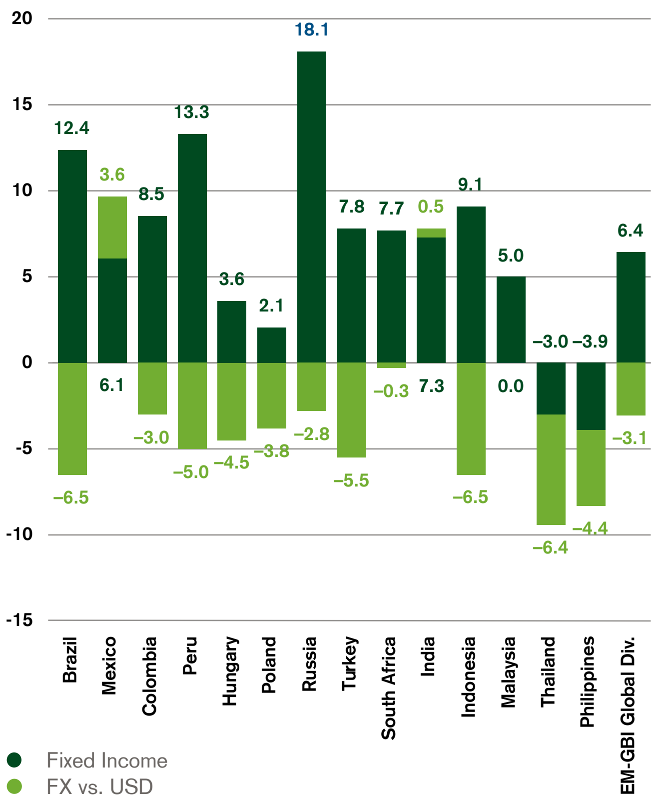


- +/– 2 Standard Deviation
- +/– 1 Standard Deviation
- Real effective exchange rate (REER) deviation from 10-year moving average (current)
- Real effective exchange ratte (REER) deviation from 10-year moving average (as on 30.09.2014)

Source: Credit Suisse

Figure 2

Emerging Market Global Bond Index sub-indices – 12-month expected USD returns (in %)



- Fixed Income
- FX vs. USD

Source: JP Morgan, Bloomberg and Credit Suisse

In Asia, INR should outperform CNY
While Asian EMs generally saw smaller declines in growth and currencies than Latin America, valuations are generally not as attractive. The only exceptions are MYR, and INR where faster growth and fairly high inflation should keep rates high. In China, policies to internationalize the currency and an improving current account should provide support. Policy easing and capital outflows could work in the opposite direction, so that some marginal depreciation is possible. However, we do not expect any major policy move to devalue.

In EMEA, carry currencies should eventually gain support
While PLN offers the best fundamentals within the EMEA countries (Europe, the Middle East and Africa) and could initially outperform, its lack of carry is likely to lead to an underperformance over the course of the year, while TRY, ZAR, and RUB (which offer much more attractive rate spreads) should eventually outperform in our view.

Among the risk scenarios, weakening developed market growth could burden growth-sensitive EM currencies facing external financing needs offset only partially by delays in Fed rate hikes. If developed market growth surprises to the upside instead, the Fed would likely tighten faster, which would be negative for some South American currencies where there the trade benefit from stronger demand is small. Upside surprises to growth in China or the EM counties would naturally support EM currencies, particularly those of countries with vulnerable external balances and higher interest rates (i.e. IDR, ZAR, TRY, and BRL).

Fixed income: Moderate overall returns, with significant dispersion
Our baseline scenario foresees average returns on external and domestic EM debt in the range of 3%–5% in USD terms, although returns in some countries may lie well above or below this range.

Local currency bonds: Searching for pockets of value
The trend in the US dollar exchange rate will remain the single most important driver of EM domestic bonds. At the time of writing, the near-term forward markets in many countries have discounted less currency weakness than appears justified by macroeconomic fundamentals, implying the need for tactical currency hedges, with Mexico and less clearly Peru and Russia as exceptions. The positive news is that even with continued EM currency weakness, inflation can still decline, making upside surprises with regard to interest rates unlikely.

While our macro risk indicators show Latin America as being more vulnerable than other regions, bond valuations have become compelling. Mexico is preferred in the region, as a possible rate hike by Banxico is already discounted. Peru, Colombia and Brazil deserve a more opportunistic approach and the FX-hedging costs should be analyzed individually. Further policy rate hikes in Peru and Colombia are possible, but the interest rate premium ("carry") provides an offset.

Russia remains our highest conviction call in the CEEMEA countries (Central & Eastern Europe, Middle East and Africa). Although the strong rally has moved long-dated bonds to expensive, they should benefit further from the disinflationary environment, more stable growth and cautious monetary easing. We prefer ZAR over TRY bonds because inflation should be lower in South Africa, and we think high-yielding countries will outperform PLN and HUF bonds because the latter are already highly valued.

In Asia, Indian short-term bonds are still attractive on the back of a more stable currency. Indonesia is likely to perform well on a local currency basis, but less so on a USD-adjusted basis. Philippines and Thailand are likely to underperform Malaysia as fundamental valuations remain expensive.

Hard currency bonds: Returns stabilizing at low levels
The trend toward a downgrading of certain EM bonds by rating agencies is likely to continue, especially for some vulnerable high-profile countries. However, this seems to be largely priced in so there should be little market impact unless fundamentals deteriorate further. That said, we see little scope for spreads on EM hard currency bonds to narrow as the Fed starts to tighten, implying that such bonds provide few diversification benefits in a global portfolio.

In Latin America, Mexico's strong fiscal commitment places the country's bonds in a good position to outperform. Peru is also attractively valued and the economy appears to be stabilizing. In EMEA, valuations are generally expensive. Russia is our preferred country in the region due to reasonably good fiscal performance, but valuations are not cheap. South Africa is better positioned than Turkey to retain its credit rating. Finally, Malaysia and Indonesia are trading at wider spreads to peers with similar credit ratings. In Malaysia, fiscal performance is expected to improve, despite potentially lower dividends from the state-owned oil- and gas-company Petronas. In Indonesia, a delayed growth recovery might require additional spending. India and Philippines are expensive, despite their better fundamental credit ratios.

Even though bonds in Argentina and/or Ukraine rallied to some extent late in 2015 and valuations have become expensive, risk-tolerant investors might consider positioning in these countries for higher carry. Venezuela remains a wild card, but credit metrics are likely to deteriorate as a result of the economic crisis and high political uncertainty – the likelihood of a credit event remains high, in our view.

"Mexico's bonds are in a good position to outperform; Peru is also attractively valued. In EMEA, Russia is our preferred country, but valuations are not cheap."

Equities: Growth, valuation and monetary outlook suggest EM Asia could outperform
After a good first quarter in 2015, EM equities fell almost 30% from April to September due to low commodity prices and worries about China, followed by a recovery, which at the time of writing is still limited. For 2016, we think that most of the negative factors will remain in place, with no meaningful recovery in commodities and a still-difficult macro environment. But we do see opportunities in India, China, Taiwan, Korea and Russia, while Latin America generally seems less attractive.

We are positive on equities in China

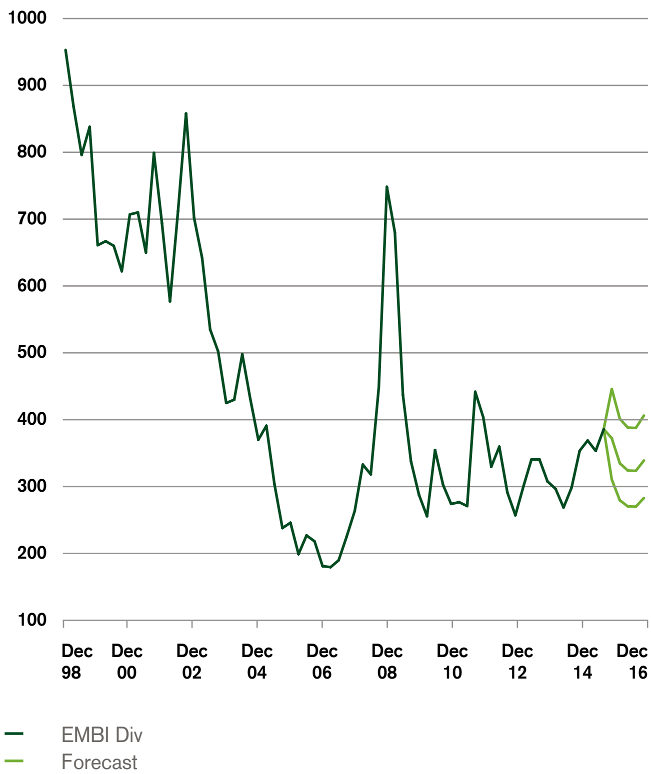
Within EM equities, we prefer EM Asia, not least because most economies are net commodity importers. While growth is well below pre-crisis levels, inflation is generally low and the currencies are fairly stable, providing some room for additional monetary easing. Within EM Asia, we have a medium- to long-term positive view on India given its high growth potential. We also favor China. While growth has turned down as the economy transitions to consumption-led growth, we believe this is priced in. The valuations of H-shares are attractive and further monetary easing should be supportive. Meanwhile, Taiwan and South Korea should benefit most from low commodity prices, and Taiwan has a relatively high dividend yield, while South Korea has a good earnings outlook.

Fed's rate hikes a headwind for LatAm and some of EEMEA

Historically, EM equities have underperformed global equities by more than 4% in the two months following a first Fed rate hike. Rising US interest rates tend to weigh most on LatAm and some EEMEA equities, due to their vulnerability to capital outflows. Within EEMEA, Russia and South Africa, being the biggest commodity exporters of the region, will more likely continue to suffer from low commodity prices and weak macro strength. However, cheap valuations should partially counterbalance macro weakness in the case of Russia. Moreover, EEMEA markets stand to benefit from their close ties to EMU and the euro, particularly Poland, which should benefit from positive momentum and supportive monetary policy. Finally, political developments could have a meaningful impact on Brazil's performance if the ongoing political crisis declines, or on Russia's performance if the Ukraine situation de-escalates.

Figure 3

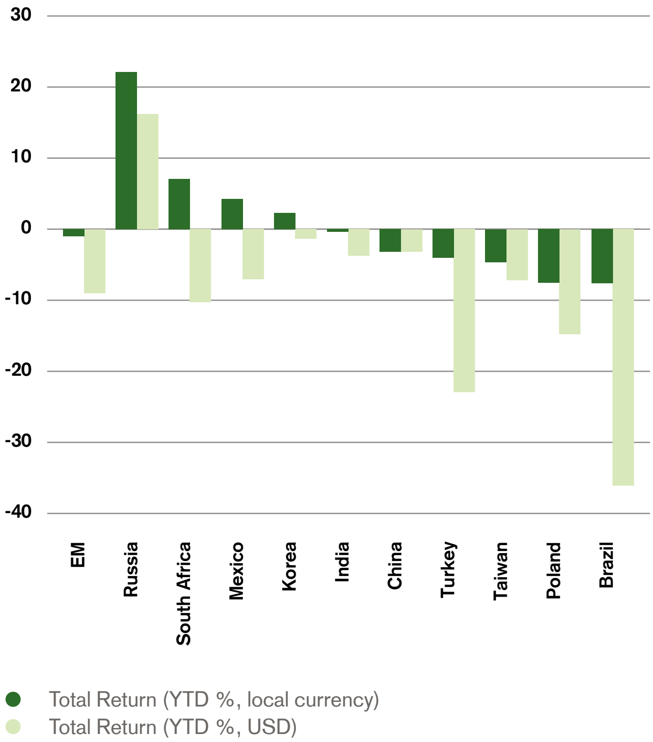
Emerging Market Bond Index Global diversified (EMBIG, in basis points)



Source: JP Morgan, Bloomberg and Credit Suisse
Last data point: 30 October 2015

Figure 4

Emerging markets year-to-date equity performance (MSCI Indices, as of 30/10/2015)



Source: Datastream, Credit Suisse

Liquidity Matters
Investment strategies as markets become less liquid

Joe Prendergast
Head of Financial Markets Analysis

An investor who reviews an up-to-date valuation of his or her portfolio on the screen or in a print-out tends to assume that it would be possible to sell the assets in the open market at somewhere around the prices shown or buy more, with the exception of specialized items known to be illiquid such as private equity and certain real estate-related investments.

But times are changing. Mainstream assets such as blue-chip equities, government bonds and major currencies that enjoyed deep, liquid markets prior to the 2007-08 financial crisis, have started to show signs of illiquidity, meaning that it may not always be possible to buy/sell as easily as in the past. There are various problems involved. For example, some assets now have wider gaps between buying and selling prices (bid-offer spread) and/or a decline in the maximum size that can be traded in one transaction, and these effects may be especially marked at certain times of day such as mid-afternoon. A more extreme phenomenon is the "flash crash," with examples seen in equity or bond markets in May 2010, October 2014 and August 2015, during which times the prices at which one can trade may differ greatly from those quoted even a few moments before. And in the normally liquid FX markets, the removal of the Swiss franc cap in January 2015 led temporarily to a suspension of most trading in that currency. Meanwhile, many corporate bonds are currently difficult to buy in the secondary market, especially in larger sizes, although sales tend to be relatively easy for now. But the reverse applies in a number of cases where issuers face unexpected credit risks, and their bonds suddenly become difficult to sell.

In this article, we review some of the reasons for this decline in liquidity and discuss the risk that it may deteriorate further in future. We then suggest how investment strategies can be adapted to allow for the changing environment. For example, investors with crucial future cash flow needs should consider relying more on dividend and interest flows, and less on asset sales, while trading-orientated investors can stand ready to buy or sell into flash-crash events.

Rising costs and tighter balance sheets at banks passed on to investors through wider spreads and greater selectivity

In the decade before the 2007–08 financial crisis, new technologies, rapid deregulation and easy central bank policy helped increase banks' capacity to take risk, which in turn made them more willing and able to make bid and offer prices for a wide range of financial assets. The result was a trend toward easier and cheaper trading for most investors. Since the crisis, this process has gone into reverse, as market-making capacity is reduced by tighter capital requirements, price-stabilizing speculation is limited by restrictions on proprietary risk-taking, and the USA moves to start raising short-term interest rates.

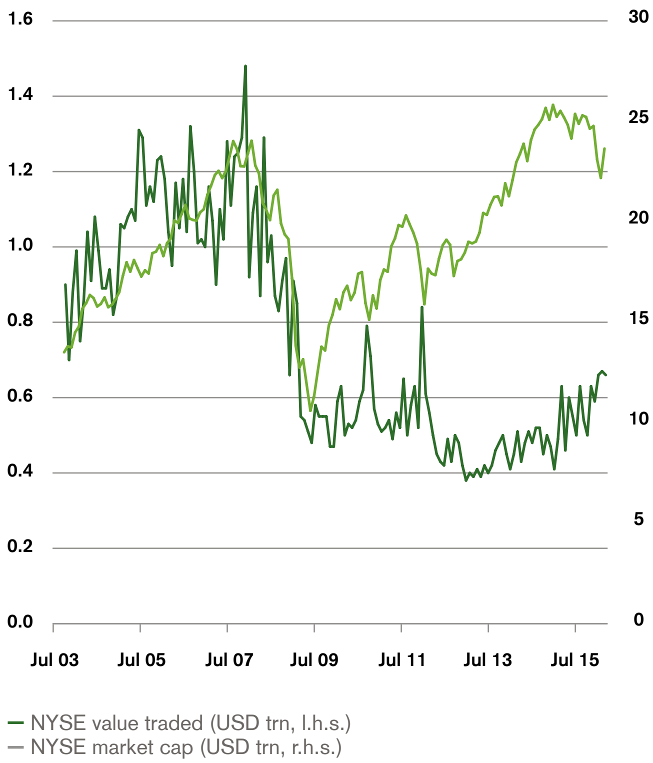
Figure 1 shows that, since the financial crisis, the volumes traded on the New York Stock Exchange have diverged from the rapid recovery of market capitalization.

This is one signal of the declining liquidity behind the scenes, which may become of greater concern amid less-friendly market conditions.

The banks that offer to buy and sell financial assets (market makers) are faced with higher capital costs, smaller balance sheets and a more conservative attitude to risk among shareholders, depositors and regulators.

Figure 1

Equity volumes traded on the New York Stock Exchange diverge from recovery of market capitalization



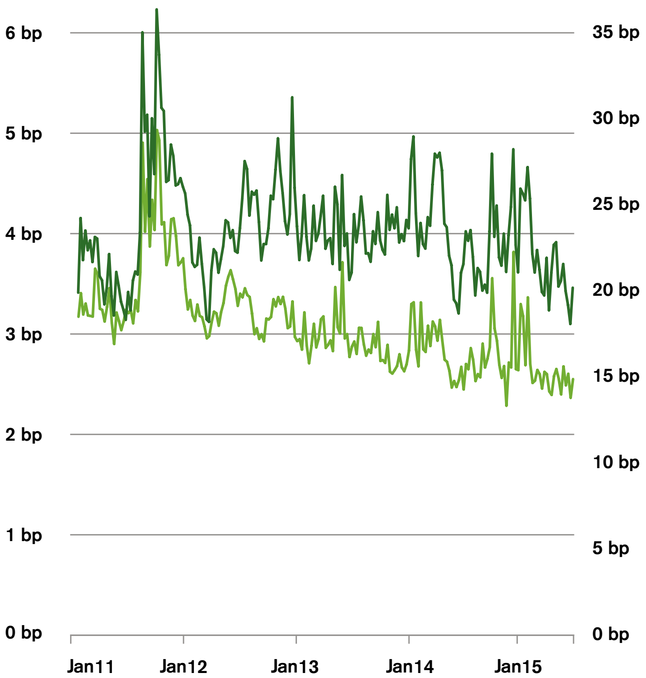
Source: Bloomberg
Last data point: 30 October 2015

In response, they have tended to widen bid-offer spreads, in effect raising the price charged to their clients for taking the risks involved in making markets. Moreover, they are tending to assess the value of trades on a case-by-case basis rather than provide liquidity indiscriminately. Credit Suisse studies of market depth (meaning the volume of nearby bids and offers on either side of the current mid-price, as typically provided by market makers) suggest that depth in US and European government bonds, for example, has been significantly diminished since the Federal Reserve's tapering ended late in 2014, and more so in the USA than in Europe.

Moreover, market depth is elusive, responding rapidly and negatively to increases in volatility. This could also help explain why overall liquidity measures do not appear to have deteriorated significantly, but pockets of illiquidity and extreme volatility appear more frequent.

Figure 2

Comparison of US large cap versus small cap equity bid-ask spreads



Russell 2000 (small caps, r.h.s.)
S&P 500 (large caps)

Source: Credit Suisse
Last data point: 24 July 2015

Less-liquid assets become even more illiquid (especially at certain times of the day)

While the banks have been widening bid-offer spreads and becoming more selective in their trading, there has been a rise in high-tech automated trading strategies used by some investors, which are programmed to favor liquid trading conditions. The result has been a clustering of trades around the same "most liquid" part of the day. More than one in six trades in S&P 500-listed stocks took place in the final hour of trading in 2014, compared with almost one in ten in 2007. By contrast, mid-afternoon trading is increasingly parched of liquidity.

> "Mainstream assets have started to show signs of illiquidity. Some have wider bid-offer spreads or a decline in the maximum transaction size, especially at certain times of day."

A similar clustering is visible across markets, with traditionally less-liquid markets becoming even more illiquid. Smaller-cap US stocks, where transaction costs were significantly higher to start with, and volumes less, reflect this tendency. Quoted bid-ask spreads for Russell 2000 (small cap) stocks have widened relative to those of S&P 500 (large cap) stocks in the past three years (see Figure 2). Market makers (and high-frequency traders) have congregated and provided the most liquidity in large caps at the expense of small caps.

> “For mainstream markets, open-ended funds have the advantage of staying close to valuation, unlike closed-end funds. But for unusual areas, like frontier markets, closed-end funds have potential advantages in times of stress.”

Another consequence has been smaller trade sizes, leading to an illusion of liquidity, which disappears when larger trade sizes are presented to the market. Block equity trades (defined as trades of 10,000 or more shares) comprised only about 10% of total volume in the last decade, compared to about one-third of volumes in the preceding decade.

In short, there is a global trend in financial market liquidity, with market-making concentrated in the most liquid securities at the most liquid times of day, while deteriorating in less-liquid assets and times, thus creating an increasing liquidity gap between these extremes.

Looking ahead: Illiquidity in financial markets may worsen as the Fed starts raising interest rates

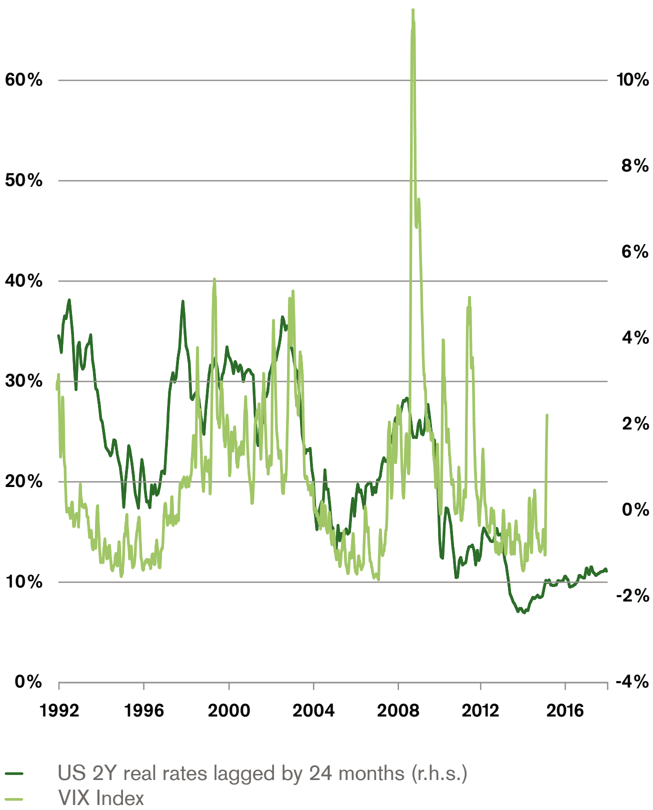
Easy central bank monetary policy around the world has, in our view, limited the deterioration in trading liquidity. However, that very easy policy is now slowly being unwound. The first step was the ending of US quantitative easing in 2014, and the next step is the move toward slowly rising US short rates in late 2015.

In previous cycles, there have been significant lags between the initiation of monetary tightening and rising volatility in asset markets, but the connection has nonetheless been strong (Figure 3). As central bank policy normalizes, we expect to see more evidence of reduced trading liquidity and its consequences in the form of higher volatility.

In particular, at a point perhaps one to two years after interest rates start to rise, we would expect conditions in corporate bond markets to become tougher. This not only means higher yields (i.e. lower prices), but also increasing illiquidity in secondary markets. We noted above that, at the moment, many corporate bonds are relatively difficult to buy in the secondary market, and relatively easy to sell. This situation could reverse as interest rate increases gather pace, so that investors may not be able to make certain sales in their bond portfolios.

Figure 3

Rising real rates cause volatility, but with a lag



Source: Bloomberg
Last data point: 02 November 2015

A key variable to monitor, in our view, is US liquidity conditions, which we proxy with our US Liquidity Indicator, as shown in Figure 4. The US Liquidity Indicator is part of our proprietary set of liquidity indicators that go beyond measuring trading liquidity. In addition, they track rates, credit, housing activity, bank lending and money supply to provide a broad snapshot of liquidity conditions. The Federal Reserve's tapering to end quantitative easing has already seen some deterioration in liquidity conditions on this measure, which contributed to some significant occasions of market stress in 2015.

Some factors may help offset this sober picture. As banks become less able to offer market-making services, large institutional end-investors are already starting to make more transactions directly among themselves via new trading platforms, and this trend may continue. This may help smaller investors indirectly if it limits the rise in overall market volatility.

Figure 4

Credit Suisse Liquidity Indicator

Source: Bloomberg, Datastream, Credit Suisse
Last data point: 04 November 2015

This trend toward greater trading illiquidity has practical relevance for investment decisions:

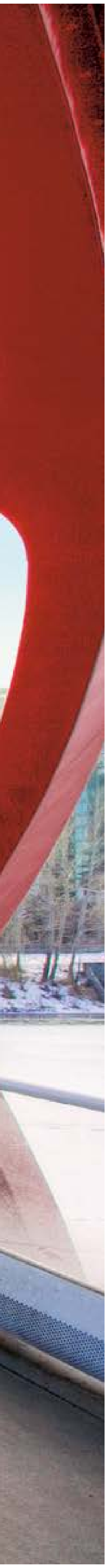
- Investors should analyze their expected future cash needs, and plan to meet them as far as possible from expected dividends, coupon payments and redemptions, with reduced reliance on sales in the secondary markets, especially for corporate bonds where this may become difficult as the Fed tightening cycle progresses.

- Strategic portfolio construction should take account of illiquidity as well as volatility when assessing the desirability of an asset in a portfolio. In our discretionary mandates, for example, the relative illiquidity of emerging market equities, high yield bonds and convertibles reduces the amount we hold compared to other assets offering a comparable risk-return.

- Open-ended funds will generally be saleable at or close to underlying net asset value in all but the very most extreme conditions, making them potentially more attractive for investing in mainstream rather than closed-end markets, which can trade well below net asset value at times of stress. However, for investments outside of the mainstream (e.g. frontier markets), open-ended funds may have to sell the more liquid, better-quality assets in their portfolios during a downturn to meet early redemptions, thus leaving the remaining investors with low-quality assets, which does not happen in a closed-end fund.

- Assets such as private equity and some real estate-linked investments, which are traditionally seen as illiquid, can play a valuable role in a diversified portfolio if they offer sufficient expected returns. But they may become very deeply discounted or unsaleable in periods of stress and investors should allow for this in assessing their overall cash flow needs.

- Investors should be prepared for greater volatility, with large price movements even in traditionally liquid assets. Extreme falls can create value and provide attractive entry points. To take advantage of this volatility, it is important to hold sufficient cash from asset sales during periods of exaggerated price rises. As large falls (rises) in prices do not always signal one of these entry (exit) points, a clear framework for judging value is also needed, such as the tactical asset allocation framework used by our discretionary mandates with the resulting strategy also published in a regular and timely manner in our Investment Committee report.



Untapped Opportunities
How to identify "hidden investment gems"

Michael O'Sullivan
CIO UK and EEMEA

One way to aim for improved investment performance is to identify "hidden gems," i.e. trends that are potentially powerful and durable, but which have not yet been reflected in market prices. Here we describe three such trends: the superior profitability of companies with gender diversity in their boards and senior management, the outperformance of certain family businesses, and the way that capital markets of small economies may be able to punch above their weight in the longer term.

We also describe a fourth trend that is more tentative, but potentially of considerable importance, i.e. the impact on consumers and food product companies of the emerging new consensus among nutritionists that fat may not have the adverse effects once attributed to it.

We have produced detailed research on all of these themes in our think-tank, the Credit Suisse Research Institute (CSRI), which draws on both our large internal research network and other advisers. We have developed large proprietary datasets, such as the CS Gender 3000, which contains unique data on diversity within most of the world's most important companies. And we have lists of stocks that can be used to invest in some of these themes, with investment products available in certain cases.

Corporate gender diversity and improved financial performance

The impact of gender diversity on corporate performance is an increasingly prominent topic. However, it has not yet become a fully mainstream theme, suggesting that markets may not always properly reflect its impact, which can create an investment opportunity. During 2015, the CSRI updated its earlier "Gender Diversity and Corporate Performance Report" to include, for the first time, data not only on boards, but also top management. The report identifies by gender more than 28,000 senior managers at over 3,000 leading companies actively covered by Credit Suisse analysts worldwide – The CS Gender 3000.

The study shows that although the proportion of women in senior management is in many cases similar to that on the boards, their roles tend to be skewed toward areas of less influence or offer less opportunity to move into the most senior positions in a company. It also shows that female representation is higher in "New Economy" companies and in services ("Non-Manual Labor") companies than in much of manufacturing and construction, though sector-based patterns of this kind are less prominent than country and cultural factors.

For investors, the new report confirms most of the crucial findings of the initial version. In particular, greater diversity in boards and management is empirically associated with higher returns on equity. This in turn is shown to be linked over time to superior stock-price performance, with not only higher earnings, but also higher valuations. These results are correlations rather than proven causality, but they are striking. They suggest that investment strategies based on public information about gender diversity have the potential to significantly outperform over a period of time – a key conclusion for investors.

"The impact of gender diversity on corporate performance is increasingly prominent, but has not yet become a mainstream theme, which can create investment opportunities."

Moreover, new findings emerge from this added management analysis. We find no evidence that female-led companies miss out on equity returns by taking a financially conservative approach to leverage. Also, dividend payout ratios are shown to be higher. But, in a different and potentially positive way, female CEOs are shown to be more conservative than men. They are less acquisitive than men when assuming the leadership position – and other studies have shown that acquisitions are often associated with adverse effects on shareholder value.

At the macro level, we find that board diversity has increased in almost every country and every sector, progressing in our global sample from 9.6% in 2010 to 12.7% at the end of 2013. Female participation in top management (CEO and directors reporting to the CEO) stood at 12.9% at the end of 2013, but as noted above there is wide variation among sectors and countries. Interestingly, countries with formal board quotas for diversity are not, so far at least, showing a trickle-down effect to female representation of women in top management.

From an investment point of view, it is possible to construct strategies based on a selection of companies that we have identified with a higher than average representation in terms of women on the board and/or in top management. We would suggest further refining the list so as to include only those companies that also score well in terms of the operational and valuation metrics in our HOLT* scorecard. Investors could implement such a strategy either by direct purchases of these equities or, where available, by purchasing a suitable investment product.

Family businesses – stability and potential for longer-term outperformance

While some family companies are held privately, there are also many listed companies where a single family holds a significant stake. Credit Suisse is very focused on family businesses and we have published regular research on them since 2007, with the most recent being the CSRI report, "The Family Business Model," published in July 2015. Our work finds that family businesses have a distinctive focus on medium- to long-term returns. Historically this has tended to produce successful results that investors could potentially share if the trend continues in future.

Among the reasons why we feel that family businesses stand apart and why the return profile is different to that of the broader corporate universe, we note a desire to maintain control, leading to more cautious and more efficient management and strategies, and a focus on value-added products and brand development. Moreover, we see evidence that family businesses tend to focus more on core activities and this means they are less acquisitive and growth is organic. Investment intensity, be it research and development (R&D) or broader capex, is lower than for other companies, but it tends to cause less of a burden on short-term return on equity, suggesting that the chosen investments and R&D are more efficient.

To aid our assessment of the health of family businesses we have constructed The CS Global Family 900, a detailed financial database of 900 family businesses globally. This group of companies has shown an excess return of 4.5% compound annual growth rate versus the MSCI All Countries World Index since 2006. Over the longer term, family companies in the CS Global Family 900 have generated twice the economic profit – earnings in excess of the opportunity cost of utilizing assets or capital – compared to benchmarks.

Table 1

Percentage of women on boards by industry

	2010	2011	2012	2013
Consumer Discretionary	10.6%	11.3%	12.4%	13.4%
Consumer Staples	13.3%	14.2%	14.9%	16.3%
Energy	6.7%	7.7%	8.3%	9.4%
Financials	11.3%	12.0%	13.0%	14.8%
Healthcare	11.7%	12.4%	12.9%	14.1%
Industrials	7.8%	8.7%	9.9%	11.0%
Materials	6.8%	7.7%	8.6%	10.0%
Technology	8.1%	8.4%	9.0%	10.9%
Telecoms	11.1%	11.0%	12.4%	14.2%
Utilities	10.6%	11.0%	12.0%	14.4%
Total	**9.6%**	**10.3%**	**11.3%**	**12.7%**

Source: Credit Suisse Research Institute

Table 2

Percentage of women on boards by region 2013

	0	<10%	10-20%	20-30%	>30%
North America	24.7	11.0	39.6	18.6	6.0
Europe	10.3	6.3	31.4	32.8	19.2
EMEA	39.6	10.4	29.2	15.1	5.7
Latam	56.0	13.1	19.0	10.7	1.2
Developed Asia	54.0	11.1	24.3	8.7	1.9
Emerging Asia	49.5	17.2	23.3	6.7	3.3
Total	**33.7**	**11.1**	**31.4**	**16.9**	**6.9**

Source: Credit Suisse Research Institute

In general, family-owned companies are a lower return on equity (ROE) business model in the more developed markets of the USA and Europe. By contrast, they demonstrate higher ROE in Asia and EMEA. Lower ROE is indicative of more conservative strategies as well as broader priorities for family ownership beyond simply financial returns. Similarly, leverage is lower for US and European family businesses, in line with previous research.

Finally, our dataset shows that family business growth is organic. Since 1990, M&A has been just 2.1% of sales versus 5.8% at non-family businesses. We also find that family businesses make better and cheaper acquisitions as they drive better growth and returns in the 3-year post-acquisition period.

For investors, it is possible to create a strategy that aims to share in this potential performance by identifying small portfolios of companies that have significant family holdings and which also have good metrics in our HOLT* scorecard.

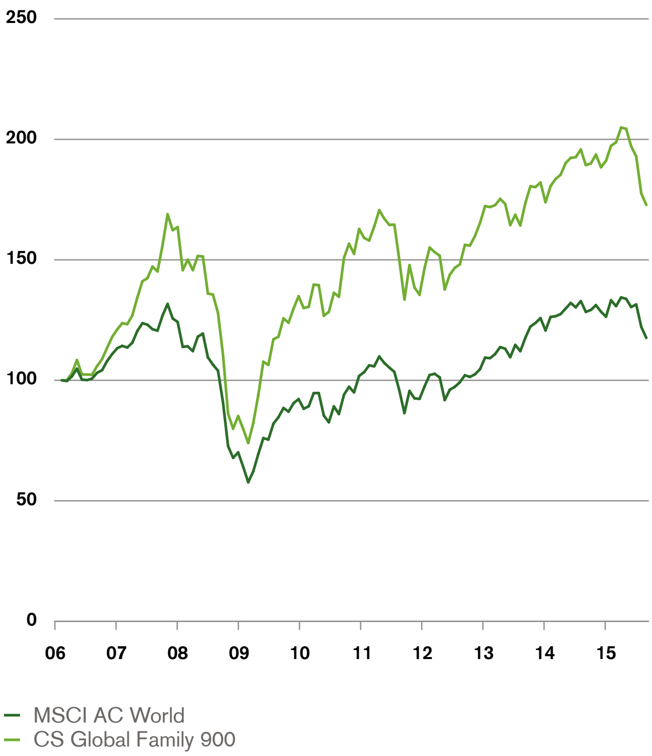
As with the gender diversity theme, investors could implement such a strategy via direct purchases of these stocks or, if available, by purchasing a suitable investment product.

The success of small countries and markets

The long-term economic success of some smaller developed countries such as Singapore and Switzerland is well known, but the relationship between country size and the performance of stock and bond markets is less widely studied, even though there are widespread comparisons of the performance of small and large companies within national stock markets. Our recent research aimed to fill this gap and to see if this under-researched area offered a potential investment opportunity. We examined the link between small countries' macro performance and the performance of their capital markets and we found that in the long term, small developed country equity markets have outperformed large country ones. The same is true, though less emphatically so, for small developed country bond markets.

Figure 1

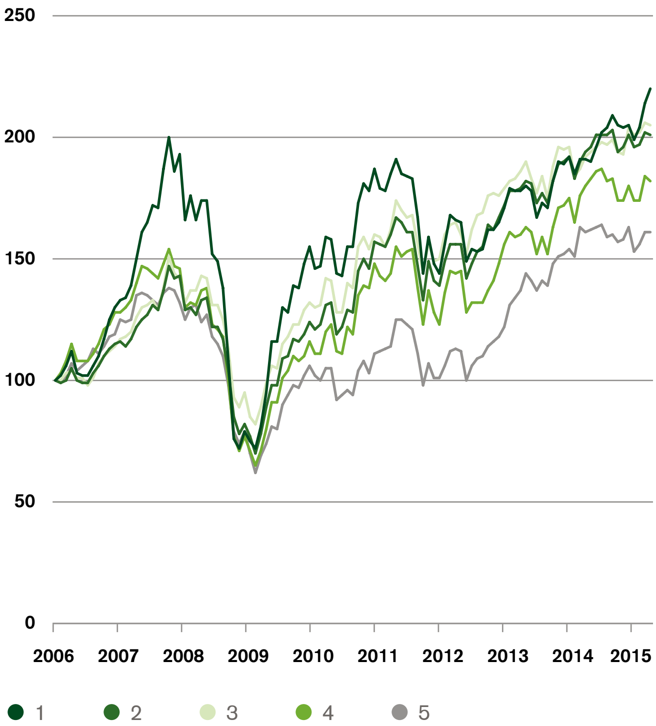
CS Global Family 900 universe versus MSCI ACWI



Source: Bloomberg, Credit Suisse Research Institute
Last data point: 10 November 2015

Figure 2

Share price returns by generation



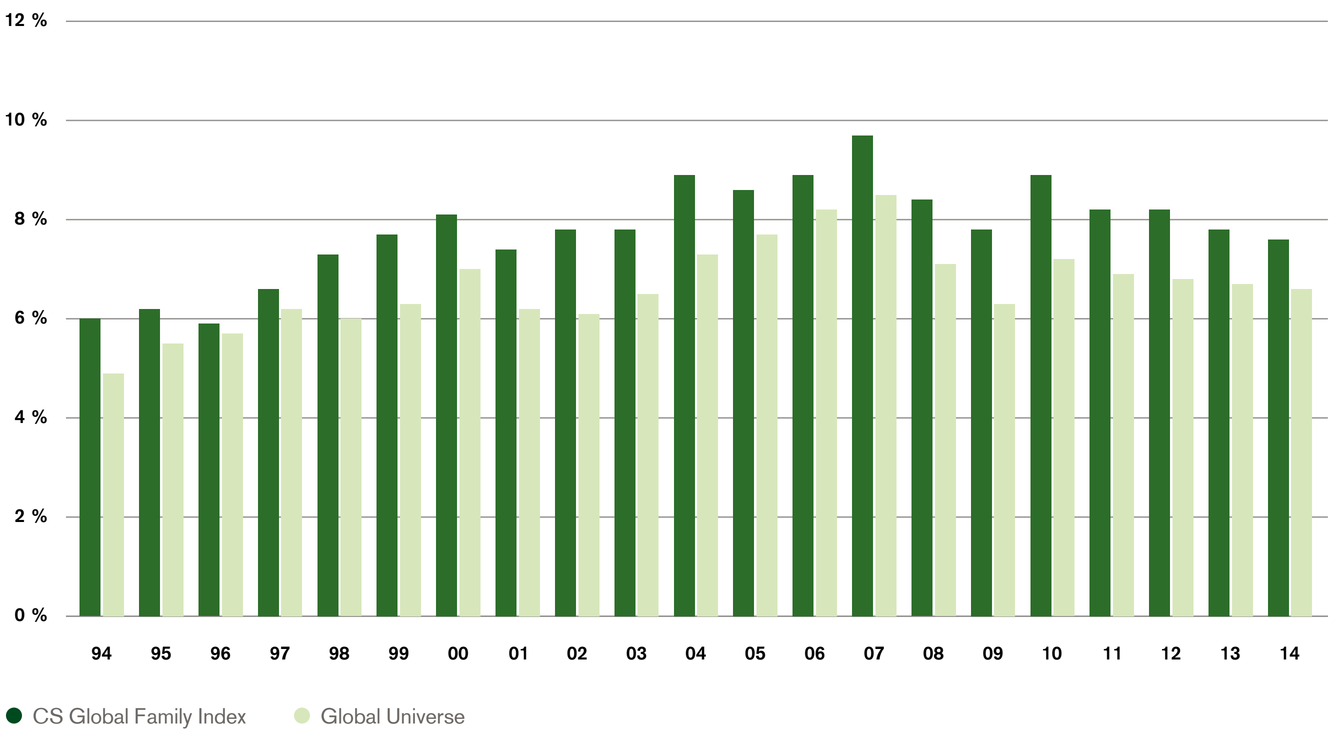
Source: Credit Suisse HOLT
Last data point: 10 November 2015

Of course, as highlighted by events in Greece, being small in itself is no guarantee of success. The ingredients for strong and sustained economic performance were analyzed in the CSRI “Success of Small Countries Report” published in 2014, where we developed a CS Country Strength index to identify the key factors. Six of the top ten countries on this index were small ones, and we found that key factors included “intangible infrastructure” like education, technology and healthcare, which were growth drivers in themselves and also built the base for future success. This index can be used to help investors in selecting countries, although it should be noted that long-term success does not guarantee immunity from adverse global economic forces in the shorter term, and indeed small countries may be affected by them more, or more rapidly, than larger countries. Switzerland and Denmark, for example, were forced to adopt negative interest rates during 2015 in part because their success was attracting excess inflows. New Zealand and Norway are registering the side effects of slower growth in China, the social costs of austerity are evident in Ireland and Portugal, and the central banks in the Nordic region have difficulty in containing the side effects of imported deflation. Overall, small countries can be seen as the dashboard on which many of the world’s imbalances first become evident.

*CFROI®, HOLT, HOLTfolio, HOLTSelect, ValueSearch, AggreGator, Signal Flag and “Powered by HOLT” are trademarks or service marks or registered trademarks or registered service marks of Credit Suisse AG or its affiliates in the United States and other countries. HOLT is a corporate performance and valuation advisory service of Credit Suisse.

Figure 3

CS Global Family 900 universe cash flow return on investment versus MSCI ACWI



Source: Credit Suisse HOLT
Last data point: 04 November 2015

Fat – the new health paradigm

The fourth and final theme discussed here is one that is only slowly starting to emerge, and the investment implications are not yet fully clear. However, it has the potential to be large in its impact, so we highlight it here for investors who wish to follow the theme from a relatively early stage and take action in future as the appropriate investment strategy becomes more apparent.

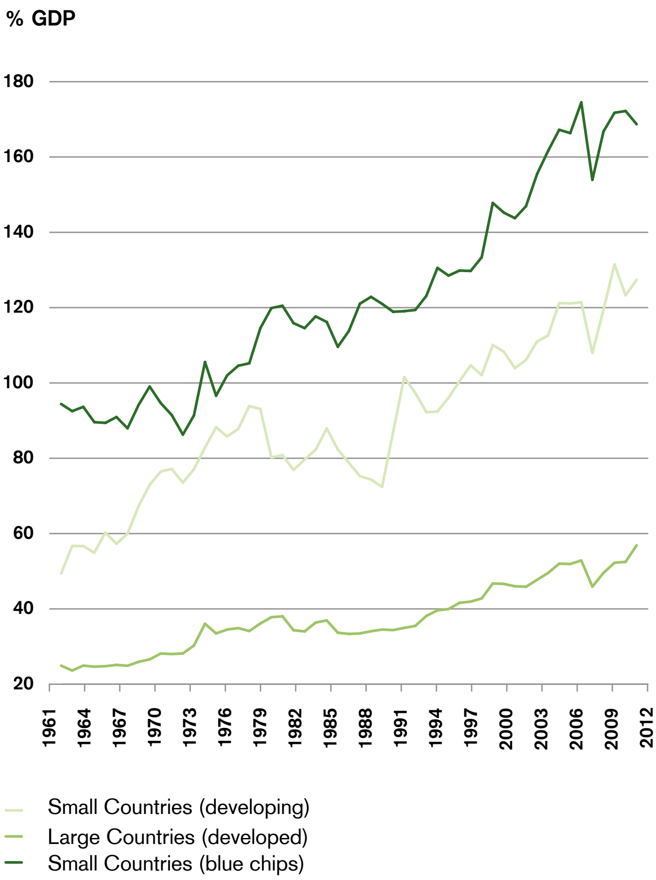
Fat is one of the three macronutrients of any diet; protein and carbohydrates are the other two. Over the last 50 years, general nutritional wisdom has been to recommend moderate consumption of fat, lower the intake of saturated fats (butter, lard, milk, red meat, coconut oil) and cholesterol (eggs) and increase the consumption of polyunsaturated fats (soybean, sunflower, corn, cottonseed oils) and carbohydrates (pasta, bread, sugar, etc.).

These recommendations have been an area of huge debate over the past 10–15 years. Some maintain that the results of these dietary recommendations are nowhere more evident that in the USA, where 35% of the population is now obese and similar percentage is suffering from metabolic syndrome. Others support maintaining the current “generally accepted principles” with a limit of 10% of daily energy intake from saturated fats and no limits on monounsaturated (olive oil, canola oil, palm oil, nuts) fats, polyunsaturated fats or carbohydrates.

In our recent CSRI Report entitled “Fat: The New Health Paradigm,” published in September 2015, we analyze in depth the ecosystem of “fat,” looking at the five main types of fats, the main fat-rich foods and who produces them, the medical research on fat and the perception of doctors, consumers and health officials.

Figure 4

Small developed economies are more open than larger ones



Source: World Bank, Credit Suisse

Table 3

Small countries dominate CS Globalization rankings

Country	Size	Score
Luxembourg	S	0.97
Switzerland	S	0.89
Hong Kong	S	o.87
Ireland	S	0.84
Belgium	M	0.82
Hungary	S	0.81
Iceland	S	0.81
Netherlands	M	0.80
Malta	S	0.80

Our market surveys show that consumers' and doctors' perceptions are aligned with the official nutritional recommendations. Yet, consumption of butter is growing globally at a rate of 2%–4% a year and whole milk in the USA in the first half of this year grew 11%, while skim milk shrank by 14%. In the last 12 months, egg consumption in the USA has grown by 2% and organic egg consumption by 21%.

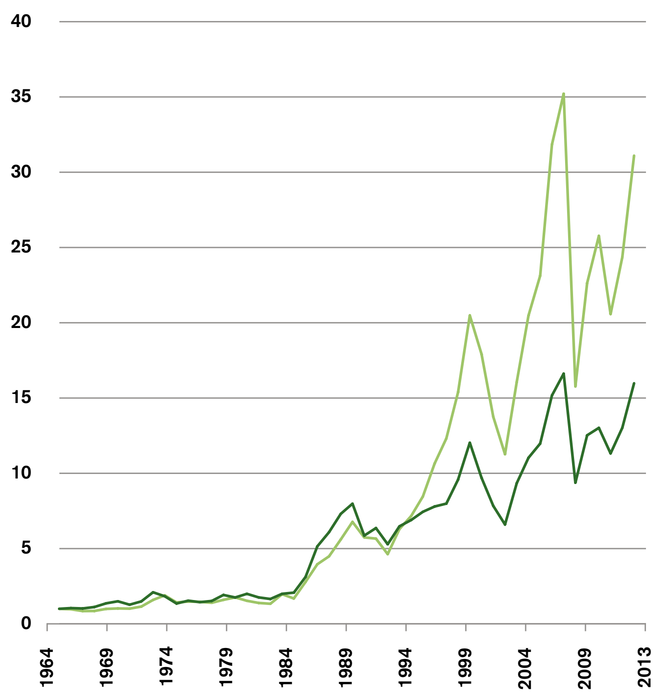
We believe that we are at a breaking point. Our own analysis and the most recent medical research support these new trends. Medical research has shown that eating cholesterol has basically no influence on the level of cholesterol in the blood and therefore on potential heart illnesses; and the link between saturated fat intake and cardiovascular risk has never been proven. In other words, eating saturated fats has no negative implication for heart-related diseases. On the other hand, at current levels of consumption in the developed world, omega-6 polyunsaturated fats (vegetable oils), are unlikely to be as beneficial as people perceived.

The report concludes that natural fats are healthy and key to the evolution of a society that focuses on developing heathy individuals. Fat is one of the best sources of energy we can store and use; saturated and monounsaturated fats are a good source of energy; and omega-3 has impressive preventive properties for our heart and brain. The companies that adjust most quickly to this new emerging consensus are likely to outperform, while those that lag are likely to underperform, and we expect this to build to a clearer investment theme over time.

Figure 5

In the long run (total returns), small countries appear to have outperformed

Indexed, 1964 =1



Small countries
Large countries

Source: DMS database, Credit Suisse / IDC

Major Global Events 2016

(subject to change)

G7 Summit
Shima, Japan

General Elections
Peru

Presidential Elections
Taiwan

General Elections
Ireland

General Elections
Philippines

Parliamentary Elections
Iran

January February March April May June

Legislative Elections
South Korea

World Economic Forum Annual Meeting
Davos, Switzerland

Boao Forum for Asia
Boao, China

General Elections
Austria

Parliamentary Elections
Slovakia

Republican Party National Convention
USA

Jackson Hole Economic Policy Symposium
USA

Parliamentary Elections
Russia

Legislative Elections
Hong Kong, China

Parliamentary Elections
Montenegro

Parliamentary Elections
Georgia

Municipal Elections
Tunisia

G20 Summit
Hangzhou, China

House of Representatives Elections
USA

Legislative Elections
Romania

July | August | September | October | November | December

Democratic Party National Convention
USA

General Elections
Thailand

Parliamentary Elections
Belarus

Presidential Elections
Bulgaria

Parliamentary Elections
Lithuania

APEC Summit
Lima, Peru

Presidential Elections
Puerto Rico

Presidential Elections
USA

Risk warning
This report may include information on investments that involve special risks. You should seek the advice of your independent financial advisor prior to taking any investment decisions based on this report or for any necessary explanation of its contents. Further information is also available in the information brochure “Special Risks in Securities Trading” available from the Swiss Bankers Association at **http://www.swissbanking.org/en/home/publikationen-link/shop_popup.htm?ID=11308**

For a discussion of the risks of investing in the securities mentioned in this report, please refer to the following Internet link:
https://research.credit-suisse.com/riskdisclosure

The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments is affected by changes in spot or forward interest and exchange rates, economic indicators, the financial standing of any issuer or reference issuer, etc., that may have a positive or adverse effect on the income from or price of such securities or financial instruments. By purchasing securities or financial instruments, you may incur a loss or a loss in excess of the principal as a result of fluctuations in market prices or other financial indices, etc. Investors in securities such as ADRs, the values of which are influenced by currency volatility, effectively assume this risk. **Past performance is not an indicator of future performance. Performance can be affected by commissions, fees or other charges as well as exchange rate fluctuations.**

Commission rates for brokerage transactions will be as per the rates agreed between CS and the investor. For transactions conducted on a principal-to-principal basis between CS and the investor, the purchase or sale price will be the total consideration. Transactions conducted on a principal-to-principal basis, including over-the-counter derivative transactions, will be quoted as a purchase/bid price or sell/offer price, in which case a difference or spread may exist. Charges in relation to transactions will be agreed upon prior to transactions, in line with relevant laws and regulations. Please read the pre-contract documentation, etc., carefully for an explanation of risks and commissions, etc., of the relevant securities or financial instruments prior to purchase

Some investments discussed in this report have a high level of volatility. High volatility investments may experience sudden and large falls in their value causing losses when that investment is realized. Those losses may equal your original investment. Indeed, in the case of some investments the potential losses may exceed the amount of initial investment, in such circumstances you may be required to pay more money to support those losses. Income yields from investments may fluctuate and, in consequence, initial capital paid to make the investment may be used as part of that income yield. Some investments may not be readily realizable and it may be difficult to sell or realize those investments, similarly it may prove difficult for you to obtain reliable information about the value, or risks, to which such an investment is exposed. Please contact your Relationship Manager if you have any questions.

Emerging markets
Where this report relates to emerging markets, you should be aware that there are uncertainties and risks associated with investments and transactions in various types of investments of, or related or linked to, issuers and obligors incorporated, based or principally engaged in business in emerging markets countries. Investments related to emerging markets countries may be considered speculative, and their prices will be much more volatile than those in the more developed countries of the world. Investments in emerging markets investments should be made only by sophisticated investors or experienced professionals who have independent knowledge of the relevant markets, are able to consider and weigh the various risks presented by such investments, and have the financial resources necessary to bear the substantial risk of loss of investment in such investments. It is your responsibility to manage the risks which arise as a result of investing in emerging markets investments and the allocation of assets in your portfolio. You should seek advice from your own advisers with regard to the various risks and factors to be considered when investing in an emerging markets investment.

Alternative investments
Alternative investments (e.g. Hedge Funds or Private Equity) are complex instruments and may carry a very high degree of risk. Such risks can arise from extensive use of short sales, derivatives and debt capital. Furthermore, the minimum investment periods can be long. Alternative investments are intended only for investors who understand and accept the associated risks. Hedge funds are not subject to the numerous investor protection regulations that apply to regulated authorized collective investments and hedge fund managers are largely unregulated. Hedge funds are not limited to any particular investment discipline or trading strategy, and seek to profit in all kinds of markets by using leverage, derivatives, and complex speculative investment strategies that may increase the risk of investment loss. Commodity transactions carry a high degree of risk and may not be suitable for many private investors. The extent of loss due to market movements can be substantial or even result in a total loss. Investors in real estate are exposed to liquidity, foreign currency and other risks, including cyclical risk, rental and local market risk as well as environmental risk, and changes to the legal situation.

Interest rate and credit risks
The retention of value of a bond is dependent on the creditworthiness of the Issuer and/or Guarantor (as applicable), which may change over the term of the bond. In the event of default by the Issuer and/or Guarantor of the bond, the bond or any income derived from it is not guaranteed and you may get back none of, or less than, what was originally invested.

Global disclaimer / important information

This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject CS to any registration or licensing requirement within such jurisdiction.

The term “Credit Suisse” is the global marketing brand name for the investment banking, asset management and private banking services offered by Credit Suisse Group subsidiaries and affiliates worldwide. Each legal entity in Credit Suisse Group is subject to distinct regulatory requirements and certain products and services may not be available in all jurisdictions or to all client types. There is no intention to offer products and services in countries or jurisdictions where such offer would be unlawful under the relevant domestic law.

References in this report to CS include Credit Suisse AG, the Swiss bank, its subsidiaries and affiliates. For more information on our structure, please use the following link:

http://www.credit-suisse.com/who_we_are/en/

NO DISTRIBUTION, SOLICITATION, OR ADVICE: This report is provided for information and illustrative purposes and is intended for your use only. It is not a solicitation, offer or recommendation to buy or sell any security or other financial instrument. Any information including facts, opinions or quotations, may be condensed or summarized and is expressed as of the date of writing. The information contained in this report has been provided as a general market commentary only and does not constitute any form of regulated financial advice, legal, tax or other regulated service. It does not take into account the financial objectives, situation or needs of any persons, which are necessary considerations before making any investment decision. You should seek the advice of your independent financial advisor prior to taking any investment decisions based on this report or for any necessary explanation of its contents. This report is intended only to provide observations and views of CS at the date of writing, regardless of the date on which you receive or access the information. Observations and views contained in this report may be different from those expressed by other Departments at CS and may change at any time without notice and with no obligation to update. CS is under no obligation to ensure that such updates are brought to your attention. Any questions about topics raised in this report or your investments should be made directly to your local relationship manager or other advisers.

FORECASTS & ESTIMATES: Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. To the extent that this report contains statements about future performance, such statements are forward looking and subject to a number of risks and uncertainties. Unless indicated to the contrary, all figures are unaudited. All valuations mentioned herein are subject to CS valuation policies and procedures.

CONFLICTS: CS reserves the right to remedy any errors that may be present in this report. Credit Suisse, its affiliates and/or their employees may have a position or holding, or other material interest or effect transactions in any securities mentioned or options thereon, or other investments related thereto and from time to time may add to or dispose of such investments. CS may be providing, or have provided within the previous 12 months, significant advice or investment services in relation to the investments listed in this report or a related investment to any company or issuer mentioned. Some investments referred to in this report will be offered by a single entity or an associate of CS or CS may be the only market maker in such investments. CS is involved in many businesses that relate to companies mentioned in this report. These businesses include specialized trading, risk arbitrage, market making, and other proprietary trading.

TAX: This material does not contain all of the information that you may wish to consider and it does not take into account your individual situation or circumstances. Nothing in this report constitutes investment, legal, accounting or tax advice. CS does not advise on the tax consequences of investments and you are advised to contact an independent tax advisor to understand the implications of any investment specific to your personal financial situation. The levels and basis of taxation are dependent on individual circumstances and are subject to change.

SOURCES: Information and opinions presented in this report have been obtained or derived from sources which in the opinion of CS are reliable, but CS makes no representation as to their accuracy or completeness. CS accepts no liability for a loss arising from the use of this report.

WEBSITES: This report may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the report refers to website material of CS, CS has not reviewed the linked site and takes no responsibility for the content contained therein. Such address or hyperlink (including addresses or hyperlinks to CS’s own website material) is provided solely for your convenience and information and the content of the linked site does not in any way form part of this report. Accessing such website or following such link through this report or CS’s website shall be at your own risk.

Distribution

Except as otherwise specified herein, this report is distributed by Credit Suisse AG, a Swiss bank, authorized and regulated by the Swiss Financial Market Supervisory Authority.

Australia: This material is distributed in Australia by Credit Suisse AG, Sydney Branch solely for information purposes only to persons who are **“wholesale clients”** (as defined by section 761G(7) of the Corporations Act. Credit Suisse AG, Sydney Branch is regulated by the Australian Prudential Regulation Authority as an Australian branch of a foreign authorised deposit-taking institution (“**Foreign ADI**”). As a Foreign ADI, deposits made with Credit Suisse are not covered by the provisions of Division 2 of the Banking Act 1959 (Cth.) entitled “Protection of Depositors” and accordingly, deposits with Credit Suisse do not have the benefit of those depositor protection provisions of the Banking Act.

Austria: This document constitutes marketing material within the meaning of WAG 2007 and is not the result of a financial analysis or research. It is distributed in Austria by CREDIT SUISSE (LUXEMBOURG) S.A. Zweigniederlassung Österreich. The Bank is a branch of CREDIT SUISSE (LUXEMBOURG) S.A., a duly authorized credit institution in the Grand Duchy of Luxembourg with address 5, rue Jean Monnet, L-2180 Luxemburg. It is further subject to the prudential supervision of the Luxembourg supervisory authority, the Commission de Surveillance du Secteur Financier (CSSF), 110, route d’Arlon, L-2991 Luxembourg, Grand Duchy of Luxembourg as well as the Austrian supervisory authority, the Financial Market Authority (FMA), Otto-Wagner Platz 5, A-1090 Vienna.

Gibraltar: This report is distributed by Credit Suisse (Gibraltar) Limited. Credit Suisse (Gibraltar) Limited is an independent legal entity wholly owned by Credit Suisse and is regulated by the Gibraltar Financial Services Commission.

Guernsey: This report is distributed by Credit Suisse (Channel Islands) Limited, an independent legal entity registered in Guernsey under 15197, with its registered address at Helvetia Court, Les Echelons, South Esplanade, St Peter Port, Guernsey. Credit Suisse (Channel Islands) Limited is wholly owned by Credit Suisse AG and is regulated by the Guernsey Financial Services Commission. Copies of the latest audited accounts are available on request.

Hong Kong: This report is issued in Hong Kong by Credit Suisse AG Hong Kong Branch, an Authorized Institution regulated by the Hong Kong Monetary Authority and a Registered Institution regulated by the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong).

Italy: This report is distributed in Italy by Credit Suisse (Italy) S.p.A., a bank incorporated and registered under Italian law subject to the supervision and control of Banca d’Italia and CONSOB, and also distributed by Credit Suisse AG, a Swiss bank authorized to provide banking and financial services in Italy. Financial instruments mentioned in this document could be considered complex products and therefore may not be suitable for retail clients.

Israel: This document has not been approved by the Israel Securities Authority and will only be distributed to Israeli residents in a manner that will not constitute “an offer to the public” under sections 15 and 15a of the Israel Securities Law, 5728-1968 (“the Securities Law”) or section 25 of the Joint Investment Trusts Law, 5754-1994 (“the Joint Investment Trusts Law ”), as applicable. This document may not be reproduced or used for any other purpose, nor be furnished to any other person other than those to whom copies have been sent. Nothing in this document should be considered investment advice or investment marketing as defined in the Regulation of Investment Counselling, Investment Marketing and Portfolio Management Law, 5755-1995.

Japan: This report is solely distributed in Japan by Credit Suisse Securities (Japan) Limited, Financial Instruments Dealer, Director-General of Kanto Local Finance Bureau (Kinsho) No. 66, a member of the Japan Securities Dealers Association, Financial Futures Association of Japan, Japan Investment Advisers Association, and Type II Financial Instruments Firms Association. Credit Suisse Securities (Japan) Limited will not distribute or forward this report outside Japan.

Jersey: This report is distributed by Credit Suisse (Channel Islands) Limited, Jersey Branch, which is regulated by the Jersey Financial Services Commission for the conduct of investment business. The address of Credit Suisse (Channel Islands) Limited, Jersey Branch, in Jersey is: TradeWind House, 22 Esplanade, St Helier, Jersey JE4 5WU.
Portugal: This marketing material is distributed in Portugal by Credit Suisse (Luxembourg) S.A. - Sucursal Portugal, who is an investment service provider authorized and regulated by the Comissão do Mercado dos Valores Mobiliários (the "CMVM"), and relates to the service of discretionary portfolio management to be rendered by Credit Suisse (Luxembourg) S.A., who is an investments service provider authorized and regulated by the Commission de Surveillance du Secteur Financier (the "CSSF"), in Luxembourg.
Singapore: This material is distributed in Singapore by Credit Suisse AG, Singapore Branch, which is licensed by the Monetary Authority of Singapore under the Banking Act (Cap. 19) to carry on banking business. This material has been prepared and issued for distribution in Singapore to institutional investors, accredited investors and expert investors (each as defined under the Financial Advisers Regulations (the "**FAR**")) only, and is also distributed by Credit Suisse AG, Singapore Branch to overseas investors (as defined under the FAR). By virtue of your status as an institutional investor, accredited investor, expert investor or overseas investor, Credit Suisse AG, Singapore Branch is exempted from complying with certain compliance requirements under the Financial Advisers Act, Chapter 110 of Singapore (the "**FAA**"), the FAR and the relevant Notices and Guidelines issued thereunder, in respect of any financial advisory service which Credit Suisse AG, Singapore branch may provide to you. These include exemptions from complying with: Section 25 of the FAA (pursuant to Regulation 33(1) of the FAR); Section 27 of the FAA (pursuant to Regulation 34(1) of the FAR); Section 36 of the FAA (pursuant to Regulation 35(1) of the FAR); and Sections 25 to 29 and 36 of the FAA (pursuant to Regulation 36(1) and (2) of the FAR). **Singapore recipients should contact Credit Suisse AG, Singapore Branch for any matters arising from, or in connection with, this material.**
Spain: This report is distributed in Spain by Credit Suisse AG, Sucursal en España, authorized under number 1460 in the Register by the Banco de España.
United Kingdom: This material is issued by Credit Suisse (UK). Credit Suisse (UK) Limited, is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. The protections made available by the Financial Conduct Authority and/or the Prudential Regulation Authority for retail clients do not apply to investments or services provided by a person outside the UK, nor will the Financial Services Compensation Scheme be available if the issuer of the investment fails to meet its obligations. To the extent communicated in the United Kingdom ("UK") or capable of having an effect in the UK, this document constitutes a financial promotion which has been approved by Credit Suisse (UK) Limited which is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority for the conduct of investment business in the UK. The registered address of Credit Suisse (UK) Limited is Five Cabot Square, London, E14 4QR. Please note that the rules under the UK's Financial Services and Markets Act 2000 relating to the protection of retail clients will not be applicable to you and that any potential compensation made available to "eligible claimants" under the UK's Financial Services Compensation Scheme will also not be available to you. Tax treatment depends on the individual circumstances of each client and may be subject to changes in future.
UNITED STATES: NEITHER THIS REPORT NOR ANY COPY THEREOF MAY BE SENT, TAKEN INTO OR DISTRIBUTED IN THE UNITED STATES OR TO ANY US PERSON (WITHIN THE MEANING OF REGULATION S UNDER THE US SECURITIES ACT OF 1933, AS AMENDED).

15C028A_IO

Credit Suisse AG
P.O. Box 100
CH-8070 Zurich
credit-suisse.com

Credit Suisse (UK) Limited
5 Cabot Square
London E14 4QR