

Special focus

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# Editorial



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Research Strategic Advisory



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Head of Investment Strategy

Since the increase in the ECB quantitative easing program to EUR 80 billion per month, government bond yields have become further compressed. There are now 16 European government bond markets where 2-year yields are negative. Outside the Eurozone, the Japanese government yield curve is negative out to 20 years and, for Switzerland, all government bonds have a negative yield, even going out to 50 years. In the Eurozone, the Bund 10-year yield is now also in negative territory. Eurozone bond spreads are narrow, despite increased political risks in a number of countries, and the ECB's purchases of corporate bonds have depressed corporate bond spreads. This low-yield environment will persist, unless there is an acceleration in economic growth with an associated upturn in inflation, with investors moving out of fixed income into "riskier" assets – an unlikely prospect, at least in the near term. Investors are addressing these challenges by reviewing the relevance of existing portfolio benchmarks, alternative strategies such as long/short positions, and exposures to asset classes such as emerging debt, while increasing positions to "fixed income proxies" such as infrastructure. In this and future editions of Trends, we will focus on these themes, since we are very sensitive to the difficult environment that investors are operating in, and the need to generate well-risk-managed ideas for producing positive returns.

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Editorial deadline: 05 July 2016

## Investment strategy and asset allocation

# Riskier asset classes under pressure

- The UK vote to leave the EU has triggered a sell-off in riskier asset classes. We are keeping a negative view on equities, as we expect high volatility to persist.
- We have turned more defensive within equities, by downgrading the Eurozone and the UK, while upgrading the low-beta US market.

**Florence Lombardo**  
Investment Strategy Switzerland

In a clear vote, United Kingdom citizens decided to leave the European Union in the referendum which took place June 23. This amounts to a political watershed in our view, with lasting implications for both the EU and for the UK, which now even potentially puts the unity of the country into question. The coming weeks and months will be shaped by strong uncertainty with regards to the path and timeline of the UK exit, future relations between the UK and the EU, and political contagion risks in the rest of the Europe. Financials markets are therefore expected to remain highly volatile as a result. On a somewhat more positive note for markets, we note that anti-European parties did not see rising support in the Spanish legislative elections, which took place three days after the UK referendum.

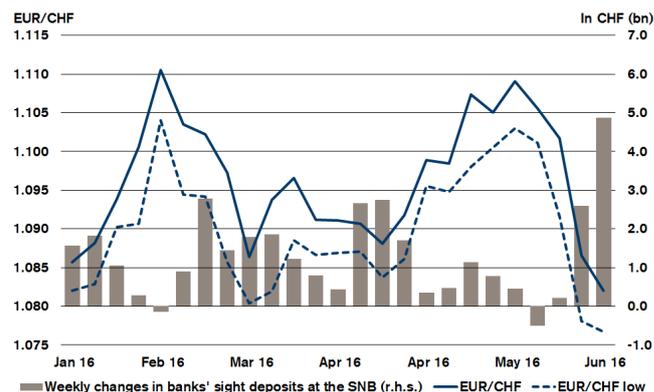
In terms of the economic impact of a “Brexit,” the UK will suffer most, with growth expected to slowdown meaningfully. Europe and Switzerland will also be impacted, albeit by a much lesser extent: the UK represents only roughly 8% and 6% of German and Swiss exports, respectively. However, there could be a more meaningful impact from falling consumer sentiment and company investments. We therefore expect central banks globally to play an important role in keeping the global economic recovery on track, by adopting a more dovish stance if necessary.

Given European Central Bank support and the continued strength of domestic demand, we expect the Eurozone to grow at a moderate rate this year, but view the likelihood of the region falling back into recession as being low. In our view, the European Central Bank (ECB) is now even more likely to extend its asset purchase program by six months at its September meeting. It could potentially even expand the program, though this is not our base case. Due to the significant UK growth slowdown which we foresee, we expect the Bank of England to cut policy rates in the coming months, while a reactivation of its asset purchase program is also possible.

In Switzerland, the Swiss National Bank (SNB) has already been strongly intervening in the FX market, to dampen CHF appreciation pressure resulting from capital inflows. We expect currency interventions to remain the primary tool which the SNB will use in that regard, though in the case of persistent

capital inflows and potential additional easing measures by the ECB, the likelihood of the SNB lowering the deposit rate further in negative territory would increase.

## Increase in bank's sight deposits indicates strong currency intervention by the SNB



Source: Datastream, Credit Suisse / IDC

With “Brexit” having been mentioned as one of the risks the Fed was watching, and given the resulting financial market turbulences and stronger USD, we believe that the Federal Reserve will wait until at least December to raise policy rates. Domestic demand remains a strong growth driver in the USA, though the manufacturing side continues to be weak, as reflected in the latest durable goods orders. In Japan, we expect the central bank to cut interest rates further, in an attempt to revive economic growth and inflation, as well as to reduce JPY attractiveness.

In the days prior to the referendum, the financial markets had actually positioned for a “remain” outcome. As they were not prepared for a “Brexit” vote, riskier asset classes sold off significantly, while safe-haven assets were in strong demand following the vote. Given the high level of uncertainty that will persist in our view, we would expect riskier asset classes to remain under pressure over the next three-to-six months.

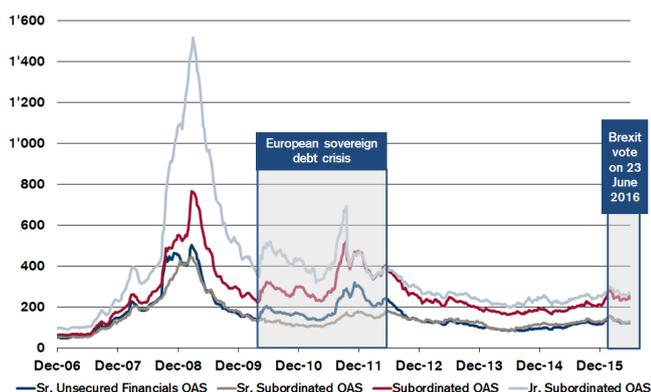
## Fixed income

Bond yields moved lower at the beginning of June, following weak US labor data, and core government bonds were the main beneficiaries of investors' flight to quality in the aftermath of the "Brexit" vote. The yield on 10Y German bunds turned negative, the Swiss yield curve is in negative territory for maturities up to 30 years, and US yields fell to their lowest level since 2012. While bond yields are unattractive from a valuation standpoint, they could remain low for some time, as we expect financial market turbulences to persist amid subdued economic growth. The Fed also hinted towards a lower long-term natural rate of interest, on the back of weak productivity.

We are remaining neutral on fixed income overall, favoring inflation-linked bonds over nominal government debt, given the medium-term recovery in commodity prices. In terms of regions however, we do not expect Swiss government bonds to underperform anymore, as strong capital inflows to Switzerland could fuel expectations of a renewed lowering of deposit rates by the Swiss National Bank.

Within fixed income, investment-grade credits continue to offer the best risk/reward in our view. Following the "Brexit" vote however, we have moved to an underperform view on financials, with European subordinated debt in particular likely to remain under pressure. For valuation reasons, we are focusing on longer maturities in USD non-financial debt. High-yield spreads have widened, but lower-rated credits are at risk of further spread-widening in our view, as default rates increase. We are thus remaining neutral on the asset class. In emerging markets, we continue to see selective opportunities, such as Brazilian local debt given the high yield, and where we also see the potential for the currency to appreciate.

## Vote for "Brexit" not discounted in financial spreads ahead of the vote



Option-adjusted spread (OAS) across the capital structure

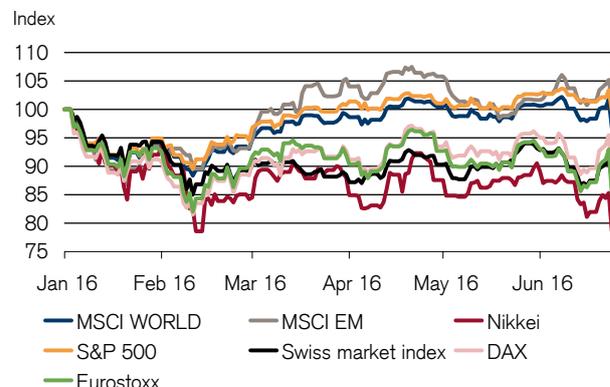
Source: Credit Suisse, Bloomberg

## Equities

Ahead of event risks and missing catalysts for equity upside, we adopted a defensive investment strategy, by turning cautious on equities on April 21. In the portfolios, we also moved to a more pronounced underweight in equities in mid-June. Following the "Brexit" vote and subsequent equity market sell-off, we are confirming this negative view, as political risk should keep volatility high. While central banks should provide support to the markets, this will not be enough to trigger a sustainable recovery, in our view. We are not expecting much impetus

from the Q2 2016 earnings season, as the subdued macroeconomic environment is likely to result in muted earnings growth. Moreover, valuations have not yet turned attractive, and technical analysis also points towards further equity weakness.

## YTD performance – major equity indices



Source: Bloomberg, Credit Suisse / IDC

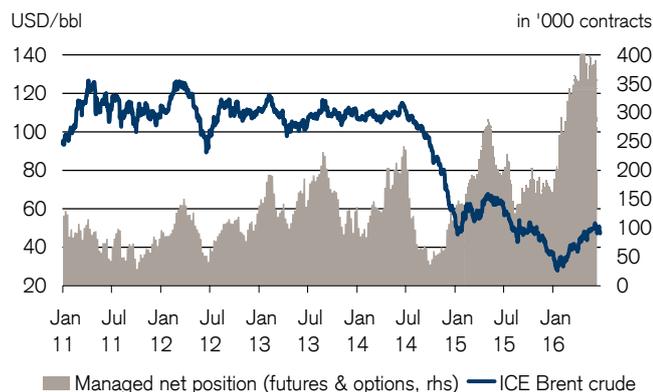
While continuing to underweight equities, we are turning even more defensive by adjusting our regional and sectoral allocation. We are reducing our holdings in Eurozone equities, while increasing exposure to the low-beta US market. With economic growth in the UK expected to slow down significantly, and earnings revisions having already turned, we now expect the UK market to underperform. While the performance of Swiss equities will largely depend on CHF and Eurozone growth developments, the SNB will continue to intervene in the FX markets to dampen CHF appreciation in our view. We are thus maintaining our outperform view on the more defensive Swiss market, as it should also benefit from the large exposure to its healthcare sector, which we recently upgraded on the back of solid fundamentals and US exposure.

Our favored sectors in the current environment are thus healthcare and IT, where we see good growth prospects. We have neutralized our positive stance towards financials, as it is the sector that is suffering the most from the political uncertainty and low interest rates, despite inexpensive valuations. We have also upgraded utilities to neutral, as they are unlikely to underperform in the current risk-off environment. Energy, materials and consumer discretionary are the sectors we expect to lag over the next three to six months.

## Alternative investments

We are staying neutral on commodities overall, but see short-term correction potential in energy and oil. Oil is subject to shifts in investor sentiment, particularly as significant long positions have been built up. Moreover, easing disruptions should lead to increased supply, thereby temporarily slowing the rebalancing process. We are thus moving energy to underperform on a tactical basis, as oil prices could move towards USD 40/barrel, before recovering on improved medium-term prospects.

### Brent price vs. speculative positioning (futures and options)



Source: Bloomberg, Credit Suisse / IDC

At the beginning of June, we turned neutral on gold with the Fed's dovish stance and rising political risks limiting underperformance, in our view. Gold, which typically acts as a safe-haven asset, has benefitted from investors' increased risk aversion. At these levels however (around USD 1325/oz at the time of writing,) we would not increase gold positions, as a stronger USD limits the upside, and very stretched positioning makes it vulnerable to a repricing once risks abate.

In the real estate space, we are maintaining a neutral positioning on global REITs, but have moved UK REITs from outperform to underperform. The UK property market is in the late stage of the cycle, displaying slowing rental growth, and with vacancy rates bottoming out. We expect UK REITs to suffer heavily from the vote to leave the EU, and the correspondingly uncertain economic outlook. We are also maintaining a cautious view on REITs from developed Asia ex Japan, and on the expensive Swiss real estate stocks. We continue to view hedge funds as an important portfolio component, and are staying overweight the asset class. We are nevertheless focusing on strategies with low directional exposure, such as equity market-neutral, fixed income arbitrage and global macro.

### Currencies

Currency fluctuations have been strong following the UK vote, with the GBP/USD dropping to its lowest level in more than 30 years. While this implies an attractive valuation for the

GBP, we would not turn positive on the currency. The Bank of England is likely to cut rates, and we expect the high uncertainty with regards to the UK political and economic outlook to be a drag.

### Implied volatility spikes sharply post-"Brexit" vote

Currency volatility vs USD (1M implied)



Source: Bloomberg, Credit Suisse / IDC

Safe-haven currencies (CHF, JPY) have been in strong demand, with the SNB intervening to stabilize the currency, with EUR/CHF levels currently around 1.07-1.08. With the SNB thus limiting the downside while rates spreads cap EUR upside, we are staying neutral on the EUR/CHF. The JPY has appreciated by 15% against the USD since the beginning of the year, and further strength cannot be excluded in the current environment. The country's external surplus and continued supportive valuations limit the downside, despite the fact that the Bank of Japan is likely to cut rates this month.

The risk-off environment has also led the USD to gain against the EUR and the CHF. With rates support however being limited, as the Fed is very unlikely to hike interest rates prior to December, we are refraining from turning positive on the USD at this stage. The cheap NOK is currently our preferred currency, while contagion risks from the Brexit vote are likely to prevent the SEK from appreciating against the USD, the EUR and the CHF over the coming months.

(29/06/2016)

### Asset allocation

	Bench- mark	Previous month	---	--	-	0	+	++	+++	Comment
Liquidity	5.0%	4.0%- 6.0%					6%-9%			Higher allocation to cash, given more pronounced equity underweight.
Bonds total	40.0%					39.0%- 41.0%				Neutral overall. We favor investment-grade credits over government bonds.
Bonds CHF	24.0%	22%- 23.5%				23.5%- 24.5%				Neutral as the SNB could come under pressure to ease further.
Bonds core* (ex CHF)	8.0%					7.5% - 8.5%				
Bonds EUR	2.3%					1.8%- 2.8%				We are staying neutral on EMU bonds. Carry in peripheral bonds has become more attractive, but the European premium should remain wide.
Bonds GBP	0.5%				0.0%					Very unattractive after drop in yields post-"Brexit."
Bonds USD	3.6%					3.1%- 4.1%				Fed not committed to a pre-set hiking path. Could benefit from further foreign inflows.
Bonds CAD	0.2%				0.0%					Improving economic momentum and improving oil picture expected to drive CAD yields higher.

<b>Bonds core* (ex CHF)</b>	<b>8.0%</b>				<b>7.5% - 8.5%</b>					
Bonds JPY	1.3%				0.8%-1.8%					Very low carry balanced by potential for more BoJ easing.
Bonds AUD	0.1%				0%-0.6%					Highest carry among majors, but market expectations for easing are already high.
<b>Bonds non-core*</b>	<b>8.0%</b>				<b>7.5%-8.5%</b>					
Bonds high-yield	4.0%				3.5%-4.5%					Technical view remains negative, but other input factors are neutral.
Bonds emerging markets	4.0%				3.5%-4.5%					Only risk/flow indicators continue to point to outperformance, with EM HC rally starting to mature.
<b>Equities total</b>	<b>30.0%</b>	<b>27.0% - 29.0%</b>		<b>25% - 27%</b>						<b>We increased the equity underweight mid-June, and maintain this cautious stance. Markets were not positioned for "Brexit," and global equities are expected to correct further given high uncertainty.</b>
<b>Swiss equities</b>	<b>10.0%</b>									<b>Attractive valuations and generally a defensive stance keep us overweight in Swiss stocks.</b>
<b>Other equities</b>	<b>20.0%</b>				<b>17% - 19%</b>					
Equities EUR	2.0%	2.5%-4%			0%-1.5%					Risk that markets will price in another European crisis.
Equities Great Britain	1.4%	0.9% - 1.9%			0% - 0.9%					Investors not positioned for "Brexit" – vulnerable to selling pressure.
Equities USA	10.0%		6% - 8%		8% - 9.5%					Less directly exposed to fall-out from "Brexit," we are therefore reducing the underweight position.
Equities Canada	0.7%				0.2% - 1.2%					Economic growth is likely to pick up in H2 after the very weak Q2. Most indicators point to a neutral equity view, however.
Equities Japan	1.4%				0.9% - 1.9%					Monetary policy remains supportive and buybacks are robust. Exposure to the strong currency makes it vulnerable, however.
Equities Australia	0.5%				0% - 1%					The labor market is improving and valuations are inexpensive, but our negative outlook on industrial metals weighs on its equities.
Equities emerging markets	4.0%				3.5% - 4.5%					Valuations are inexpensive, but technicals have deteriorated. Risks from the Chinese slowdown in H2 and weak commodity outlook.
<b>Alternative investments</b>	<b>10.0%</b>									<b>Overweight overall given the neutral position in commodities and overweight in hedge funds.</b>
Commodities	2.5%				2.0% - 3.0%					Commodities remain neutral, but we have turned tactically negative on energy. Neutral view on gold.
Private equity	2.5%				2.0% - 3.0%					
Hedge funds*	5.0%				5.5% - 7.0%					The outlook for hedge funds remains positive, though expected returns are moderate. We favor styles with a low beta to the market.
<b>Real Estate</b>	<b>15.0%</b>				<b>14% - 16%</b>					<b>We are maintaining our neutral rating for global REITs.</b>
Swiss real estate	12.0%				11.5% - 12.5%					Its defensive qualities help in a volatile market environment, but are counterbalanced by mature underlying real estate markets. Improved technical view.
Other real estate	3.0%				2.5% - 3.5%					UK REITs expected to underperform post-"Brexit" vote, given high uncertainty and a late-cycle UK real estate market.
<b>Currencies</b>										
CHF	72.0%				71% - 73%					Neutral on EUR/CHF, with the SNB intervening in the FX market to prevent CHF strength.
Other currencies	28.0%				27% - 29%					FX volatility expected to remain high. Given the increased levels of uncertainty, we are refraining from taking a directional view, and staying neutral on major currency pairs.
<b>Duration bonds CHF</b>	<b>6.5</b>				<b>6.25 - 6.75</b>					<b>Neutral duration.</b>
<b>Duration bonds EUR</b>	<b>6.1</b>				<b>5.85 - 6.35</b>					<b>Neutral duration.</b>
<b>Duration bonds USD</b>	<b>5.5</b>				<b>5.25 - 5.75</b>					<b>Neutral duration.</b>
		---	--	-	0	+	++	+++		
Single asset class rules**		< -40%	-2.0% - 4.0%	-0.5% - 2.0%	+/- 0.5%	+0.5% - 2.0%	+2.0% -	> +40%		
Aggregated asset class rules**		< -50%	-3.0% - 5.0%	-1.0% - 3.0%	+/- 1.0%	+1.0% - 3.0%	+3.0% -	> +50%		

\*Hedged in CHF; \*\*Absolute deviation from benchmark weighting

Note: Aggregate asset class: cash, bonds total, equities total, alternative investments, real estate, currencies (CHF, others)

Source: Credit Suisse

## Special focus

# Energy infrastructure: Attractive new territory for investors

- Energy infrastructure projects offer interesting investment opportunities in today's environment.
- Moreover, subsidies have stepped up the pace of structural change and require innovative (financing) solutions.
- Planning of cash flows and high regulatory certainty are key components when choosing and implementing financing alternatives.

Roland Dörig

Dominik Bollier

## Energy infrastructure in focus

Owing to the increase in market volatility and the low interest rate environment, investors now have to consider including new categories of investments in their investment universes. Many leading investors have thus extended their investment strategies to include infrastructure investments in the "real assets" category. In general, these investments offer good visibility on cash flows and frequently also inflation-linked returns that are uncorrelated with equity markets.

Infrastructure can basically be broken up into economic and social investments. Economic infrastructure categories include: communications, transport, and energy & utilities. In Switzerland (and also throughout Europe), investors can gain direct exposure to the latter sector, ranging from electricity production and transmission through to gas supply.

## The electricity market needs additional capital

The structural change in the European energy sector is also putting Swiss utility companies under economic pressure. One of the main drivers is the policy of subsidies for renewable energy technologies in Europe and the consequent drop in prices for conventionally produced non-subsidized energy. In this way, many utilities are no longer in a position to fund the necessary investments in maintenance and modernization by themselves. Hence they seek long-term financial investors, offering good entry opportunities in that investors to some extent take over the role of energy providers.

## Three investment categories with various opportunities and risks require differing focuses

For most institutional investors, energy infrastructure is a new territory. Economically different, the investment possibilities can roughly be split into three categories – subsidized investments, investments with regulated capital costs and unsubsidized investments.

Subsidized investments benefit from feed-in tariffs and include, for example, small hydroelectric power, wind energy, photovoltaics and biomass investments. Investments with regulated capital costs include, for example, investing in the Swiss transmission grid. Among other things, unsubsidized investments include large hydroelectric plants and (pump) storage facilities.

### ■ Subsidized investments

The essential feature here is financial support. This enables the owner to know the selling price in advance for power produced over a longer period (usually 20–25 years). In this way, the owner is not exposed to price fluctuations in the electricity wholesale market. Thus the investment risks are manageable, which can in turn trigger new investments in this area due to better planning.

However, there is still the uncertainty as to how much power will actually be produced and thus potential fluctuations in revenue. For this reason, hydrological and/or meteorological conditions should be modelled into an investment analysis.

Another aspect to consider is the impact of changing interest rates on the value of such investments. Since the cash flows are for the most part fixed and the investments will probably be valued using the net present value method, resulting in a similar valuation behavior to bonds: as soon as interest rates rise, the net present value and thus the so-called net asset value of the portfolio decline.

## ■ Investments with regulated capital costs

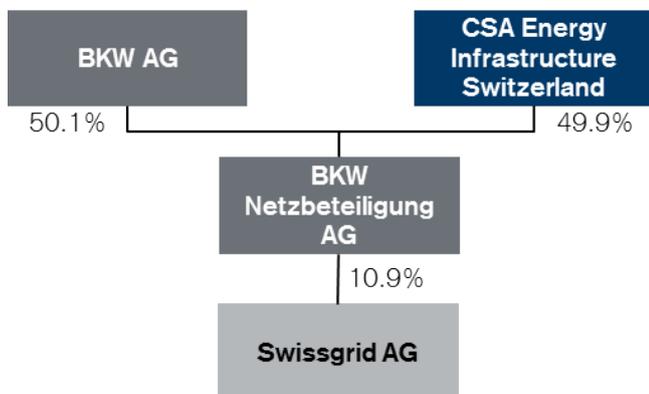
With this type of investment, the regulator fixes the return on capital employed. Among other factors such as eligible costs, the regulatory cost of capital mechanism is the key driver behind the owner's return on equity. The regulatory cost of capital is especially used when the investment has a monopoly-like characteristic, such as the transmission grid. It is aimed at preventing the owner from earning monopoly profits.

Accordingly, the regulatory risk needs to be well considered with this type of investment. A shift in the regulatory environment inevitably has a direct impact on the profitability of an investment. On the one hand, the regulator aims to ensure that the owner does not earn unreasonable returns, but on the other hand aims to create an environment where systems and plants are maintained and expanded if necessary. In this respect, Switzerland has a highly reliable regulator to fall back on. This kind of investment is therefore not dependent on how high prices are or how much energy is produced.

CSA Energy Infrastructure Switzerland is one example investor. It has a 49.9% participation in a subsidiary of the BKW energy company, which in turn has around an 11% equity stake in Swissgrid (the national grid company in Switzerland).

The partnership between BKW and CSA combines the long-term characteristics of energy infrastructure investments with the long-term investment horizon of the Swiss pension funds.

### CSA infrastructure investment in Swissgrid AG



Source: Credit Suisse

## ■ Unsubsidized investments

With these investments, the owner is completely exposed to market forces, especially the electricity market and the prices for power produced. While costs can be reasonably well forecast based on the historical costs of the respective technologies, the volatility of revenues due to constantly changing electricity prices is a fundamental problem. Hence it is important that the electricity-price risk is isolated or at least mitigated in an energy infrastructure portfolio.

Long-term purchase agreements can help here and offer a “win-win” situation in many respects. On the one hand, the capital investor receives a steady return because the electricity price can be agreed on for a longer period. On the other hand, the power company benefits from guaranteed access to a set

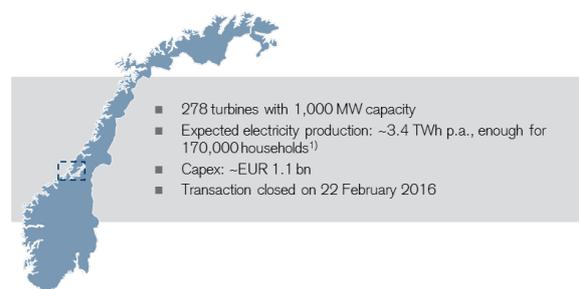
amount of electricity without having to invest as much capital and without being subjected to the volatility of the wholesale market.

The risk profile of unsubsidized assets thus depends strongly on the underlying terms of the contract.

### Fosen Vind – the largest European onshore wind project

In February 2016, Statkraft (Europe's largest producer of renewable energy), TrønderEnergi and Nordic Wind Power (a CSEIP-led investor consortium) announced they would join forces to realize Europe's largest onshore wind power project. Fosen Vind has an installed capacity of more than 1,000 megawatts and estimated annual electricity production of around 3,400 gigawatt hours – enough to provide power to 175,000 Norwegian homes (or 750,000 Swiss homes). The project portfolio comprises six wind parks that will commence operations successively from 2018 until 2020. The total investment amount is around EUR 1.1 billion. CSEIP was a driving force behind the realization of the project – setting up and administering the investment vehicle for institutional investors, setting up a consortium for external financing, negotiating long-term electricity and certificate purchase agreements and implementing numerous mechanisms to protect investors from negative developments.

### Overview of Fosen Vind DA

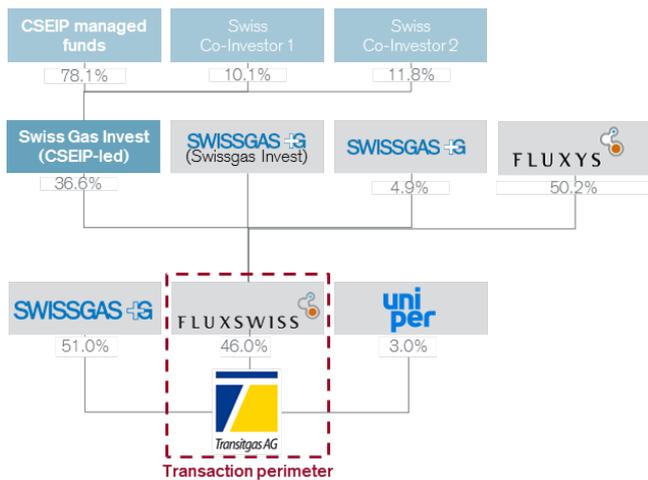


Source: Credit Suisse

### FluxSwiss – Co-Investing using right of first offer

Another example is the recently successful participation in FluxSwiss and the related indirect participation in Transitgas, which owns the Swiss high-pressure natural gas pipeline running from the north to the south borders of Switzerland with the right to market around 90% of the pipeline's capacity. This high-pressure pipeline connects the gas fields in northern Europe with Italy, thus helping to diversify the country's gas supply. Moreover, the pipeline is the main source of supply for natural gas in Switzerland.

**Investment structure FluxSwiss**



Source: Credit Suisse

**Maintain a portfolio view**

The inclusion of each of the above-mentioned investment opportunities in an energy infrastructure portfolio is fully justified in terms of risk/reward, in our view. In this context, however, we believe it is important that investors consider the respective features of the investments when putting a portfolio together and seek expert advice during the investment process due to the complexity of the investments.

**Credit Suisse Energy Infrastructure Partners (CSEIP)**

Credit Suisse Energy Infrastructure Partners is an investment boutique of Credit Suisse Asset Management, focused on investments in the European energy sector and offering various investment possibilities to institutional investors in Switzerland and Europe. (04/07/2016)

## Alternative ideas

# Swiss real estate: Reference rate likely to be lowered in 2017

- We expect a further, and likely final, drop in the reference interest rate from 1.75% to 1.5% in 2017, allowing tenants to claim a reduction in the rental price of existing contracts.
- Despite low cash-flow yields and decreasing capital growth, residential investment properties are likely to remain attractive as long as the current negative interest environment prevails.

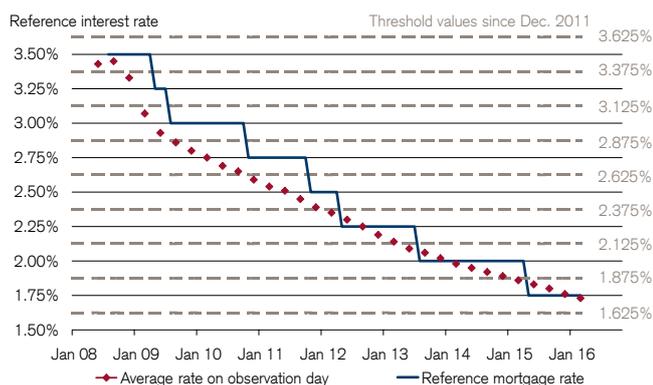
**Fabian Waltert**

Swiss Real Estate Research

## Average interest rate still falling, despite flatter rate trend

The reference interest rate from the Swiss Federal Housing Office, which is used for adjustments to rental prices for existing rental contracts, has fallen steadily since its introduction in 2008. It is based on the average of all interest rates on domestic bank mortgage loans.

## Reference rate for rental apartments likely to drop further in 2017

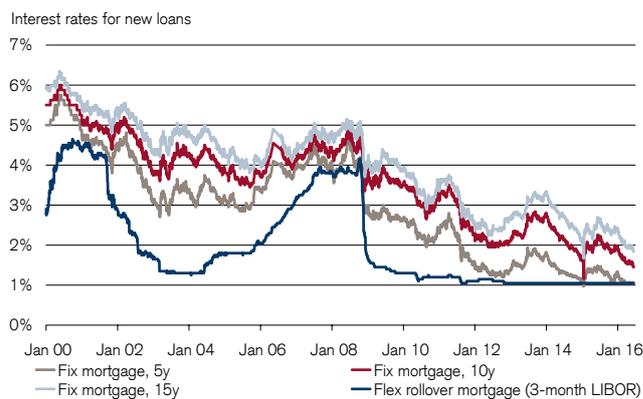


Source: Federal Housing Office, Credit Suisse

With interests on mortgage loans at record lows, there is now not much leeway left for further interest rate cuts. This applies particularly to short-term fixed-rate (or fix) mortgages, and Libor mortgages with interest rates of just over 1.0%. A further decrease is prevented by the hedging costs currently caused by the negative interest rates for financial institutions. Nonetheless, the average interest rate will most likely continue to edge down for some time, since expiring mortgages with terms of five or more years can be extended at much cheaper conditions. For example, a 10-year mortgage maturing today can be

refinanced at a rate as much as 3.0 percentage points cheaper. Interest savings are even greater when a fix mortgage is replaced with a Libor mortgage.

## Mortgage rates at new record lows



Source: Credit Suisse

## Next – and possibly final – cut in the reference rate likely in 2017

All the same, the next cut in the reference rate is probably some time away, since a condition is that the average interest rate would have to drop below the 1.625% threshold. Since the beginning of 2014, the average mortgage rate has fallen on average by a good three basis points per quarter. If this trend were to continue, the reference rate would be adjusted to 1.5% in June 2017. An adjustment in September 2017 seems more realistic, since the trend in the average interest rate seems to be flattening off. The expected reduction in 2017 will likely be the last for the reference interest rate, since without a further marked reduction of the interest rates for long-term fix mortgages, it is unlikely that the average interest rate will fall below the 1.375% threshold. At the same time, an increase cannot be expected unless monetary policy is tightened – thus an early turnaround in the reference rate seems highly unlikely at present.

### Average rental income of ongoing rental contracts to decrease by up to 1%

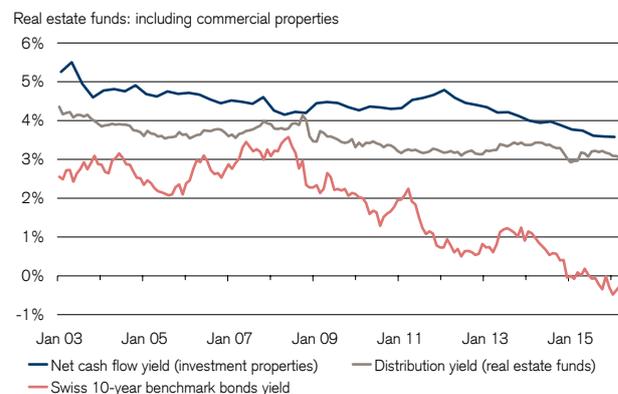
A drop in the reference rate reduces net existing rents by up to 2.9%. However, adapting rents has to be actively demanded by the tenant, and the landlord is allowed to correct the discount for inflation, change in maintenance costs and value-increasing investments. Therefore, we expect that on a total market level, the resulting reduction in overall rental income from existing rental contracts will not exceed 1%. However, gains in rental income at the event of a tenant change are declining, since the growth of market rental prices has fallen considerably. The driver for the slowdown of the market for rental apartments is the combination of utterly high growth in the supply of rental apartments (planning applications for 31,000 apartments submitted within the last 12 months), and slightly falling demand. Still, unless there is a sharp downward correction in market rents, the gap between these and the rents of ongoing contracts, which has widened significantly in recent years, will narrow only slowly. In terms of advertised rents, the price/rent ratio is currently more than 1.5 standard deviations above the long-term average – a value that was last exceeded 15 years ago, and only for a brief period.

### Real estate investments still attractive, despite low cash-flow yields and decreasing capital growth

With the transaction prices of residential investment properties growing faster than rents, the cash-flow yields of direct real estate investments have reached new lows (Q1 2016: 3.6%). The reduction in growth of rental income due to cuts in the reference rate and a decrease in market rents is reinforcing this trend. Nonetheless, in the prevailing negative interest rate environment, real estate yields continue to be attractive, with yield spreads of around 400 bp between the net cash-flow yields of

residential investment properties and the Swiss 10-year benchmark bond yield. With average yield spreads of around 300 bp, the distribution yields of Swiss real estate funds (commercial and residential) are similarly attractive. This attractiveness is reflected in high agios of 28.7% (May 2016).

### High relative attractiveness of Swiss real estate investments despite falling yields



Source: Credit Suisse, IAZI, latest annual reports of real estate investment funds

In view of the ongoing dearth of investment opportunities, we expect a further rise in prices for residential investment properties – though this is likely to be only just above zero. Despite emerging oversupplies in the market for rental apartments outside metropolitan areas, we do not expect considerable price corrections as long as the current interest rate environment prevails. In the longer term, however, investors should be aware that the capital growth returns seen in recent years will not be repeated. (28/06/2016)

Food for thought

# Trend towards long-term investment, notably infrastructure

- Low or negative bond yields are driving changes in asset allocation.
- One beneficiary is infrastructure, with attractive yields and cash flows.

**Robert J Parker**  
Research Strategic Advisory

## Powerful arguments for investing in long-term assets such as infrastructure

A recent report from Standard Life surveyed investment intentions by European insurance companies, and found that expected average future annual returns were 2.4%, below the returns needed to meet most policy-holder commitments. In response, a majority of insurers plan to reduce their exposures to sovereign fixed income, while 60% are expected to increase their allocation to real estate and/or alternatives. 69% of the insurers surveyed regarded low returns as the key factor in changing their investment strategies. Similar research in the pension fund industry has highlighted the problem of low yields in boosting actuarial liabilities, and asset allocation to alternative investments is notably increasing. One asset class which is increasingly being used to meet longer-term liabilities is infrastructure, and the investment case is that infrastructure projects and businesses offer long-term yields that are theoretically fairly stable, and can usually provide inflation protection. The Preqin 2016 infrastructure report estimates that the aggregate value of the 661 infrastructure deals completed in 2015 was USD 349 bn. The same report showed that 74% of surveyed fund managers are seeing greater appetite for infrastructure assets from investors. 76% of investors felt that infrastructure investments have met or exceeded their expectations. Assets under management by infrastructure funds stood at USD 309 bn at the end of 2015. As evidenced by recent G20 communiqués, investment in infrastructure has the strong support of governments and supranational institutions, given the powerful multiplier effects.

## Infrastructure offers diversification across different sectors, with debt and equity exposures

Infrastructure covers a range of differing assets, but can be aggregated into transport, telecommunications and technology, energy, social infrastructure, resources and waste manage-

ment. The energy sector is very broad, but will include conventional assets such as pipelines, storage facilities, refineries, the nuclear sector and alternative energy assets. In 2015, it was notable that alternative energy projects raised more funding than other infrastructure sectors, and this theme is consistent with investors increasingly focusing on environmental issues in their portfolios. Financing for infrastructure has a number of constituent elements, typically with pension funds and insurance investing equity as limited partners in funds, with banks or capital markets providing financing. It is generally agreed that it is inappropriate to have infrastructure in mutual funds, given the long-term, illiquid nature of the assets. Leverage will typically be taken at company or project level, rather than by the funds themselves. There is a clear recognition that the infrastructure bond market needs to be developed further, and this has been an important working project of the Asset Management and Investors Council, which represents the buy-side of the International Capital Markets Association.

## Risks have to be carefully monitored, but risk/reward is attractive

Infrastructure investment obviously has associated risks and for new projects, the key risk is that projects are not completed or have cost overruns. Political risks have to be carefully assessed, notably in emerging markets, while political risk also covers the possibility of subsidies changing, a major consideration in alternative energy. Modelling work on infrastructure has to focus on the certainty of cash flows being maintained and distributed to investors, the whole rationale of the asset class being the certainty of yield relative to inflation and other asset classes. One risk factor which needs to be watched at present is whether QE is leading to too great a level of demand for infrastructure assets, thereby driving valuations higher. However, despite these risks, there is a clear trend increase in demand for infrastructure investment, with returns being attractive compared with conventional asset classes.

(29/06/2016)

## Forecast summary

# Forecast summary

More information on the forecasts and estimates is available on request. 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.

## Short interest rates 3M Libor / 10-year government bonds

in %	3M Li-bor			10Y		
	Spot	3M	12M	Spot	3M	12M
CHF	-0.78	-0.9 to -0.7	-0.9 to -0.7	-0.57	-0.5 to -0.3	-0.3 to -0.1
EUR *	-0.29	-0.4 to -0.2	-0.4 to -0.2	-0.14	-0.1 to 0.1	0.1 to 0.3
USD	0.66	0.6-0.8	1.0-1.2	1.44	1.5 to 1.7	1.9 to 2.1
GBP	0.52	0.0-0.2	0.0-0.2	0.83	1.2 to 1.4	1.6 to 1.8
AUD	1.95	1.6-1.8	1.6-1.8	2.01	2.0 to 2.2	2.4 to 2.6
JPY	-0.02	-0.3 to -0.1	-0.5 to -0.3	-0.24	-0.3 to -0.1	-0.2 to 0.0

Spot rates are closing prices as of 4/7/2016. Forecast date: 27/6/2016. \* 3M Euribor, \*\* 3M Bank Bill rates.

Source: Bloomberg, Credit Suisse/IDC

## Equities

Index	Spot	P/E	Div. y. (%)	3M*	12M*
MSCI AC World**	889	15.3	3.0	825	920
US S&P 500	2103	16.8	2.5	1,940	2,100
Eurostoxx 50	2862	12.4	4.9	2,650	2,880
UK FTSE 100	6522	16.4	4.7	5,500	6,000
Japan Topix	1262	12.5	2.3	1,150	1,260
Australia S&P/ASX 200	5282	15.9	4.8	4,850	5,200
Canada S&P/TSX comp	14259	17.4	3.0	13,500	14,500
Switzerland SMI	8057	16.3	3.6	7,650	8,400
MSCI Emerging markets**	96607	12.1	2.8	89,000	100,000

Prices as of 4/7/2016. \*Forecast as on 27/6/2016. \*\*Gross return (incl. dividends).

Source: Credit Suisse / IDC, Bloomberg, Datastream

## Commodities

	Spot	3M *	12M *
Gold (USD/oz)	1351	1300	1150
Silver (USD/oz)	20.33	17	15
Platinum (USD/oz)	1070	950	950
Palladium (USD/oz)	615.3	600	600
Copper (USD/ton)	4883	4400	4600
WTI Crude Oil (USD/bbl)	48.99	43	53
Bloomberg Commodity index	181.0	175	183

Spot rates are closing prices as of 4/7/2016 \*forecast as on 27/6/2016

Source: Bloomberg, Credit Suisse / IDC

## Credit: Selected Indices

	Yield (%)	Spread (bp)	Duration (years)	3M forecast *	12M forecast *
BC IG Corporate EUR	0.9	131	5.3	-0.2%	0.2%
BC IG Corporate USD	2.9	155	7.5	0.5%	0.8%
CS LSI ex govt CHF	-0.3	64	6.3	-0.5%	-0.9%
BC High Yield Corp USD	7.2	585	4.2	1.4%	3.7%
BC High Yield Pan EUR	4.8	467	4.1	1.0%	2.9%
JPM EM hard curr USD	5.3	373	8.0	1.4%	3.7%
JPM EM local curr hedg. USD	6.3	n.a.	5.0	2.0%	5.0%

BC = Barclays Capital, IG= Investment Grade, CS = Credit Suisse, JPM = JP Morgan (EMBI+ and GBI GI Div). Index data as 4/7/2016. \*Forecast as on 27/6/2016

Source: Credit Suisse / IDC, Bloomberg

## Foreign exchange

	Spot	3M	12M
EUR/USD	1.1148	1.10	1.05
USD/CHF	0.9711	0.98	1.04
EUR/CHF	1.0826	1.08	1.09
USD/JPY	102.50	102	102
EUR/JPY	114.27	112	107
EUR/GBP	0.8386	0.80	0.76
GBP/USD	1.3294	1.38	1.38
AUD/USD	0.7539	0.73	0.73
USD/CAD	1.2855	1.30	1.30
EUR/SEK	9.3994	9.30	9.10
EUR/NOK	9.2445	9.10	8.70
EUR/PLN	4.4333	4.50	4.50
USD/CNY	6.6653	6.65	6.90
USD/SGD	1.3445	1.38	1.41
USD/KRW	1146.9	1210	1240
USD/INR	67.265	68.0	68.0
USD/BRL	3.2696	3.30	3.30
USD/MXN	18.392	18.5	18.5

Spot rates are closing prices as of 4/7/2016

Source: Bloomberg, Credit Suisse

## Real GDP growth and inflation

in %	GDP Growth			Inflation		
	2015	2016	2017	2015	2016	2017
CH	0.9	1.0	1.5	-1.1	-0.5	0.0
EMU	1.6	1.5	1.3	0.0	0.1	1.2
USA	2.4	1.8	2.0	0.1	1.3	2.0
UK	2.3	1.5	0.2	0.0	0.7	2.0
Australia	2.5	2.9	2.8	1.5	1.3	2.0
Japan	0.5	0.6	0.9	0.8	0.2	0.7
China	6.9	6.5	6.0	1.4	2.0	1.8

Forecast date: 28/6/2016.

Source: Credit Suisse

(05/07/2016)

# Glossary

## Risk warnings

Market risk	Financial markets rise and fall based on economic conditions, inflationary pressures, world news and business-specific reports. While trends may be detected over time, it can be difficult to predict the direction of the market and individual stocks. This variability puts stock investments at risk of losing value.
Bond risks	Investors are exposed to interest rates, currency, liquidity, credit market and issuer fluctuations, which may affect the price of bonds.
Emerging markets	Emerging markets are located in countries that possess one or more of the following characteristics: a certain degree of political instability, relatively unpredictable financial markets and economic growth patterns, a financial market that is still at the development stage or a weak economy. Emerging market investments usually result in higher risks as a result of political, economic, credit, exchange rate, market liquidity, legal, settlement, market, shareholder and creditor risks.
Hedge funds	Regardless of structure, 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, derivative instruments and speculative investment strategies that may increase the risk of investment loss.
Commodity investments	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.
Real estate	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.
Currency risks	Investments in foreign currencies involve the additional risk that the foreign currency might lose value against the investor's reference currency.

## Explanation of indices frequently used in reports

Index	Comment
Australia S&P/ASX 200	S&P/ASX 200 is an Australian market-capitalization-weighted and float-adjusted stock index calculated by Standard and Poor's.
BC High Yield Corp USD	The US Corporate High Yield Index measures USD-denominated, non-investment grade, fixed-rate and taxable corporate bonds. The index is calculated by Barclays.
BC High Yield Pan EUR	The Euro Corporate Index tracks the fixed-rate, investment-grade, euro-denominated corporate bond market. The index includes issues that meet specified maturity, liquidity and quality requirements. The index is calculated by Barclays.
BC IG Corporate EUR	The US Corporate Index tracks the fixed-rate, investment-grade, dollar-denominated corporate bond market. The index includes both US and non-US issues that meet specified maturity, liquidity and quality requirements. The index is calculated by Barclays.
BC IG Corporate USD	The IG Financials Index tracks the fixed-rate, investment-grade, dollar-denominated financials bond market. The index includes both US and non-US issues that meet specified maturity, liquidity and quality requirements. The index is calculated by Barclays.
Canada S&P/TSX comp	The S&P/TSX composite index is the Canadian equivalent of the S&P 500 Index in the USA. The index contains the largest stocks traded on the Toronto Stock Exchange.
Consumer Confidence Indices	Consumer Confidence Indices (CCIs) are based on surveys of consumers' spending intentions and economic situations, as well as their concerns and expectations for the immediate future.
CS Hedge Fund Index	The Credit Suisse Hedge Fund Index is compiled by Credit Suisse Hedge Index LLC. It is an asset-weighted hedge fund index and includes only funds, as opposed to separate accounts. The index reflects performance net of all hedge fund component performance fees and expenses.
CS LSI ex govt CHF	The Liquid Swiss Index ex govt CHF is a market-capitalized bond index representing the most liquid and tradable portion of the Swiss bond market excluding Swiss government bonds. The index is calculated by Credit Suisse.
DAX	The German Stock Index stock represents 30 of the largest and most liquid German companies that trade on the Frankfurt Exchange.
DXY	A measure of the value of the US dollar relative to the majority of its most important trading partners. The US Dollar Index is similar to other trade-weighted indices, which also use the exchange rates from the same major currencies.
Eurostoxx 50	Eurostoxx 50 is a market-capitalization-weighted stock index of 50 leading blue-chip companies in the Eurozone.
FTSE EPRA/NAREIT Global Real Estate Index Series	The FTSE EPRA/NAREIT Global Real Estate Index Series is designed to represent general trends in eligible real estate equities worldwide.
Hedge Fund Barometer	The Hedge Fund Barometer is a proprietary Credit Suisse scoring tool that measures market conditions for hedge fund strategies. It comprises four components: liquidity, volatility; systemic risks and business cycle.
Japan Topix	TOPIX, also known as the Tokyo Stock Price Index, tracks all large Japanese companies listed in the stock exchange's "first section." The index calculation excludes temporary issues and preferred stocks.
JPM EM hard curr. USD	The Emerging Market Bond Index Plus tracks the total return of hard-currency sovereign bonds across the most liquid emerging markets. The index encompasses US-denominated Brady bonds (dollar-denominated bonds issued by Latin American countries), loans and Eurobonds.
JPM EM local curr. hedg. USD	The JPMorgan Government Bond Index tracks local currency bonds issued by emerging market governments across the most accessible markets for international investors.

MSCI AC Asia/Pacific	The MSCI All Country Asia Pacific Index captures large and mid cap representation across 5 developed market countries and 8 emerging markets countries in the Asia Pacific region. With 1,000 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
MSCI AC World	The MSCI All Country World Index captures large and mid cap representation across 23 developed markets and 23 emerging market countries. With roughly 2480 constituents, the index covers around 85% of the global investable equity opportunity set.
MSCI Emerging Markets	MSCI Emerging Markets is a free-float-weighted Index designed to measure equity market performance in global emerging markets. The index is developed and calculated by Morgan Stanley Capital International.
MSCI EMU	The MSCI EMU Index (European Economic and Monetary Union) captures large and mid cap representation across the 10 Developed Markets countries in the EMU. With 237 constituents, the index covers approximately 85% of the free float-adjusted market capitalization of the EMU.
MSCI Europe	The MSCI Europe Index captures large and mid cap representation across 15 developed markets countries in Europe. With 442 constituents, the index covers approximately 85% of the free float-adjusted market capitalization across the European developed markets equity universe.
MSCI UK	The MSCI United Kingdom Index is designed to measure the performance of the large and mid cap segments of the UK market. With 111 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in the UK.
MSCI World	MSCI World is an index of global equity markets developed and calculated by Morgan Stanley Capital International. Calculations are based on closing prices with dividends reinvested.
OECD Composite Leading Indicators	OECD Composite Leading Indicators (CLIs) are designed to provide early signals of turning points in business cycles with components that measure early stages of production, respond to changes in economic activity, and are sensitive to expectations of future activity.
Purchasing Managers' Indices	Purchasing Managers' Indices (PMIs) are economic indicators derived from monthly surveys of private-sector companies. The two principal producers of PMIs are Markit Group, which conducts PMIs for over 30 countries worldwide, and the Institute for Supply Management (ISM), which conducts PMIs for the United States. The indices include additional sub-indices for manufacturing surveys such as new orders, employment, exports, stocks of raw materials and finished goods, prices of inputs and finished goods, and services.
Russell 1000 Growth Index	The Russell 1000 Growth Index measures the performance of the large-cap growth segment of the US equity universe based on 1000 large-cap companies with higher price-to-book ratios and higher forecast growth values.
Russell 1000 Index	The Russell 1000 Index is a stock market index that represents the highest-ranking 1,000 stocks in the Russell 3000 Index (encompassing the 3,000 largest US-traded stocks, with the underlying companies all incorporated in the USA), and representing about 90% of the total market capitalization of that index. The Russell 1000 Index has a weighted average market capitalization of USD 81 billion and the median market capitalization is approximately USD 4.6 billion.
Russell 1000 Value Index	The Russell 1000 Value Index measures the performance of the large-cap value segment of the US equity universe based on 1000 large-cap companies with lower price-to-book ratios and lower expected growth values.
Switzerland SMI	The Swiss Market Index is made up of 20 of the largest companies listed of the Swiss Performance Index universe. It represents 85% of the free-float capitalization of the Swiss equity market. As a price index, the SMI is not adjusted for dividends.
UK FTSE 100	FTSE 100 is a market-capitalization-weighted stock index that represents 100 of the most highly capitalized companies traded on the London Stock exchange. The equities have an investibility weighting in the index calculation.
US S&P 500	Standard and Poor's 500 is a capitalization-weighted stock index representing all major industries in the USA, which measures the performance of the domestic economy through changes in the aggregate market value.

### Abbreviations frequently used in reports

Abb.	Description	Abb.	Description
3/6/12 MMA	3/6/12 month moving average	IMF	International Monetary Fund
AI	Alternative investments	LatAm	Latin America
APAC	Asia Pacific	Libor	London interbank offered rate
bbl	barrel	m b/d	Million barrels per day
BI	Bank Indonesia	M1	A measure of the money supply that includes all physical money, such as coins and currency, as well as demand deposits, checking accounts and negotiable order of withdrawal accounts.
BoC	Bank of Canada	M2	A measure of money supply that includes cash and checking deposits (M1) as well as savings deposits, money market mutual funds and other time deposits.
BoE	Bank of England	M3	A measure of money supply that includes M2 as well as large time deposits, institutional money market funds, short-term repurchase agreements and other larger liquid assets.
BoJ	Bank of Japan	M&A	Mergers and acquisitions
bp	Basis points	MAS	Monetary Authority of Singapore
BRIC	Brazil, Russia, China, India	MLP	Master Limited Partnership
CAGR	Compound annual growth rate	MoM	Month-on-month
CBOE	Chicago Board Options Exchange	MPC	Monetary Policy Committee
CFO	Cash from operations	OAS	Option-adjusted spread
CFROI	Cash flow return on investment	OECD	Organisation for Economic Co-operation and Development
DCF	Discounted cash flow	OIS	Overnight indexed swap
DM	Developed Market	OPEC	Organization of Petroleum Exporting Countries
DMs	Developed Markets	P/B	Price-to-book value
EBITDA	Earnings before interest, taxes, depreciation and amortization	P/E	Price-earnings ratio

ECB	European Central Bank	PBoC	People's Bank of China
EEMEA	Eastern Europe, Middle East and Africa	PEG	P/E ratio divided by growth in EPS
EM	Emerging Market	PMI	Purchasing Managers' Index
EMEA	Europe, Middle East and Africa	PPP	Purchasing power parity
EMs	Emerging Markets	QE	Quantitative easing
EMU	European Monetary Union	QoQ	Quarter-on-quarter
EPS	Earnings per share	r.h.s.	right-hand side (for charts)
ETF	Exchange traded funds	RBA	Reserve Bank of Australia
EV	Enterprise value	RBI	Reserve Bank of India
FCF	Free cash flow	RBNZ	Reserve Bank of New Zealand
Fed	US Federal Reserve	REIT	Real estate investment trust
FFO	Funds from operations	ROE	Return on equity
FOMC	Federal Open Market Committee	ROIC	Return on invested capital
FX	Foreign exchange	RRR	Reserve requirement ratio
G10	Group of Ten	SAA	Strategic asset allocation
G3	Group of Three	SDR	Special drawing rights
GDP	Gross domestic product	SNB	Swiss National Bank
GPIF	Government Pension Investment Fund	TAA	Tactical asset allocation
HC	Hard currency	TWI	Trade-Weighted Index
HY	High yield	VIX	Volatility Index
IBD	Interest-bearing debt	WTI	West Texas Intermediate
IC	Credit Suisse Investment Committee	YoY	Year-on-year
IG	Investment grade	YTD	Year-to-date
ILB	Inflation-linked bond	Personal Consumption Expenditure (PCE deflator)	An indicator of the average increase in prices for all domestic personal consumption.

### Currency codes frequently used in reports

Code	Currency	Code	Currency
ARS	Argentine peso	KRW	South Korean won
AUD	Australian dollar	MXN	Mexican peso
BRL	Brazilian real	MYR	Malaysian ringgit
CAD	Canadian dollar	NOK	Norwegian krone
CHF	Swiss franc	NZD	New Zealand dollar
CLP	Chilean peso	PEN	Peruvian nuevo sol
CNY	Chinese yuan	PHP	Philippine peso
COP	Colombian peso	PLN	Polish zloty
CZK	Czech koruna	RUB	Russian ruble
EUR	Euro	SEK	Swedish krona/kronor
GBP	Pound sterling	SGD	Singapore dollar
HKD	Hong Kong dollar	THB	Thai baht
HUF	Hungarian forint	TRY	Turkish lira
IDR	Indonesian rupiah	TWD	New Taiwan dollar
ILS	Israeli new shekel	USD	United States dollar
INR	Indian rupee	ZAR	South African rand
JPY	Japanese yen		

### Important information on derivatives

Pricing	Option premiums and prices mentioned are indicative only. Option premiums and prices can be subject to very rapid changes: The prices and premiums mentioned are as of the time indicated in the text and might have changed substantially in the meantime.
Risks	Derivatives are complex instruments and are intended for sale only to investors who are capable of understanding and assuming all the risks involved. Investors must be aware that adding option positions to an existing portfolio may change the characteristics and behavior of that portfolio substantially. A portfolio's sensitivity to certain market moves can be heavily impacted by the leverage effect of options.
Buying calls	Investors who buy call options risk the loss of the entire premium paid if the underlying security trades below the strike price at expiration.
Buying puts	Investors who buy put options risk loss of the entire premium paid if the underlying security finishes above the strike price at expiration.

Selling calls	Investors who sell calls commit themselves to sell the underlying for the strike price, even if the market price of the underlying is substantially higher. Investors who sell covered calls (own the underlying security and sell a call) risk limiting their upside to the strike price plus the upfront premium received and may have their security called away if the security price exceeds the strike price of the short call. Additionally, the investor has full downside participation that is only partially offset by the premium received upfront. If investors are forced to sell the underlying they might be subject to taxing. Investors shorting naked calls (i.e. selling calls but without holding the underlying security) risk unlimited losses of security price less strike price.
Selling puts	Put sellers commit to buying the underlying security at the strike price in the event the security falls below the strike price. The maximum loss is the full strike price less the premium received for selling the put.
Buying call spreads	Investors who buy call spreads (buy a call and sell a call with a higher strike) risk the loss of the entire premium paid if the underlying trades below the lower strike price at expiration. The maximum gain from buying call spreads is the difference between the strike prices, less the upfront premium paid.
Selling naked call spreads	Selling naked call spreads (sell a call and buy a farther out-of-the-money call with no underlying security position): Investors risk a maximum loss of the difference between the long call strike and the short call strike, less the upfront premium taken in, if the underlying security finishes above the long call strike at expiration. The maximum gain is the upfront premium taken in, if the security finishes below the short call strike at expiration.
Buying put spreads	Investors who buy put spreads (buy a put and sell a put with a lower strike price) also have a maximum loss of the upfront premium paid. The maximum gain from buying put spreads is the difference between the strike prices, less the upfront premium paid.
Buying strangles	Buying strangles (buy put and buy call): The maximum loss is the entire premium paid for both options, if the underlying trades between the put strike and the call strike at expiration.
Selling strangles or straddles	Investors who are long a security and short a strangle or straddle risk capping their upside in the security to the strike price of the call that is sold plus the upfront premium received. Additionally, if the security trades below the strike price of the short put, investors risk losing the difference between the strike price and the security price (less the value of the premium received) on the short put and will also experience losses in the security position if they own shares. The maximum potential loss is the full value of the strike price (less the value of the premium received) plus losses on the long security position. Investors who are short naked strangles or straddles have unlimited potential loss since, if the security trades above the call strike price, investors risk losing the difference between the strike price and the security price (less the value of the premium received) on the short call. In addition, they are obligated to buy the security at the put strike price (less upfront premium received) if the security finishes below the put strike price at expiration.

## Risk warning

Every investment involves risk, especially with regard to fluctuations in value and return. If an investment is denominated in a currency other than your base currency, changes in the rate of exchange may have an adverse effect on value, price or income.

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>

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.

**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.**

### Financial market risks

Historical returns and financial market scenarios are no guarantee of future performance. The price and value of investments mentioned and any income that might accrue could fall or rise or fluctuate. Past performance is not a guide to future performance. If an investment is denominated in a currency other than your base currency, changes in the rate of exchange may have an adverse effect on value, price or income. You should consult with such advisor(s) as you consider necessary to assist you in making these determinations.

Investments may have no public market or only a restricted secondary market. Where a secondary market exists, it is not possible to predict the price at which investments will trade in the market or whether such market will be liquid or illiquid.

### 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

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.

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