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MARCH 2017

FX MONTHLY

QCAM Insight ++ The macro perspective ++ FX market talk
Economic activity ++ Inflation ++ FX markets ++ Financial markets
Number of the month

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QCAM Insight

EURUSD is about more than just interest rates

Recent moves in EURUSD have perplexed market observers. In early February, the market did not expect a Fed rate hike in March. A few weeks later, the market anticipated the Fed raising rates in March with near certainty, which it did. The dollar appreciated a bit against the euro on the back of the changing interest rate outlook but soon ran out of steam and today is almost as weak as it was in early February. What explains this conundrum? At QCAM, we have developed a new EURUSD model that combines fundamentals and market factors and helps shed some light on what is driving the exchange rate.

Our model consists of three parts. First, we estimate the purchasing power parity (PPP) of the currency pair, which currently suggests that the USD is roughly 16 percent overvalued versus the EUR. Second, we regress average monthly changes of the EURUSD exchange rate on the deviation of the exchange rate from its PPP level in the prior period (an error correction factor) as well as interest rate spreads between USD and EUR, the change in oil prices and a sentiment factor, which consists of the implied volatilities of the US stock market and the euro as well as peripheral European interest rate spreads versus Germany's base rate. The model's third component is a regression to explain the error correction factor, which is based on the external balances (current account and financial account), the fiscal balance and manufacturing surveys. The regression results are robust and the model provides a useful tool to decompose monthly EURUSD changes (see chart).

Interest rate differentials versus twin deficits

The chart shows the two main opposing forces pulling on EURUSD. The big plus for the USD is the positive interest rate differential versus the EUR. However, this is largely offset by the impact of the US twin deficits (external and fiscal) since the Eurozone enjoys a current account surplus and has a smaller fiscal deficit. The widening of the interest rate spread outpaced the deterioration of the US twin deficits at the end of 2016 and gave the USD a boost, which was compounded by unfavorable sentiment versus the euro as the market worried about the consequences of a hard Brexit and upcoming elections in several European countries, notably France.

In January, however, the interest rate differential narrowed as the market lowered its rate hike expectations. Meanwhile, the twin deficits continued to slip. Moreover, sentiment grew more euro-friendly as concerns over the impact of Brexit abated. In February and through the first three weeks of March, interest rate differentials started to widen again, lately even exceeding the levels seen last December. That is clearly a plus for the USD but it is not enough, in our view, for the dollar to resume its appreciation trend. The twin deficits remain a handicap for the USD. Moreover, sentiment continues to improve in favor of the EUR. Although periphery Eurozone interest rate spreads versus Germany remain elevated, implied EUR currency volatility has declined significantly from the highs seen last November. A key force behind this move is the

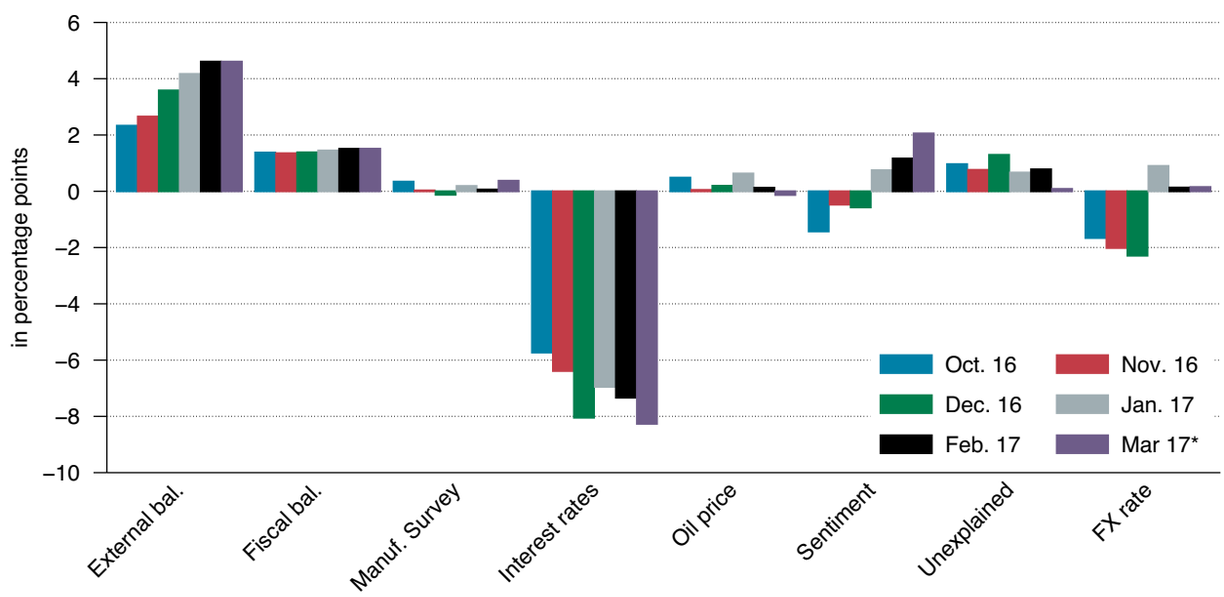
growing market belief that Marine Le Pen is unlikely to win the French presidential election, especially in a run-off against Emmanuel Macron. Another positive for the EUR is the fact that the latest manufacturing surveys have been stronger in the Eurozone than in the US. At present, the only additional help for the USD is coming from the lower oil price.

What to expect going forward

The QCAM EURUSD model is not only useful for understanding past currency moves; it also provides a framework for structuring exchange rate forecasts. We believe that the interest differential should widen another 50bps this year, which should boost the USD at least 3 pecent versus the EUR. However, we also expect that about half of that is likely to be offset by further deterioration of the US twin deficits. Given the continuous improvements in US oil production efficiency, we expect that the oil price will at best be stable or potentially fall slightly, which would be a marginal plus for the USD. Manufacturing sentiment is likely to be similar in the Eurozone and the US over time, which leaves one big open question: what happens to sentiment, especially related to political risks?

Political uncertainties are elevated on both sides of the Atlantic. In our judgment, however, the problems in Europe go deeper and are more difficult to resolve. The French election is likely to pass without Le Pen winning and taking France out of the EU and the euro. However, the French election is only one battle in the euro's fight for survival. Populism and nationalistic agendas are on the rise everywhere. Europe's banks remain troubled and many countries are struggling to maintain debt sustainability, most importantly Italy. In that environment, new challenges for the euro are bound to arise. So, on balance, we see the USD having the upper hand but still suffering occasional setbacks.

Anatomy of monthly EURUSD changes (positive values are negative for the USD)



*: Based on the data to March 17th with the external and fiscal balances kept constant at their previous levels.

Source: QCAM

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The macro perspective

The battle for Europe has been postponed

Regardless of the long-term outlook for the European Union, we think the future of the EU is unlikely to be settled in 2017. Although this year was being hyped as a decisive watershed, it now threatens to "disappoint," at least in that limited sense. And we think even a Le Pen victory is unlikely to change this fact.

The Netherlands, France and Germany, three of the EU's founding nations, all face elections this year. Reason enough for some commentators to forecast the demise of the EU given the growing strength of Euro-skeptics in recent years and the political tremors from the *Brexit*-vote in the UK and the election of Donald Trump in the US.

The Netherlands remains pro-European

Up to now, it does not appear to us that 2017 will live up to its billing as the EU's showdown year. The election results in the Netherlands introduced an unmistakable counter-narrative right at the beginning of this scenario. Although Geert Wilders' Party for Freedom now holds 20 of the 150 seats in the Dutch House of Representatives, an increase of five seats, decidedly pro-European parties like the *D66* and the *GroenLinks* also clearly increased their representation. The pro-European forces thus remain firmly in the majority in the Netherlands.

Pro-European tone in German elections

The campaigning in the current German Bundestag elections has also been fundamentally pro-European in tone. Although the *Alternative for Germany* party, given its gains in recent regional elections, is also likely to expand its presence at the federal level, the AfD will, in our view, remain on the fringe politically, even if it were to win a remarkable 20 percent of the seats in the Bundestag. We do not expect Germany to turn away from the EU. On the contrary, if there is any change of course, we expect it to be a shift towards more, not less, Europe, given the SPD's recent sharp upswing (see chart).

France on fire

France remains the center of attention now. A potential Marine Le Pen victory has concerned financial markets for months now, as seen in the widening interest rate differential between French and German government bonds. Clearly Le Pen's anti-EU and anti-euro skepticism drove this development. Le Pen's election prospects are, we think, modest. She is likely to reach the second round of the presidential elections but she lags significantly behind Emmanuel Macron and Francois Fillon in the latest polls.

Admittedly, 2016 firmly instructed us to tread carefully with pre-election and pre-referendum voter surveys. But perhaps another thought can soothe the nerves: a public vote on an EU or euro exit is almost unavoidable. According to recent surveys, however, some 70 percent of French voters remain in favor of both the EU and the euro.

It is questionable whether such a referendum might ever be held. The *Front National* does not have the necessary majorities and will not win them in June's parliamen-

tary elections, according to all available projections. An EU or euro exit for France, in our view, is to be regarded as electoral rhetoric and not as a realistic scenario.

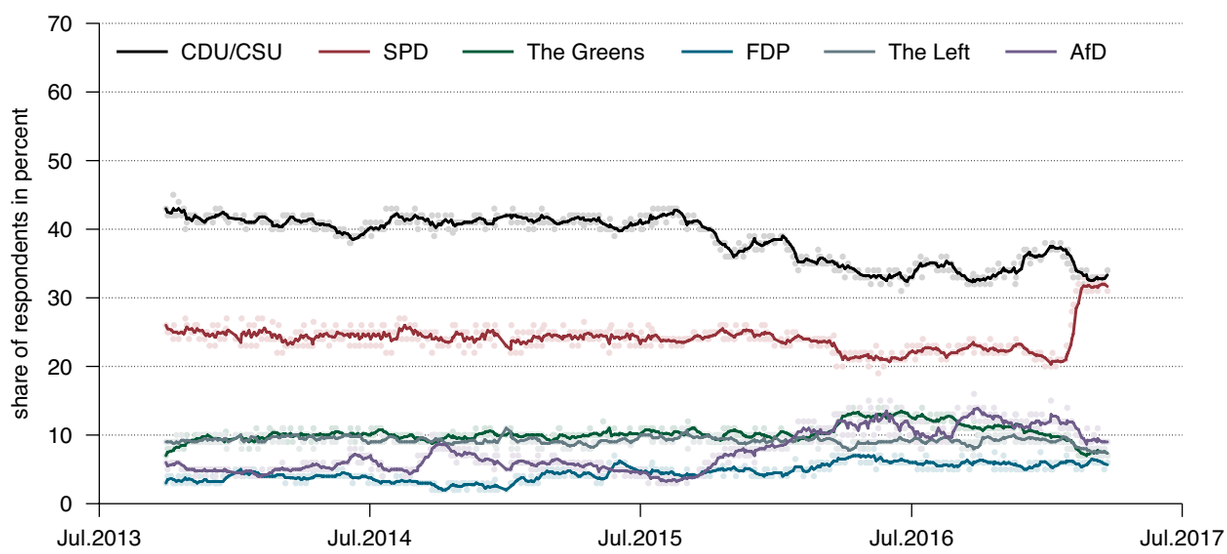
Not that different?

We therefore conclude that an election victory for Marine Le Pen would not be so very different from a "normal" election result. After all, what remains of her policies after removing the option of an EU or euro exit? Her key programs may fundamentally differ in their political orientation from those of Emmanuel Macron or Martin Schulz, but not in their scope. How would Macron govern without established party structures? And what economic policy measures would a Chancellor Schulz propose? Such considerations indicate that any impending changes, while they would not be insignificant, are just not comparable to a risk scenario stemming from France leaving the EU or the euro.

Exaggerated worries

In light of these observations, we think that concerns about political developments in Europe are exaggerated. The year 2017, which had been highly touted as a watershed for the EU, is likely to bring far less tension than was expected. This is not to say that the EU faces no major challenges. But they are not likely to be resolved in 2017.

Support surges for Germany's SPD



Source: Forsa, Infratest, Emnid, Allensbach, Wellershoff & Partners

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FX market talk

Hoping a monetary policy change can go unnoticed

Those imaginary printing presses at the Swiss National Bank have been working overtime. To stop the franc from rising, the SNB has been more active lately than at any time since the Frankenshock followed the lifting of the euro peg in January 2015. This is unsustainable.

The Swiss National Bank appears to have backed itself into a corner with its monetary policy. Looking at the changes in its sight deposits, since the end of January the SNB's currency market interventions have totaled around 25 billion Swiss francs. The SNB has not only intervened more vigorously on currency markets than it did after the *Brexit* referendum in June and the US presidential election in November 2016. We note that the latest intervention is even larger than that of December 2014, when the SNB's negative interest rates were introduced and soon thereafter the minimum exchange rate versus the euro was abandoned.

French elections

The reason for this size of the latest intervention can quickly be traced to the upcoming French presidential elections. Even if this is only just another so-called *event risk*, the upcoming elections in France do stand out from most other such events in recent years. These elections are exceptional, for one, because they will be held at the end of April and the beginning of May, thus letting them cast a long shadow in advance of the outcome. The fact that the apparent peak of the SNB's interventions occurred between the end of January and the middle of February, three months before the election's decisive second round, should not be viewed as a mere coincidence. We think it's safe to assume that many institutional investors have hedged against the outcome's possible uncertainties via foreign exchange forward contracts, which in practice often have a maturity of three months.

We cannot say whether the SNB's currency market interventions in the run-up to the French elections have peaked or not. What is certain, however, is that there is a long time to go until the decisive second round, on May 7. If the SNB wants to fight off any appreciation of the franc in the remaining weeks, we expect a few more billions will have to be spent on currency market interventions. In the process, the SNB's balance sheet will only expand even further.

Mounting long-term risks

Even without any additional interventions, the foreign exchange reserves at the SNB have risen fifteen-fold since the beginning of the financial crisis in late 2007. The bank's balance sheet has expanded by a factor of seven in this time span. And Switzerland's monetary base has multiplied by a factor of eleven. By any measure, the SNB's monetary policy has been more expansive than that of any other major central bank.

Such an extraordinary monetary policy regime comes with risks. In the past, SNB president Thomas Jordan has himself repeatedly noted the multiple risks such a policy faces. We would remind readers that the abolition of the minimum exchange rate was primarily justified by the argument that guaranteeing price stability was jeopardized

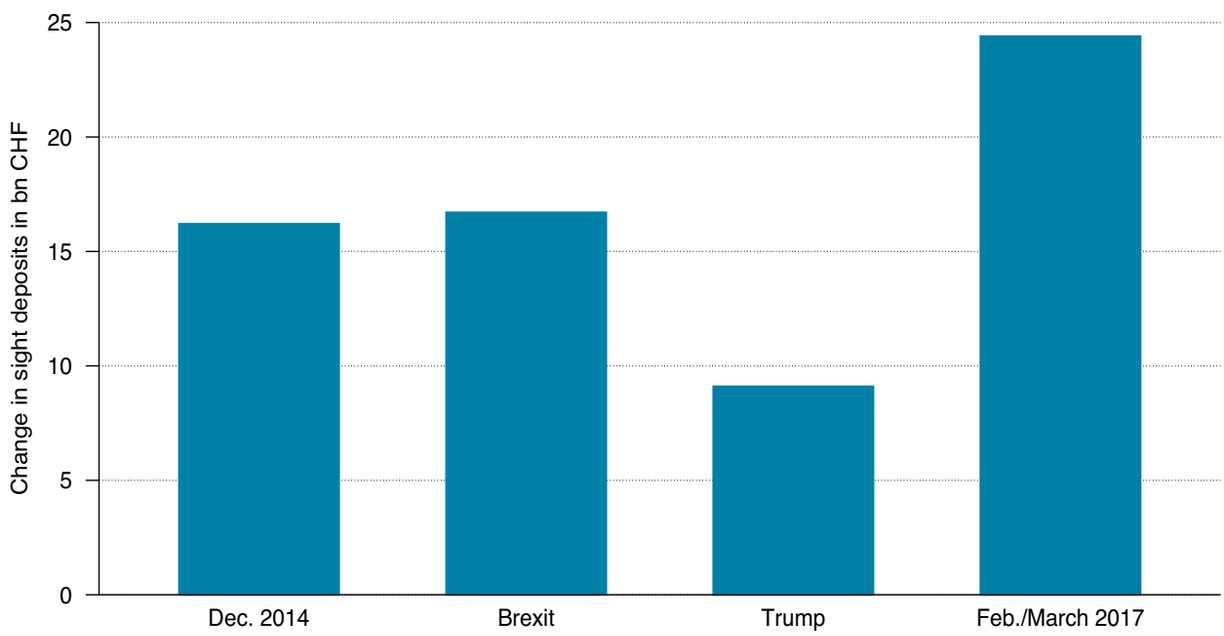
by the high foreign currency purchases and the accompanying expansion of the balance sheet.

Change is imminent

Given all this, we think it is likely that there will be a change in Swiss monetary policy in the near future. We think changing its interventionist policy before the elections in France would probably only add greater dislocation to foreign exchange markets. Such a scenario cannot be in the interest of the SNB. Thus we think a quick move is unlikely.

We find it more probable that change will come to the SNB's monetary policy only after the French elections. At that point, the significant political uncertainties of the election will likely begin to recede. This would probably ease the appreciation pressure on the franc. The SNB could use this phase to bow out of its current policy of active intervention. In the event of renewed appreciation pressure, the bank could let the franc strengthen. Switzerland's robust economy and the positive outlook for inflation are, at the least, encouraging. The Eurozone's positive economic outlook, probably the center of attention then, plus the likely normalization of European monetary policy, and the fact that the euro remains significantly undervalued against the franc in terms of purchasing power parity – all this together could even lead to a more sustained rethinking among investors. Under these circumstances, the SNB's monetary policy change might well go unnoticed – unlike the last time.

Comparing SNB intervention intensities



Source: SNB, Wellershoff & Partners

Economic activity

In the US, the purchasing managers index climbed another rung, rising from 56.0 to 57.7 points in February. That high a level hasn't been seen since November 2014. And sentiment in the service sector is also developing nicely, rising from 56.5 to 57.6 index points. The positive sentiment data was further underscored by a robust labor market, which added 238 000 new jobs in February. In sum, we expect US growth to accelerate in the first quarter of 2017.

In Europe, just as in the US, heightened political uncertainties loom large. And, again as in the US, these concerns have had little actual impact on Europe's economic activity. In the first half of 2017 European growth rates of more than 2 percent are within reach.

Switzerland's GDP numbers in the fourth quarter of 2016 did not achieve the hoped-for growth. Real GDP growth was a mere 1.3 percent in 2016. The Franken-shock effect still weighs on the Swiss economy. And the first quarter of 2017 isn't looking any brighter. Wellershoff & Partners' leading economic climate indicators are now projecting real GDP growth of just over 1 percent for Switzerland in the first quarter of 2017.

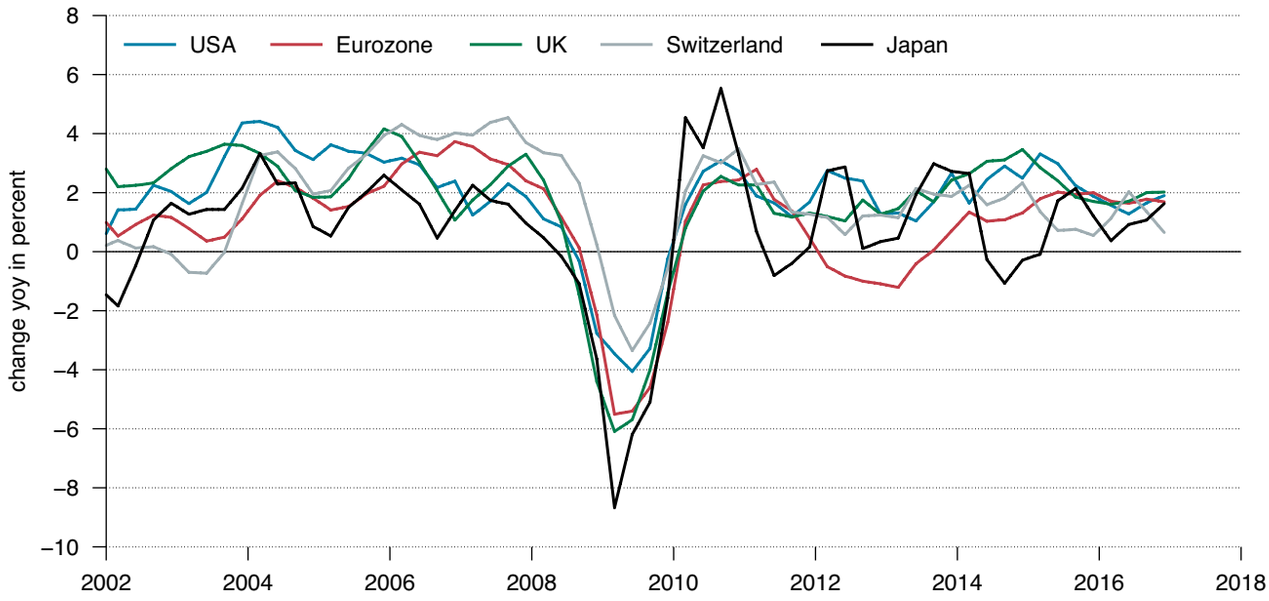
Growth overview

	Trend growth[1]	Real GDP growth[2]				W&P economic sentiment indicators[3]			
		Q1/2016	Q2/2016	Q3/2016	Q4/2016	11/2016	12/2016	1/2017	2/2017
United States	1.7	1.6	1.3	1.6	1.9	2.4	2.7	2.8	3.1
Eurozone	1.0	1.7	1.6	1.8	1.7	1.9	2.1	2.1	2.1
Germany	1.4	1.9	1.8	1.7	1.8	2.6	2.9	2.9	2.7
France	0.7	1.3	1.1	0.9	1.2	1.1	1.3	1.2	1.4
Italy	0.2	1.1	0.9	1.0	1.0	0.5	0.5	0.7	0.7
Spain	1.6	3.4	3.4	3.2	3.0	2.3	1.9	2.1	2.4
United Kingdom	1.8	1.6	1.7	2.0	2.0	2.2	2.4	2.2	2.5
Switzerland	1.5	1.1	2.0	1.4	0.6	0.9	1.2	1.3	1.5
Japan	0.4	0.4	0.9	1.1	1.6	1.7	1.9	1.9	1.9
Canada	1.6	1.3	1.1	1.4	2.0	1.2	1.1	1.3	1.3
Australia	2.4	2.5	3.1	1.9	2.4	2.4	2.5	2.6	2.6
Brazil	1.4	-5.5	-3.6	-2.8	-2.5	-0.9	-1.5	-2.2	-0.4
Russia	0.1	-1.2	-0.6	-0.4	–	3.6	3.7	4.7	2.6
India	7.7	8.6	7.2	7.4	7.0	6.7	7.2	7.1	7.0
China	7.4	6.7	6.7	6.7	6.8	7.1	7.4	7.0	7.3
Advanced economies[4]	1.4	1.6	1.7	1.6	1.7	2.3	2.6	2.7	2.9
Emerging economies[4]	6.0	4.9	4.8	4.7	4.9	4.9	4.8	4.7	4.8
World economy[4]	3.5	3.3	3.3	3.2	3.4	3.4	3.5	3.4	3.6

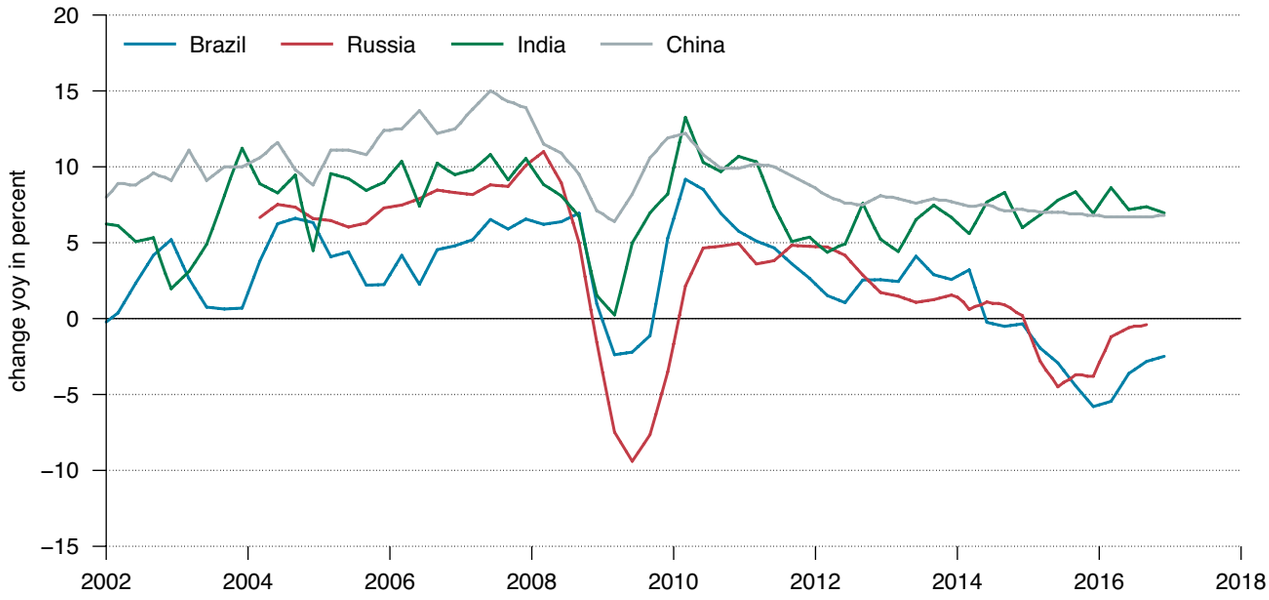
[1] Current year-on-year trend growth rate of real GDP, in percent, according to the proprietary trend growth model of Wellershoff & Partners.
[2] Year-on-year growth rate, in percent.
[3] Wellershoff & Partners economic sentiment indicators are based on consumer and business surveys and have up to 6 months lead on the year-on-year growth rate of real GDP.
[4] Calculations are based on nominal GDP weights derived from purchasing power parity exchange rates.

Source: European Commission, Penn World Table, Thomson Reuters Datastream, Wellershoff & Partners

Economic growth in advanced economies



Economic growth in emerging economies



Source: Thomson Reuters Datastream, Wellershoff & Partners

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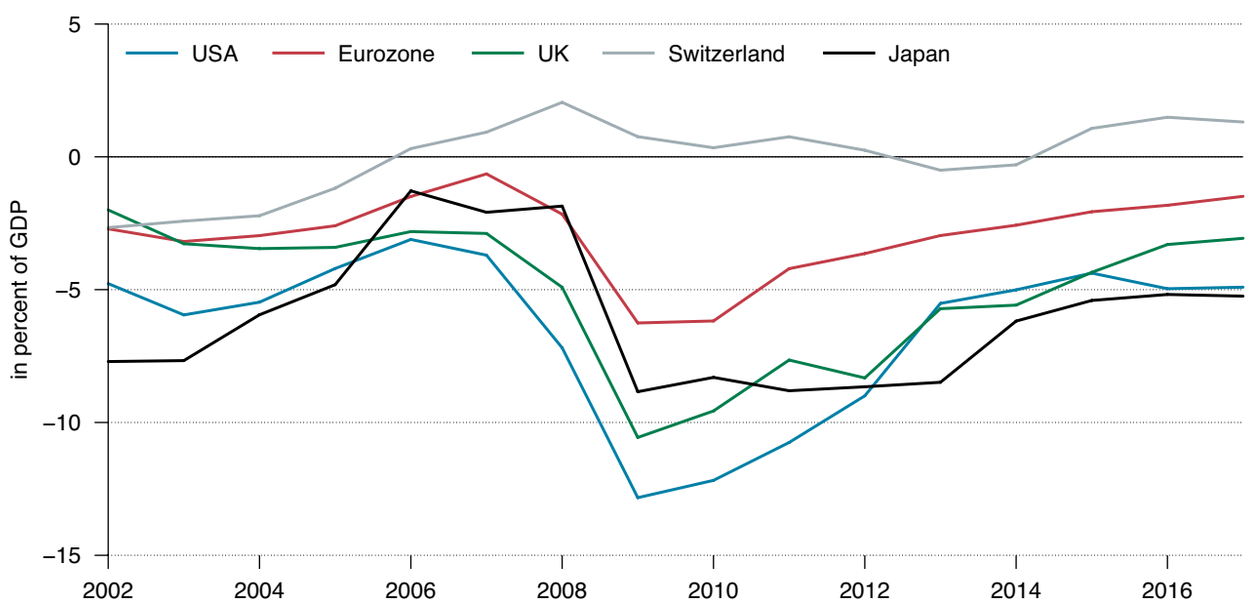
Economic indicators

Overview

	Global GDP share[1]		Current account[2]		Public debt[2]		Budget deficit[2]		Unemployment rate[3]	
	Ø 5 years	Current	Ø 5 years	Current	Ø 5 years	Current	Ø 5 years	Current	Ø 5 years	Current
United States	23.0	24.4	-2.5	-2.6	113.3	116.9	-5.8	-4.9	6.4	4.7
Eurozone	16.7	15.6	3.2	4.0	108.1	108.3	-2.6	-1.5	11.2	9.6
Germany	4.8	4.5	7.8	8.8	80.5	71.7	0.2	0.5	6.6	5.9
France	3.5	3.2	-0.9	-0.8	117.1	124.1	-3.9	-3.0	9.8	9.7
Italy	2.7	2.4	1.5	3.0	152.2	159.5	-2.7	-2.4	11.8	11.9
Spain	1.7	1.6	1.2	1.7	110.4	119.1	-6.6	-3.6	23.4	18.2
United Kingdom	3.7	3.3	-4.7	-4.8	109.6	113.1	-5.5	-3.1	6.1	4.7
Switzerland	0.9	0.9	10.3	9.2	45.0	41.7	0.4	1.3	3.1	3.6
Japan	6.5	6.4	2.0	3.8	225.6	237.5	-6.8	-5.2	3.7	3.0
Canada	2.3	2.0	-3.2	-3.1	88.1	90.5	-1.8	-2.3	7.0	6.6
Australia	1.9	1.7	-3.8	-3.9	34.3	43.2	-3.0	-2.5	5.7	5.9
China	13.6	15.5	2.4	1.6	40.0	49.9	-1.6	-3.3	4.1	–
Brazil	2.9	2.5	-2.9	-1.3	67.6	82.4	-6.4	-9.1	8.4	12.6
India	2.7	3.1	-2.1	-2.0	68.6	67.2	-7.2	-6.6	–	–
Russia	2.4	1.8	3.2	3.5	14.9	17.9	-1.9	-1.5	5.4	5.7

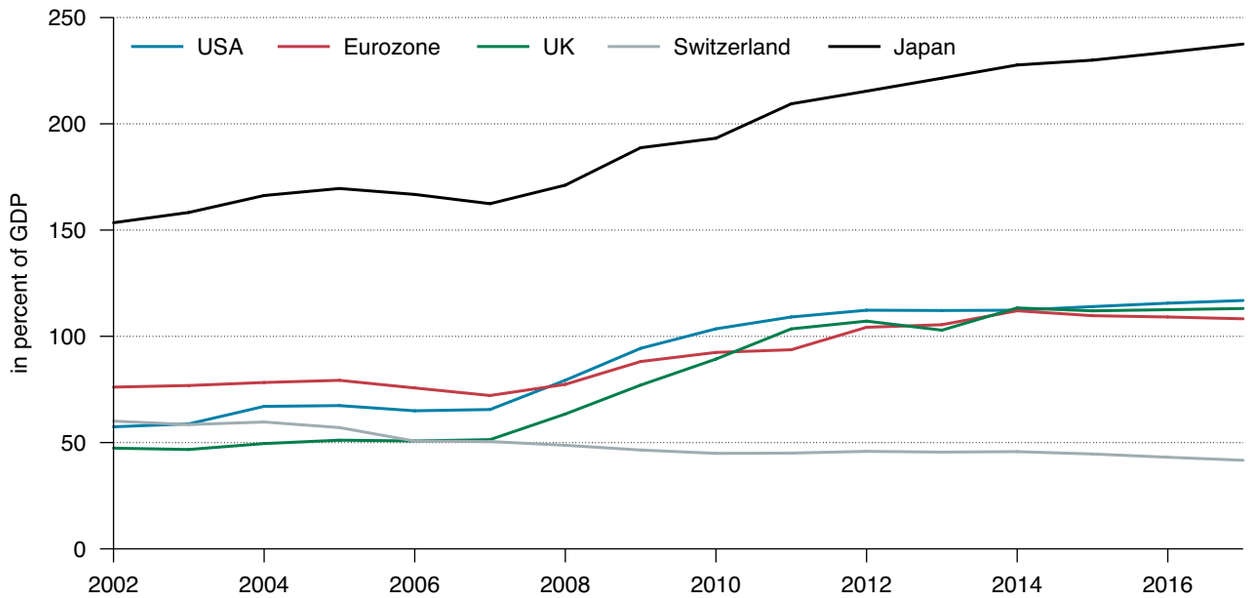
[1] In percent; calculations based on market exchange rates. [2] In percent of nominal GDP. [3] In percent.

Budget deficits in advanced economies

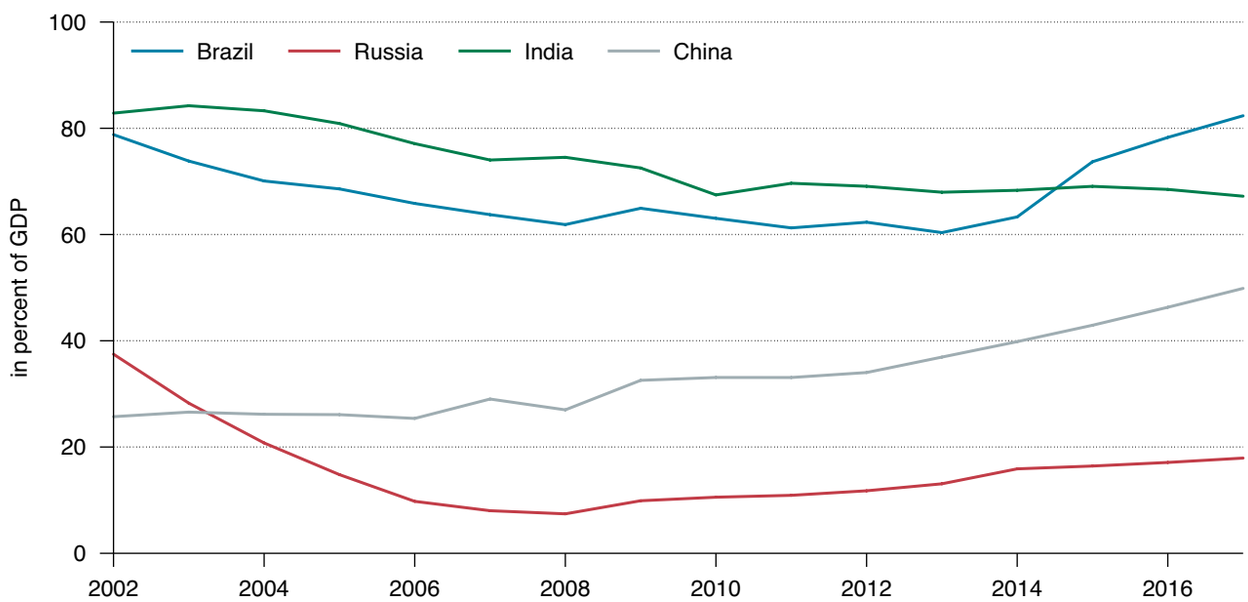


Source: Thomson Reuters Datastream, Wellershoff & Partners

Public debt in advanced economies



Public debt in emerging economies



Source: Thomson Reuters Datastream, Wellershoff & Partners

Inflation

In the US, we think consumer price inflation is likely to have peaked in February. The statistics show an inflation rate of 2.7 percent compared to a year earlier. Core inflation posted a rate of 2.2 percent year-over-year. The Fed was forced to act on interest rates not least by these numbers, raising its key rate by 0.25 percentage points at its March meeting.

Inflation levels in Europe are also once again approaching the levels targeted by the central bank. Concretely, in the Eurozone as a whole February's inflation rate hit 2 percent. Compared to the US, Europe's core inflation rate of 0.9 percent is clearly lower. That gives the European Central Bank a little breathing room to persevere with its expansive monetary policy.

In Switzerland, consumer prices rose by 0.6 percent year-over-year in February. That is the highest recorded level in almost six years. The latest uptick was driven by energy prices, above all else. These effects are likely to subside in the coming months, but also in Switzerland, the developing trend, observed worldwide, is toward higher rates of inflation.

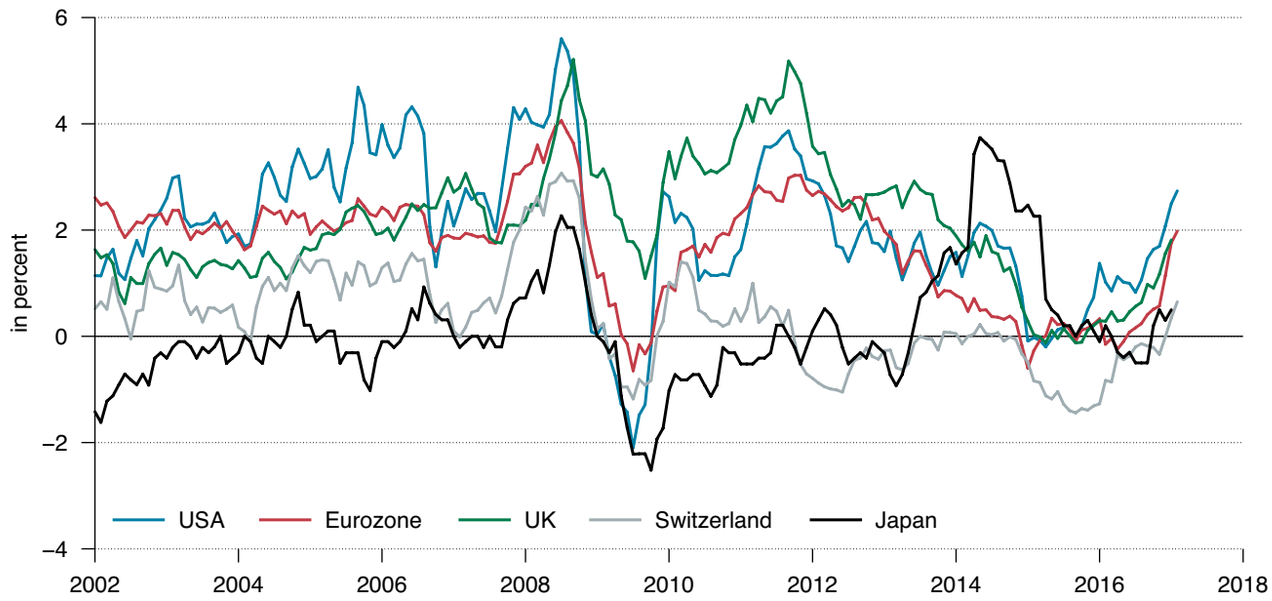
Inflation overview

	Ø 10 years[1]	Inflation[2]				Core inflation[3]			
		11/2016	12/2016	1/2017	2/2017	11/2016	12/2016	1/2017	2/2017
United States	1.8	1.7	2.1	2.5	2.7	2.1	2.2	2.3	2.2
Eurozone	1.5	0.6	1.1	1.8	2.0	0.8	0.9	0.9	0.9
Germany	1.4	0.8	1.7	1.9	2.2	1.3	1.6	1.6	1.7
France	1.2	0.5	0.6	1.3	1.2	–	–	–	–
Italy	1.5	0.1	0.5	1.0	1.6	0.4	0.6	0.5	0.6
Spain	1.5	0.7	1.6	3.0	3.0	0.8	1.0	1.1	0.9
United Kingdom	2.3	1.2	1.6	1.8	–	1.4	1.6	1.6	–
Switzerland	0.1	-0.3	0.0	0.3	0.6	-0.3	-0.3	-0.2	-0.1
Japan	0.3	0.5	0.3	0.5	–	0.1	0.0	0.1	–
Canada	1.6	1.2	1.5	2.1	–	1.5	1.6	1.7	–
Australia	2.4	1.4	1.5	–	–	1.4	1.3	–	–
Brazil	6.2	7.0	6.3	5.3	4.8	6.6	6.2	5.6	–
Russia	9.2	5.8	5.4	5.1	4.6	6.2	6.0	5.5	5.0
India	7.9	3.6	3.4	3.2	3.7	–	–	–	–
China	0.1	0.8	0.5	0.7	-1.5	1.9	1.9	2.2	1.8
Advanced economies[4]	1.5	1.1	1.5	1.9	2.1	1.4	1.4	1.5	1.5
Emerging economies[4]	3.7	2.5	2.2	2.1	0.9	3.0	2.9	3.0	2.6
World economy[4]	2.5	1.8	1.8	2.0	1.5	1.8	1.8	1.9	1.7

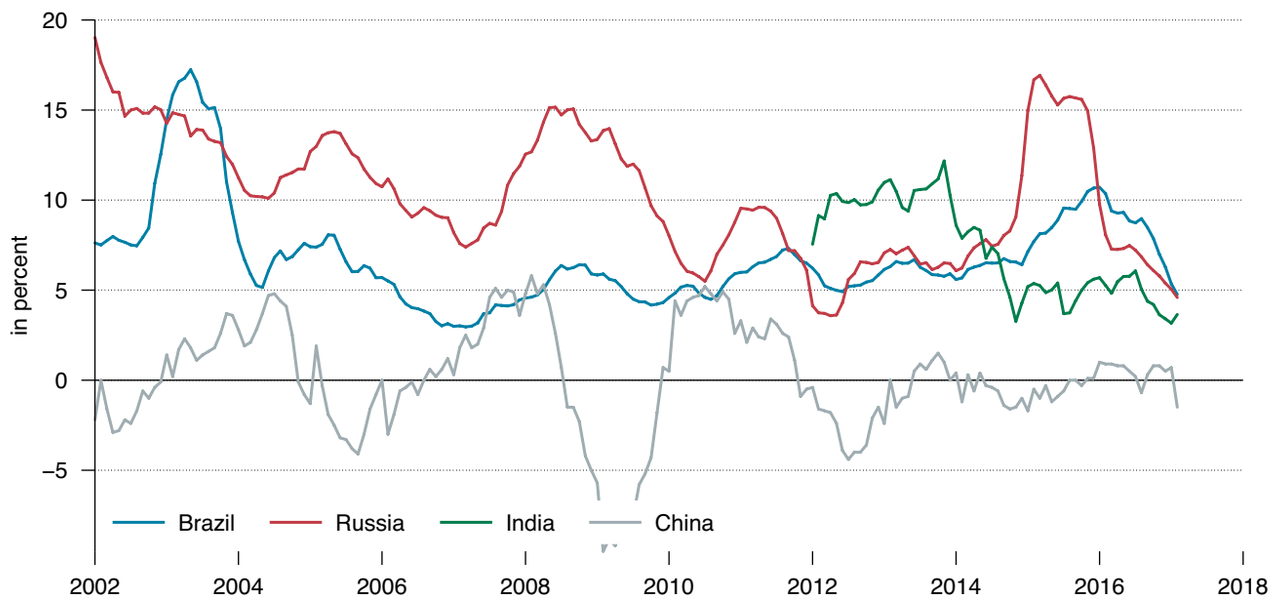
[1] Average annual consumer price inflation, in percent.
[2] Year-on-year change of the consumer price index (CPI), in percent.
[3] Core inflation is a measure of inflation that excludes certain items that can experience volatile price movements, such as energy and certain food items; year-on-year change of the core consumer price index, in percent.
[4] Calculations are based on nominal GDP weights derived from purchasing power parity exchange rates.

Source: Thomson Reuters Datastream, Wellershoff & Partners

Consumer price inflation in advanced economies



Consumer price inflation in emerging economies



Source: Thomson Reuters Datastream, Wellershoff & Partners

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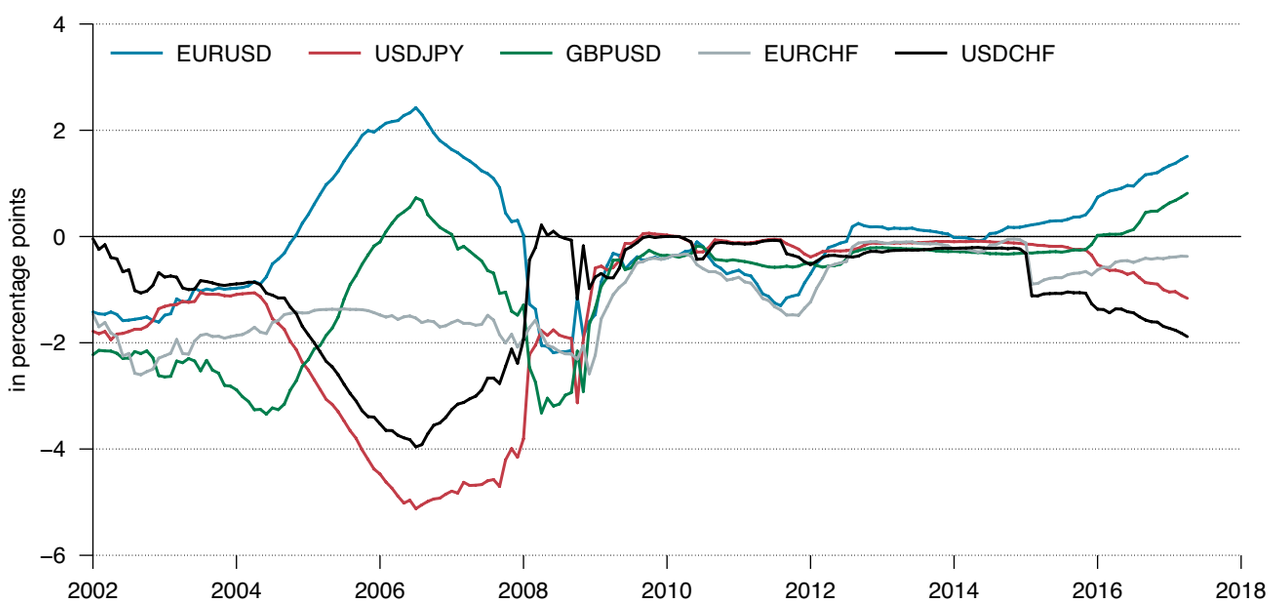
Interest rates

Interest rate differentials overview

	Current exchange rate	Interest rate differentials 3 months[1]				Interest rate differentials 12 months[1]			
		Current	1 year ago	Ø 5 years	Ø 10 years	Current	1 year ago	Ø 5 years	Ø 10 years
EURUSD	1.081	1.47	0.87	0.39	-0.11	1.92	1.25	0.59	-0.01
USDJPY	111.9	-1.16	-0.64	-0.32	-0.76	-1.69	-1.11	-0.60	-0.95
GBPUSD	1.248	0.81	0.04	-0.14	-0.55	1.08	0.21	-0.10	-0.55
EURCHF	1.074	-0.42	-0.49	-0.35	-0.79	-0.40	-0.52	-0.43	-0.87
USDCHF	0.993	-1.88	-1.36	-0.74	-0.68	-2.31	-1.77	-1.02	-0.86
GBPCHF	1.240	-1.07	-1.32	-0.88	-1.23	-1.23	-1.57	-1.13	-1.42
CHFJPY	112.6	0.72	0.73	0.42	-0.07	0.63	0.66	0.42	-0.08
AUDUSD	0.772	-0.34	-1.33	-1.93	-2.58	0.30	-0.65	-1.32	-2.11
USDCAD	1.332	-0.23	0.25	0.69	0.49	-0.61	-0.16	0.42	0.28
USDSEK	8.790	-1.71	-1.13	0.02	0.37	-2.00	-1.40	-0.15	0.27
USDRUB	57.5	8.79	9.72	9.22	7.87	7.53	8.83	8.72	8.00
USDBRL	3.084	10.13	13.46	10.70	10.02	7.97	12.41	10.35	9.85
USDCNY	6.897	3.21	2.17	3.57	2.66	2.33	1.83	3.25	2.38
USDTRY	3.613	10.94	10.87	8.87	9.47	10.75	10.31	8.72	9.66
USDINR	65.24	7.47	7.47	8.71	7.33	5.42	6.08	6.55	4.66

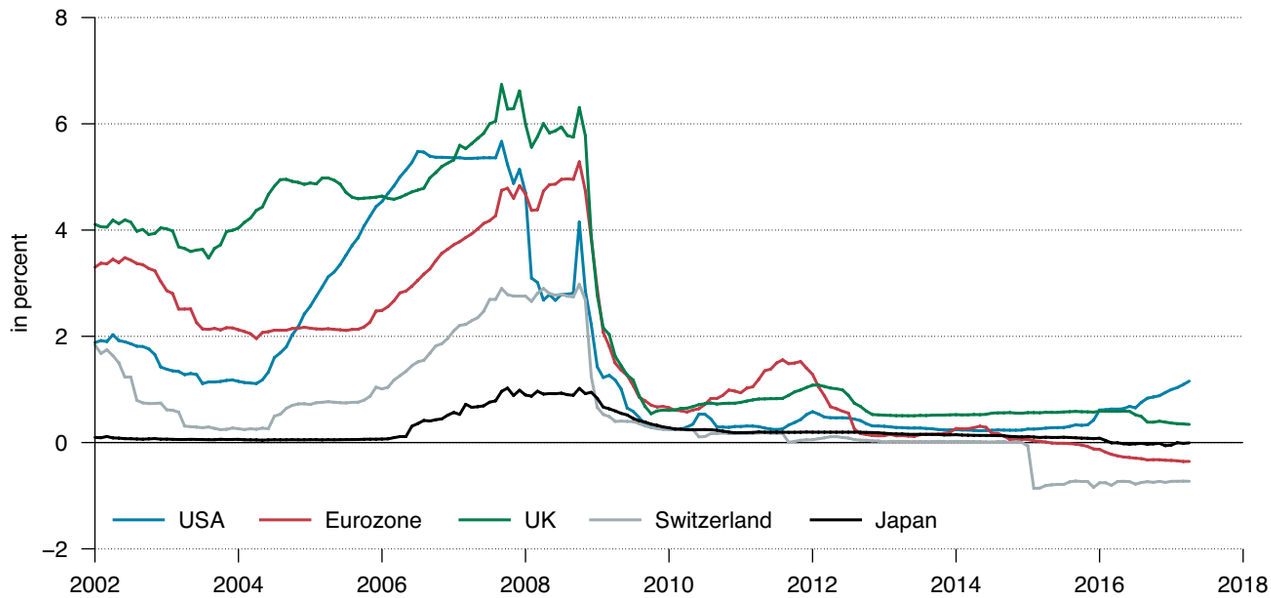
[1] The gap in interest rates between the second currency and the first one, in percentage points; e.g. US dollar minus euro for EURUSD.

Interest rate differentials

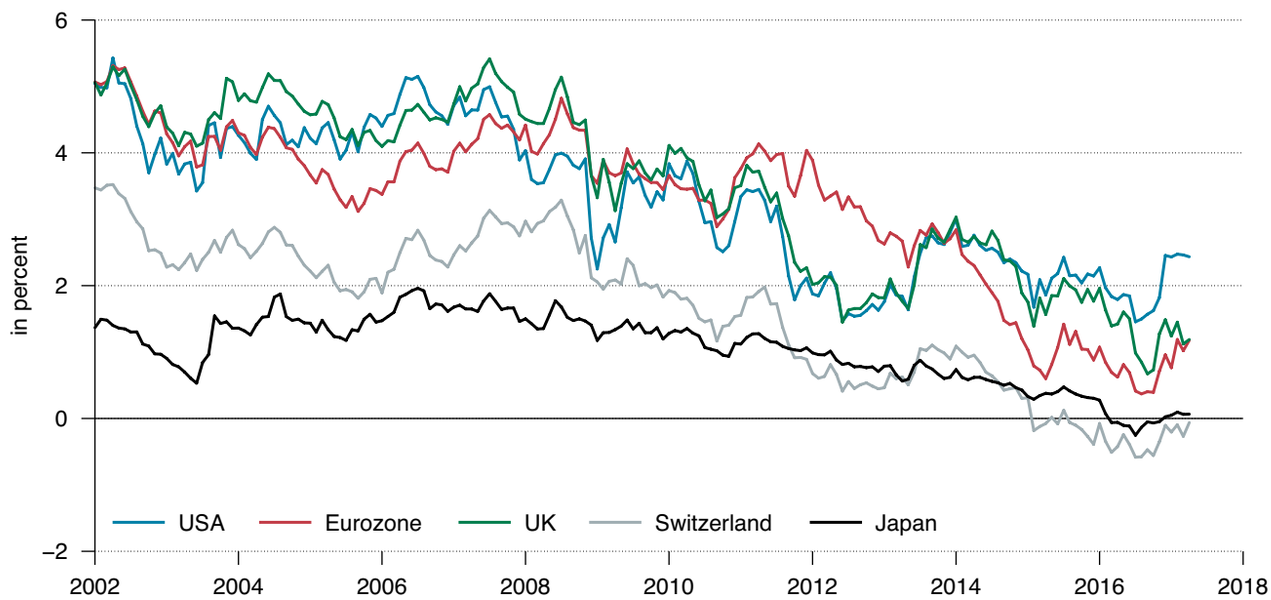


Source: Bloomberg, Thomson Reuters Datastream, Wellershoff & Partners

3-month Libor



10-year government bond yields



Source: Bloomberg, Thomson Reuters Datastream, Wellershoff & Partners

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FX markets

Currency markets have shown their placid side in recent weeks, as the low levels of implied volatility indicate. But at least for the Swiss franc, this calm is deceptive and achieving it demanded considerable effort from the Swiss National Bank. Swelling by roughly 25 billion Swiss francs in February and the first half of March, the SNB's sight deposits grew as strongly as they last did in the weeks leading up to the lifting of the euro peg, on January 15, 2015. This course of action appears to be unsustainable and, in our view, it could compel the SNB to make a significant shift in its monetary policy in the foreseeable future.

According to purchasing power parity, the franc is overvalued versus the euro and the pound. It should be borne in mind, however that the two pairs of currencies are at the margins of the neutral range, which indicates the average variation in the historical currency movements. Meanwhile, the UK government has confirmed its intention to submit its formal notification to leave the EU by the end of March. We can only assume that the process thus put into effect will not pass without leaving a trace on the British pound.

FX overview

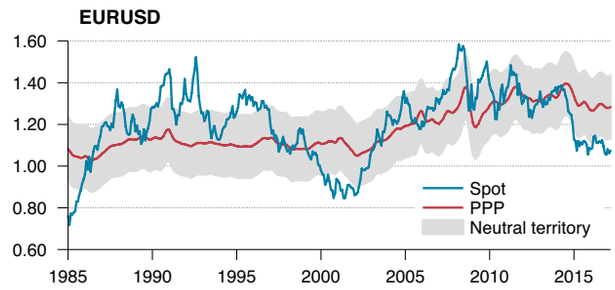
	Current exchange rate	Performance[1]				Purchasing Power Parity[2]		
		YTD	3 months	1 year	5 years	PPP	Neutral territory	Deviation[3]
EURUSD	1.081	2.5	3.6	-4.0	-18.0	1.28	1.13 - 1.43	-15.8
USDJPY	111.9	-4.1	-4.9	0.2	33.8	91.2	60.8 - 121.6	22.7
GBPUSD	1.248	1.0	0.9	-13.3	-21.3	1.62	1.42 - 1.82	-23.0
EURCHF	1.074	0.2	0.3	-1.4	-10.9	1.19	1.07 - 1.31	-10.0
USDCHF	0.993	-2.3	-3.2	2.7	8.7	0.95	0.72 - 1.19	4.4
GBPCHF	1.240	-1.3	-2.3	-11.0	-14.4	1.52	1.24 - 1.80	-18.5
CHFJPY	112.6	-1.9	-1.8	-2.4	23.1	89.5	74.3 - 104.7	25.8
AUDUSD	0.772	6.6	6.4	1.6	-26.1	0.71	0.60 - 0.83	8.3
USDCAD	1.332	-0.7	-0.6	1.9	34.1	1.20	1.13 - 1.27	10.9
USDSEK	8.790	-3.2	-4.7	6.9	30.6	7.29	6.35 - 8.22	20.6
USDRUB	57.5	-5.9	-6.0	-15.4	96.2	41.9	33.8 - 50.1	37.1
USDBRL	3.084	-5.2	-7.5	-14.6	68.8	2.88	2.37 - 3.39	7.2
USDCNY	6.897	-0.8	-0.8	6.3	9.1	6.92	6.69 - 7.16	-0.4
USDTRY	3.613	2.7	2.8	26.4	98.9	2.77	2.55 - 3.00	30.3
USDINR	65.24	-3.9	-3.9	-1.9	28.8	71.7	68.1 - 75.3	-9.0

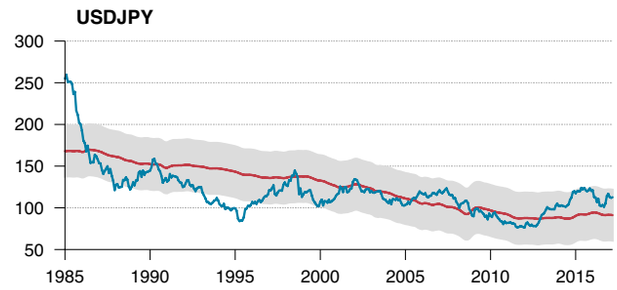
[1] Performance over the respective period of time, in percent.

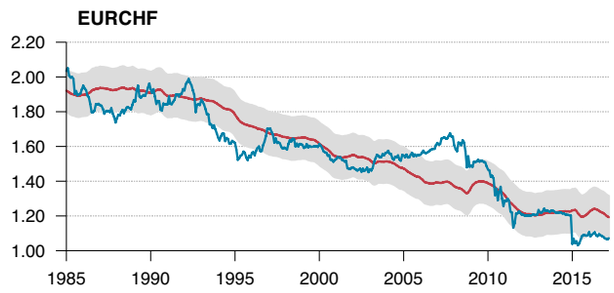
[2] Purchasing power parity (PPP) is estimated based on the relative development of inflation rates in two currency markets; the neutral territory is determined by +/- 1 standard deviation of the historical variation around the PPP value.

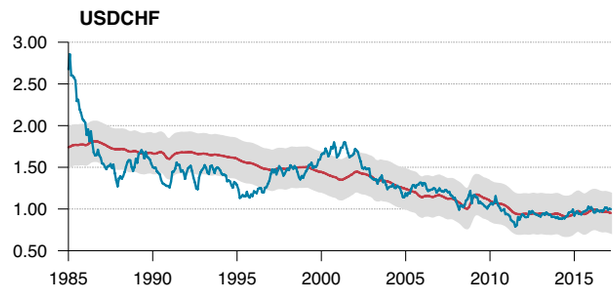
[3] Deviation of the current spot rate from PPP, in percent.

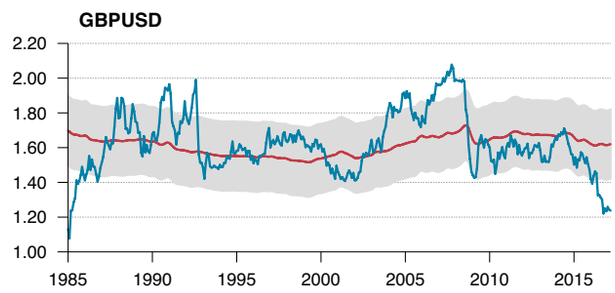
Source: Bloomberg, Thomson Reuters Datastream, Wellershoff & Partners

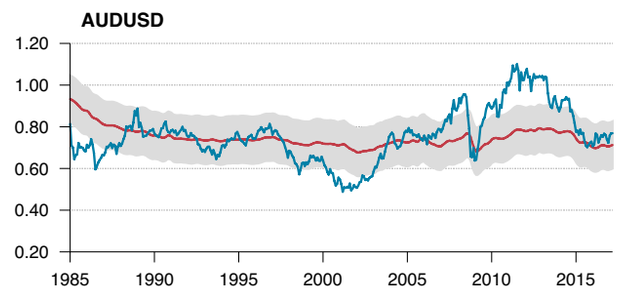


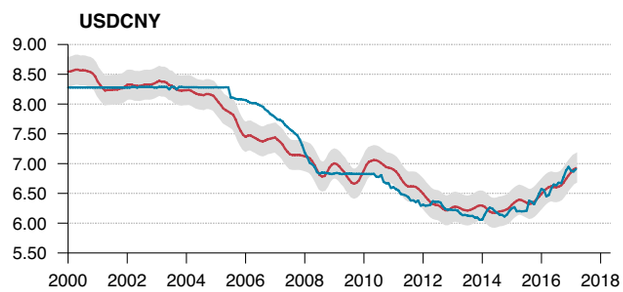


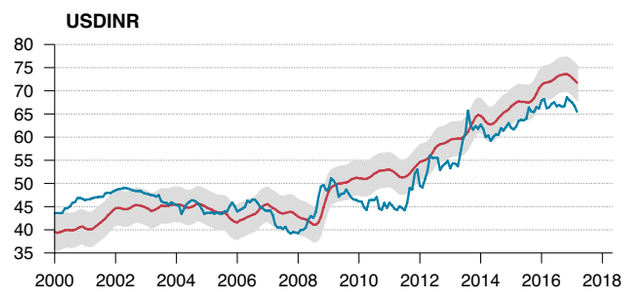


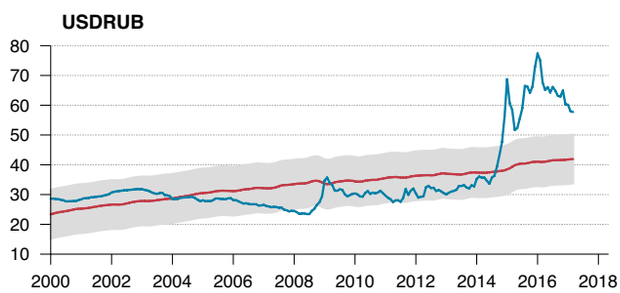


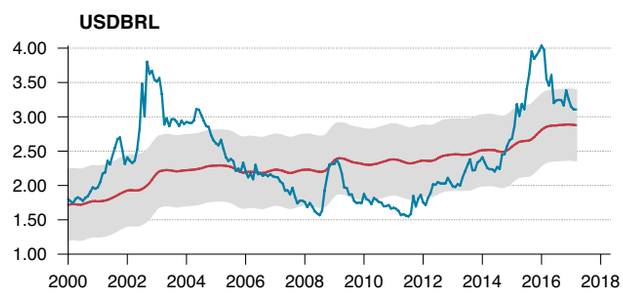












Source: Thomson Reuters Datastream, Wellershoff & Partners

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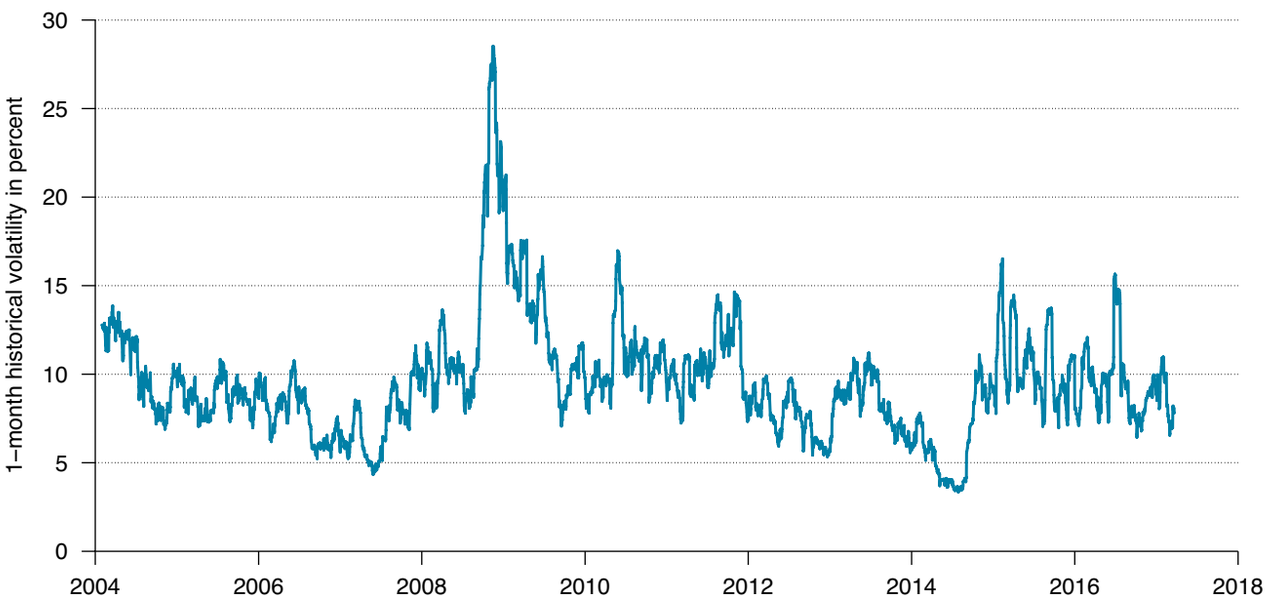
FX volatility

FX volatility overview

	Current exchange rate	Volatility 3 months[1]				Volatility 12 months[1]			
		Historical	Implied	Ø 5 years[2]	Ø 10 years[2]	Historical	Implied	Ø 5 years[2]	Ø 10 years[2]
EURUSD	1.081	7.8	9.2	8.9	10.5	8.2	8.8	9.4	10.8
USDJPY	111.9	10.3	10.0	9.9	11.0	11.6	9.9	10.4	11.3
GBPUSD	1.248	9.8	9.3	8.4	9.9	12.7	9.7	8.9	10.3
EURCHF	1.074	3.9	6.0	5.5	6.4	5.1	6.1	6.4	6.8
USDCHF	0.993	7.4	7.6	9.2	10.6	7.7	8.1	9.9	10.9
GBPCHF	1.240	8.6	8.3	8.8	10.3	12.1	8.5	9.3	10.7
CHFJPY	112.6	7.9	9.2	10.5	11.7	10.6	9.6	11.3	12.1
AUDUSD	0.772	8.7	9.4	10.3	12.6	10.7	9.8	11.0	12.9
USDCAD	1.332	7.3	7.2	7.9	9.9	8.8	7.6	8.4	10.2
USDSEK	8.790	8.5	9.4	10.4	12.6	9.8	9.6	11.0	12.8
USDRUB	57.5	16.3	12.6	16.1	13.9	16.3	13.1	16.4	15.0
USDBRL	3.084	10.5	13.4	14.7	15.5	15.2	14.0	15.2	15.9
USDCNY	6.897	3.2	4.2	3.1	3.1	2.7	5.5	4.0	4.7
USDTRY	3.613	14.7	14.6	11.7	13.3	13.0	14.9	13.0	14.6
USDINR	65.24	3.7	5.7	8.8	9.6	3.9	6.7	9.9	10.5

[1] Annualized volatility, in percent. [2] Average of implied volatility.

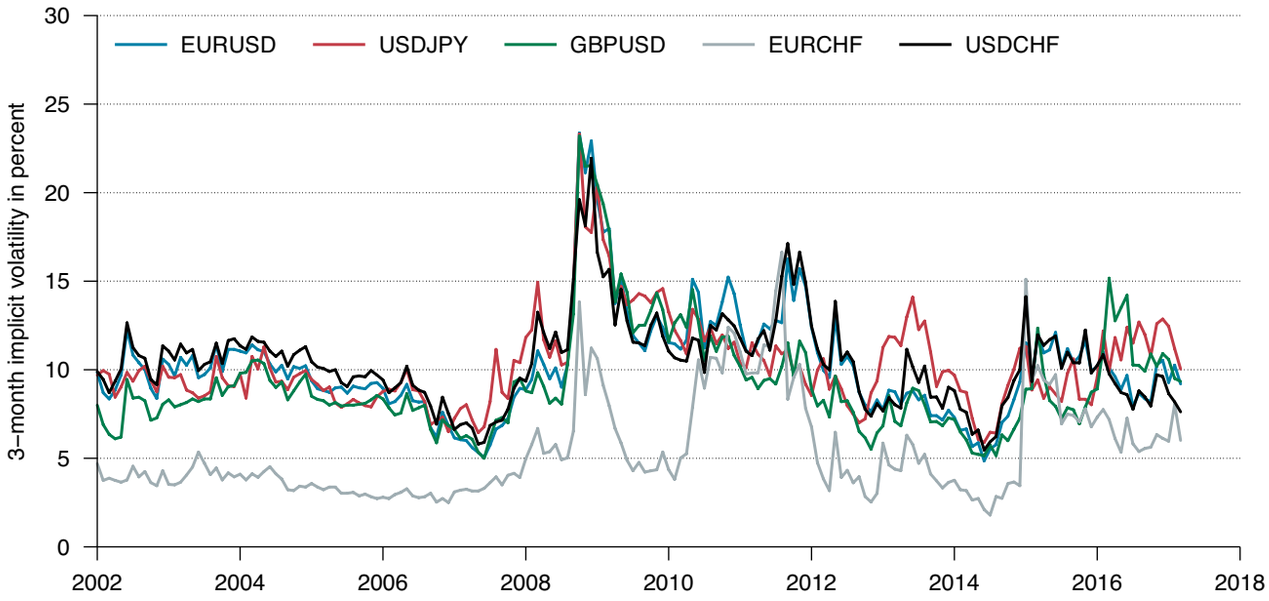
QCAM volatility indicator[3]



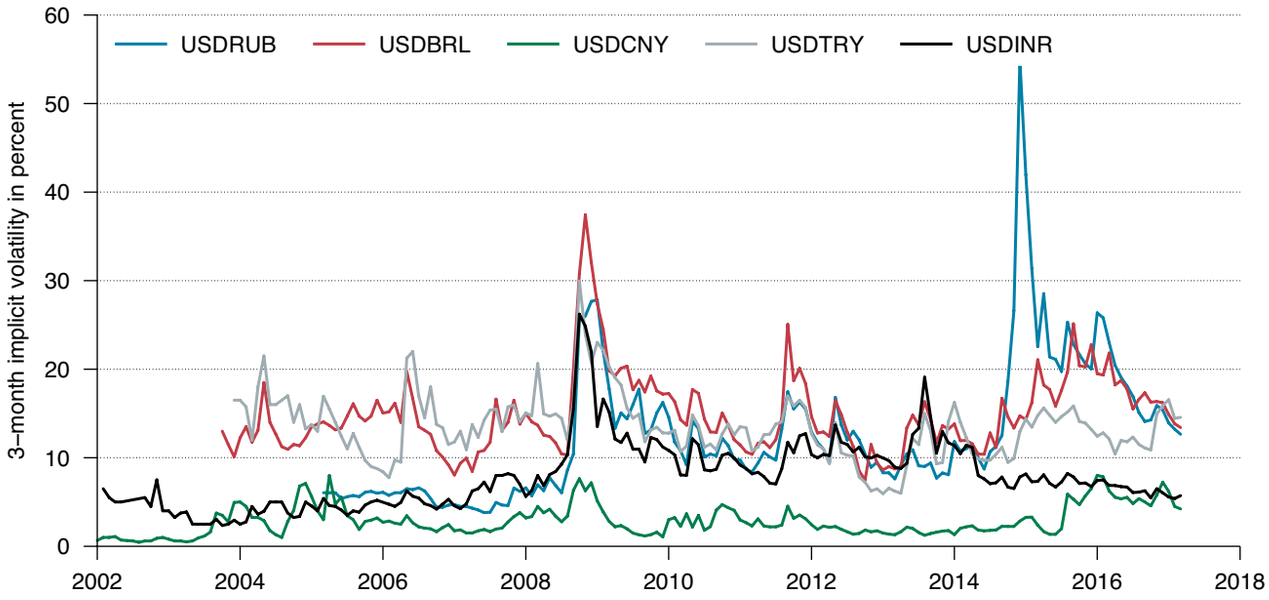
[3] The QCAM volatility indicator measures general volatility in global FX markets; the indicator is based on historical volatility of the main exchange rates, which are weighted by trading volume.

Source: Bloomberg, Thomson Reuters Datastream, QCAM Currency Asset Management, Wellershoff & Partners

Implicit volatility



Implicit volatility



Source: Bloomberg, Thomson Reuters Datastream, Wellershoff & Partners

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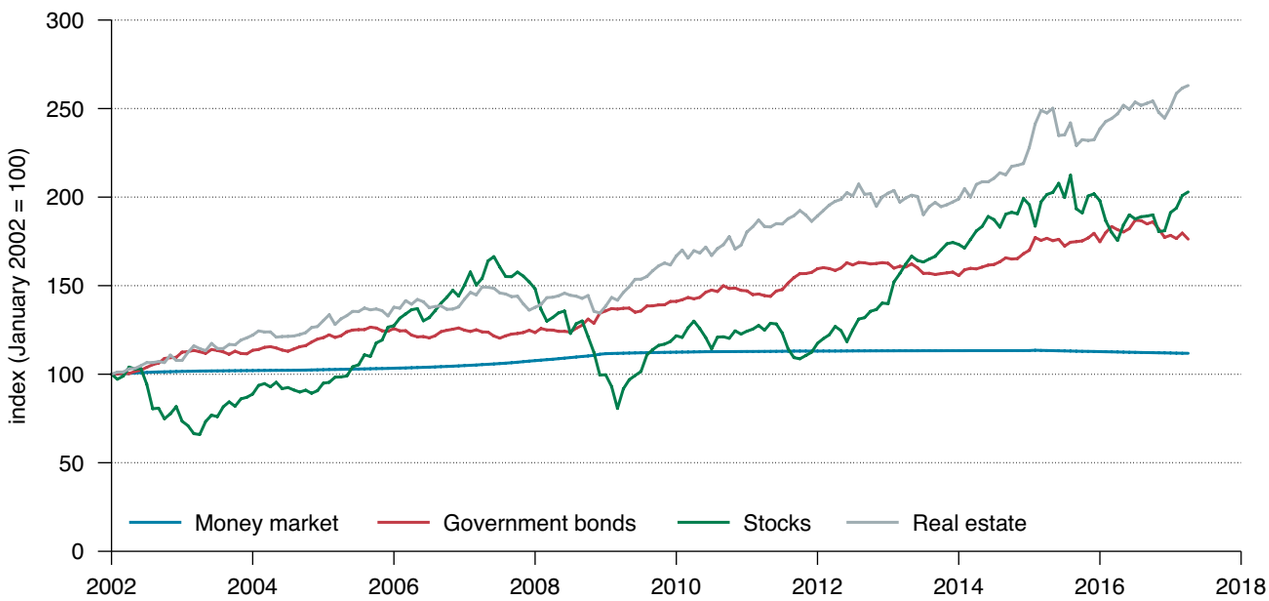
Financial markets

Performance overview

	Performance in either local curreny or USD[1]				Performance in CHF[1]			
	YTD	3 months	1 year	5 years	YTD	3 months	1 year	5 years
Swiss money market	-0.1	-0.2	-0.7	-1.1	-0.1	-0.2	-0.7	-1.1
Swiss government bonds	-1.2	-0.4	-2.7	11.7	-1.2	-0.4	-2.7	11.7
Swiss corporate bonds	-0.4	0.0	-1.3	11.8	-0.4	0.0	-1.3	11.8
Swiss equities (SMI)	6.1	5.9	13.6	61.7	6.1	5.9	13.6	61.7
European equities (Stoxx600)	4.6	4.8	14.1	68.1	4.7	5.5	12.3	49.9
UK equities (Ftse100)	4.4	5.9	24.1	52.2	3.6	3.7	10.1	30.4
Japanese equities (Topix)	3.0	1.4	18.8	101.3	4.9	2.6	20.8	61.0
US equities (S&P 500)	5.2	4.0	16.7	87.3	3.1	0.9	19.8	103.6
Emerging markets equities	13.1	14.9	20.5	7.7	10.9	11.4	23.8	17.0
Global equities (MSCI World)	5.9	5.5	15.3	61.3	3.9	2.3	18.3	75.3
Swiss real estate	4.9	5.0	8.4	34.7	4.9	5.0	8.4	34.7
Global real estate	1.6	3.7	3.1	49.2	-0.4	0.6	5.9	62.2
Commodities	-3.0	-1.7	5.1	-40.6	-4.9	-4.7	7.9	-35.4
Brent oil	-9.8	-7.2	23.4	-58.4	-11.5	-10.0	26.6	-54.7
Gold	7.4	9.8	-0.2	-24.1	5.3	6.5	2.4	-17.6

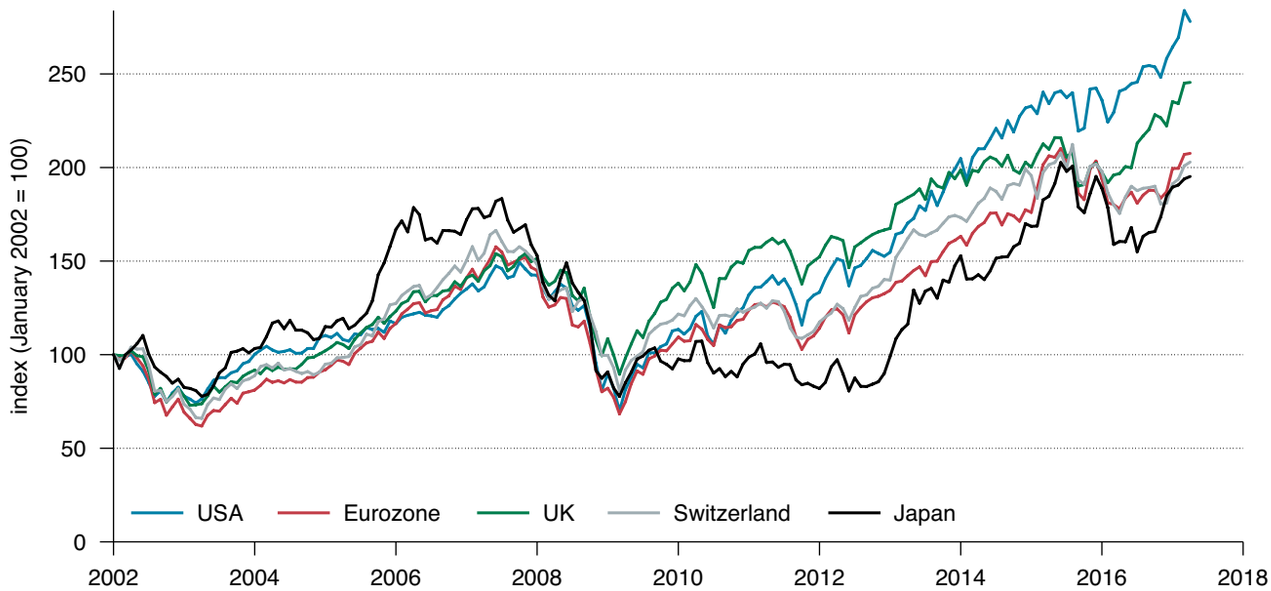
[1] Performance over the respective period of time, in percent.

Performance of selected Swiss asset classes

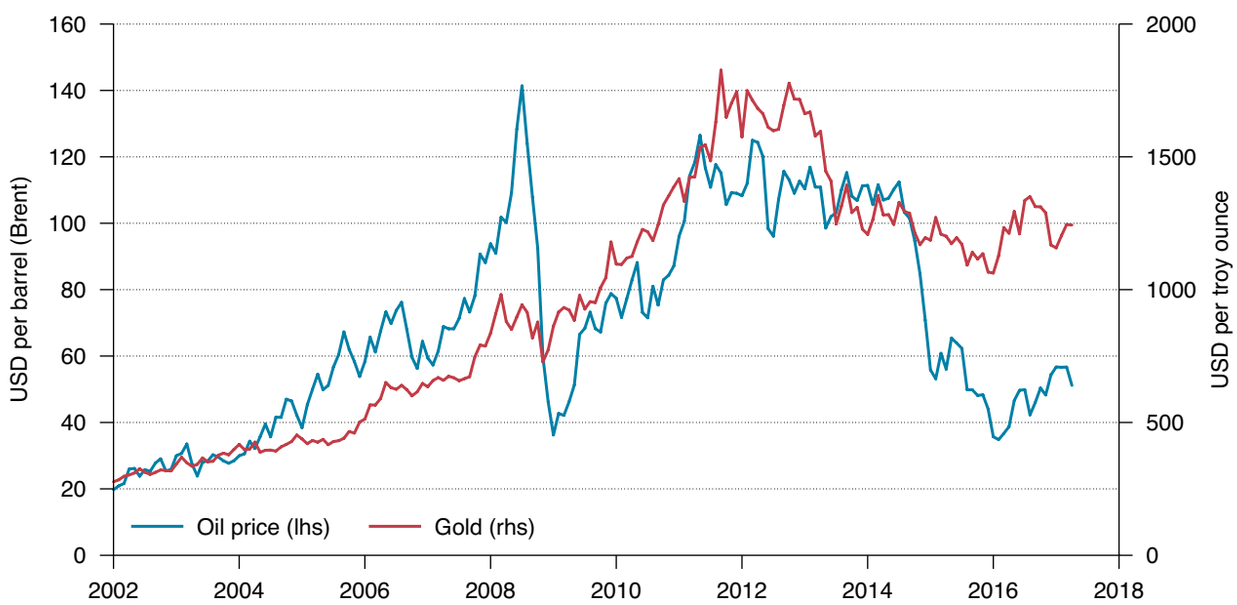


Source: Bloomberg, Thomson Reuters Datastream, Wellershoff & Partners

Performance of selected equity markets (in local currency)



Performance of selected commodity prices



Source: Bloomberg, Thomson Reuters Datastream, Wellershoff & Partners

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Number of the month

16 quarters

The number 16 serves this month as a symbolic reminder of how good we are at ignoring fundamental developments in favour of superficial ambiguities. For all the political risks that Europe is facing this year, how readily we disregard the good news from the European economy. If Eurozone growth in this quarter continues to accelerate, as expected, that would make it the 16th consecutive quarter of uninterrupted economic growth.