QCAM
Currency Asset Management

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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 Currency Asset Management

QCAM Insight

Is it enough for Sterling to be cheap?

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The GBP has fared surprisingly well so far this year despite the failure to define the terms of the Brexit break-up between the UK and the EU. Given its prior steep fall, the GBP still seems cheap, but it also faces headwinds even if a hard Brexit can be avoided.

The final outcome of the Brexit process remains wide open. In the near term, however, it looks increasingly likely that the UK government will ask for an Article 50 extension before the March 29 deadline. In fact, this may happen as early as this week, when the House of Commons meets again to vote on the revised Brexit proposal. Resistance among British MPs to Theresa May's new proposal, which differs little from the previous version, remains very strong, yet few MPs seem willing to chance a hard Brexit . So, with time running out, an extension is the only interim option that a majority of MPs can probably agree on. The EU may try to limit the extension and attach some conditions but is unlikely to refuse the request altogether.

Such outcome would be a relief for the market and could give Sterling a temporary lift. But resolving the thorny issues plaguing Brexit will remain as difficult to achieve as before and may require a change of government or a new referendum, or both. The EU may also have to modify its position, depending on the outcome of the EU parliamentary elections in May as well as other political and economic developments over the next few months. There are many possible scenarios but ultimately three basic outcomes look plausible: No Brexit , a Brexit with a deal and a hard Brexit. We believe the chances are 20/60/20, respectively.

GBP is undervalued versus USD and EUR

Based on our estimates, Sterling is currently significantly undervalued, more than 20 percent (or about two standard deviations) versus the USD and about 10 percent (roughly one standard deviation) versus the EUR (see page 15). It is difficult to say whether Sterling's discount is a realistic reflection of current risks and what scenarios it prices in. In our judgment, however, finding a deal or avoiding Brexit altogether would be a positive for the market that is not fully priced in. Were either of these outcomes to happen, we think it would give the GBP a boost.

However, there remains a 20 percent risk, in our view, that the final outcome is a hard Brexit . We think that is also not fully priced in, and would probably result in negative market response and a fundamental repricing of the

GBP, which would not be the first time in the history of Sterling (remember 1992). Moreover, avoiding a hard Brexit is not all that matters for the pound.

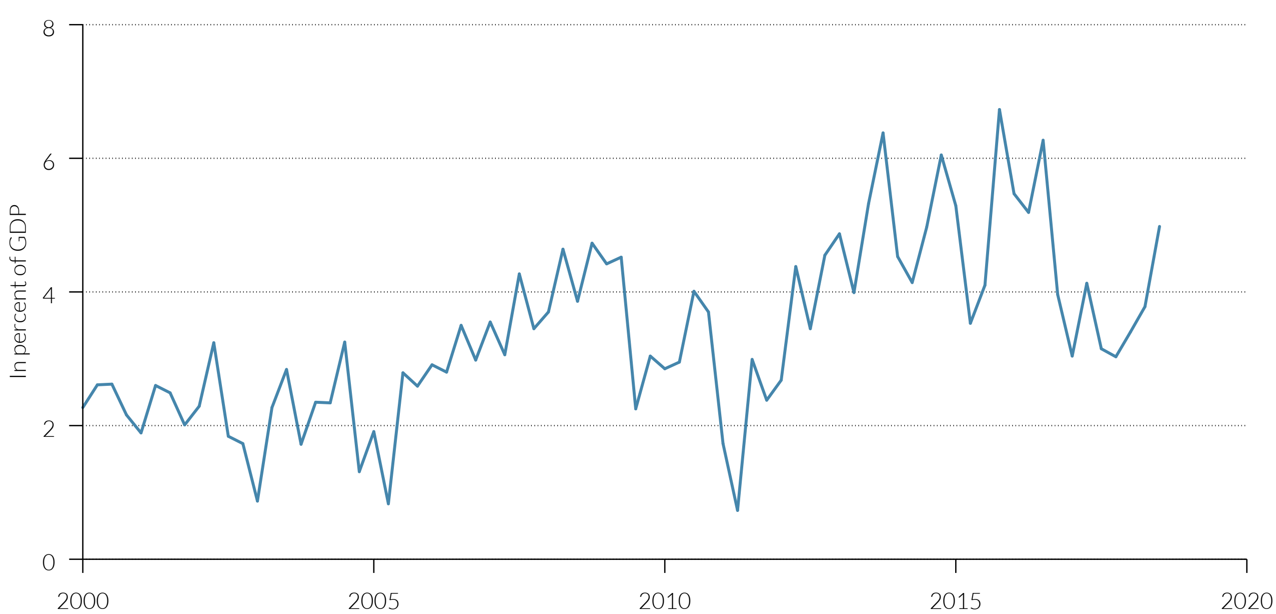
More headwinds

First, the uncertainty over Brexit has already done substantial and irrevocable damage. International companies have moved or are in the process of moving at least parts of their operations to continental Europe. Even if a hard Brexit is avoided, the UK will probably never regain its favored position as a bridgehead into Europe.

Second, the UK is a chronic current-account-deficit economy, and lately that deficit has been on the rise again (see chart). Paying for the gap means attracting capital inflows. The UK's status as a stepping-stone to Europe made it easy to attract capital in the past. Now, Britain may have to pay higher interest rates or allow its currency to weaken. When under pressure in the past, the UK has resisted drastic interest rate hikes and been more willing to tolerate a weaker currency. With government debt still high by historical standards, the government's appetite for higher interest rates is limited. The Bank of England has not yet changed its policy guidance but it has significantly lowered its growth outlook, which we think makes a tightening move very unlikely.

Third, whatever the Brexit outcome, the UK will always remain closer to Europe than the rest of the world. In the past, this was also reflected in the link of Sterling's exchange rate with the euro. That link will weaken but not disappear. Europe, on the other hand, has other, larger problems than just Brexit , most notably with Italy. So, the irony may well be that the UK and Sterling will still suffer from Europe's problems despite Brexit's goal of separating Britain from the EU.

UK current account deficit



Source: UK Office for National Statistics, QCAM Currency Asset Management

The macro perspective

The global economy looks solid

Assessing the American economy was recently hindered by the delayed publication of key economic data. In the Eurozone, various special factors are also making a clear appraisal problematic. But all the available information indicates that an optimistic view of the global economy is still justified. The problems in China, however, persist.

A month ago, we discussed whether the outlook implied by the cheerless financial markets or that of the more upbeat macroeconomists was the right one. Recent developments show that markets have been listening to the economists, and not the other way around. Stock markets are once again clearly anticipating a more positive economic development. Meanwhile, accurately assessing the American economy has been complicated by the delay in publishing some key economic data due to the recent partial government shutdown.

The US economy is humming despite shutdown

Labor market figures continue to signal a boom in the US. At the same time, we note, leading growth indicators have turned a bit more cautious. Business sentiment stabilized in January, following a decline in December, and consumer sentiment has slipped a bit. Still, the labor market's glowing health makes a further decline unlikely. The shutdown itself will leave its mark on first-quarter growth figures, but we expect to see no medium-term impact on growth momentum from this disruption. At the same time, however, the shutdown episode highlights some long-term risks for the US. First, the government debt situation is precarious despite the boom – that's the only reason why there is a shutdown. Second, the difficulty in achieving any political consensus in the US is unsettling. The divisive state of domestic politics could have a negative impact on the long-term economic stability of the country.

The US Fed used the slightly weaker growth outlook to show some generosity. But if this rather expansionary monetary policy stance were to translate into higher inflation, further interest rate hikes would follow, and potentially at a faster pace than the Fed would prefer.

Moderately positive outlook for the Eurozone too

In the Eurozone, the difficulty in assessing current economic developments is not the lack of data but the challenge of distinguishing between the impact of special factors and cyclical developments. The leading indicators continue to point to above-trend growth in the coming months. After the rather weak numbers in the second half of last year, we can expect a recovery in growth rates. But a hard Brexit looms as the next potential special factor to burden Eurozone growth.

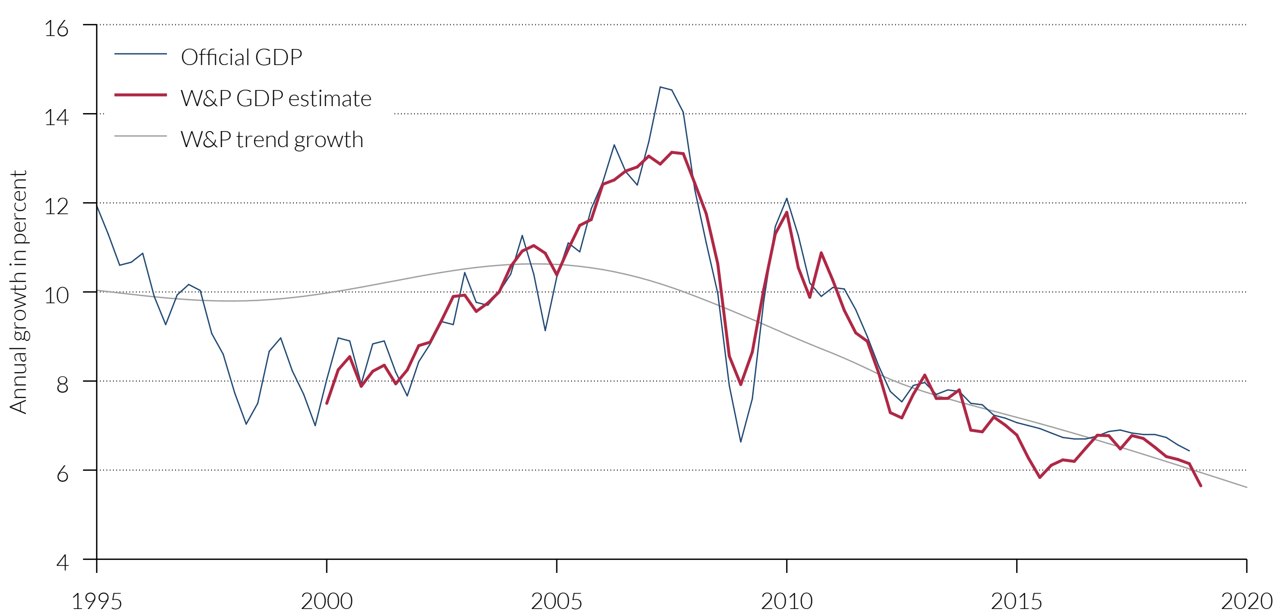
China's problems persist

China still has plenty to worry about. According to our estimates, the Chinese economy grew by 5.7 percent in the final quarter of 2018. Industry was the main problem, despite the fact that export-dependent industrial sectors were still able to benefit from the artificially increased demand of foreign importers. At the same time, domestic consumption was also disappointing. For example, car sales and spending on smartphones both declined markedly.

The Chinese authorities have undertaken various measures to support economic growth. For example, local governments have been given the green light to issue new infrastructure bonds. The construction sector stands to benefit from this stimulus. The consumption of glass, cement and steel, which serve as reliable leading indicators of construction activity, have all risen recently. However, measures aimed at lending are problematic. The private sector and local governments are already heavily in debt from the credit-driven growth of the past decade. A further increase in debt would escalate risks in the financial system once again. The government seems to be aware of these problems. It will therefore only cautiously promote credit-driven demand.

This is one of the reasons why Beijing is now newly promoting consumer spending. Tax cuts for individuals have already come into force. Measures to support car purchases are also in the pipeline. Whether the consumer-side stimulus will provide the desired boost is doubtful, in our view. Credit policy measures are easier to implement: Local governments can be induced to undertake new construction projects more readily than consumers can be persuaded to buy new cars.

Chinese economic growth now estimated to be below trend



Source: Thomson Reuters Datastream, Wellershoff & Partners

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FX market talk

The dollar starts 2019 overvalued

The US dollar started 2019 overvalued against a broad range of G7 currencies as well as versus some major emerging market currencies. The dollar's strength is not only a reflection of strong US growth, but also of developments outside the US. History shows that phases of noteworthy over- and undervaluation eventually do correct.

As can be seen in the chart, which is a snapshot as of the end of January 2019, the US dollar was overvalued against a broad range of currencies. With the exception of the Thai baht and Israeli shekel, two outliers which, according to our estimates, are over-valued against the US dollar, the greenback started the year in a position of strength against the currencies of many major and minor economies.

It is noteworthy that some of the largest valuation gaps have emerged versus G7 currencies, including Sterling and the Japanese yen, which were both trading around 20 percent below their respective purchasing parity rates of GBPUSD 1.65 and USDJPY 86. In purchasing power parity terms, the dollar's overvaluation against the euro and the Canadian dollar was more modest – 10 percent relative to a EURUSD PPP rate of 1.26 and a USDCAD PPP rate of 1.20.

Against the Swiss franc, the dollar traded just 6 percent stronger than our PPP rate estimate of USDCHF 0.94. Our estimated neutral range for USDCHF is 1.06 to 0.82, meaning that we do not currently see any extreme valuation of the dollar relative to the Swiss franc.

Emerging market currencies stage a recovery

As we have previously noted – for example, in the November 2018 issue – emerging market currencies were unusually cheap some months back. As a reference we used a broad index of emerging market currencies that comprise the most liquid local currency bonds – a group including the bonds of Brazil, Indonesia, Poland, Mexico, South Africa, Thailand, Russia, Colombia, Turkey, Malaysia, Hungary and Peru. Since our November assessment, this basket has seen an average appreciation of 4 percent, or 12 percent annualized, excluding carry.

Some of these emerging market currencies are no longer at extreme levels of undervaluation. The South African rand, for example, now appears on our chart as fairly valued against the US dollar. Overall, though, the emerging market currencies reflected in this broader basket are still undervalued according to our estimates. At the end of October 2018, the valuation gap relative to the US dollar stood at -17 percent. By the end of January 2019, it had narrowed to -12 percent.

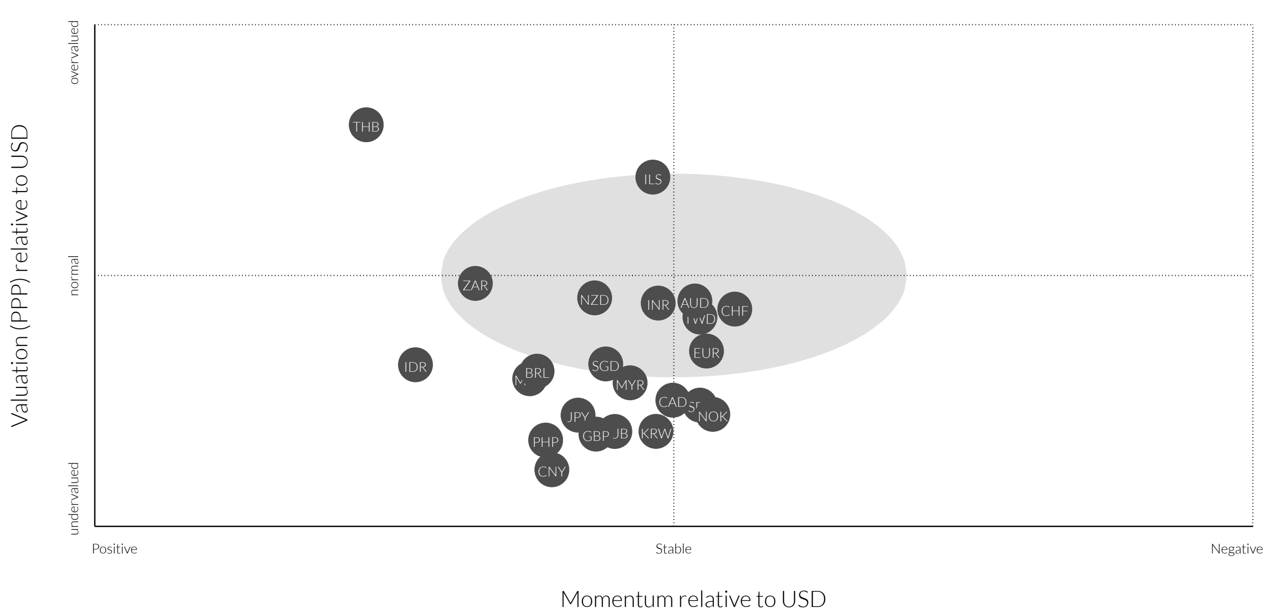
China and India

In terms of population, these two countries are the biggest in the world, with around 1.4 billion inhabitants each. It is clear that what happens to the Chinese economy has a global impact. It is also clear that India's economic weight will only increase as its population overtakes that of China and as its per capita level of wealth heads higher.

In terms of their respective currencies, these two large economies have pursued different paths. China's currency arrangement is officially classified by the IMF as a "managed float" and, until recently, as having been "crawl-like" (meaning that it tended to trade in a narrow range). Against that background, the Chinese renminbi currently finds itself in uncharted waters as it diverges from a traditionally very narrow band around its central PPP rate against the US dollar. It is this extreme deviation from its historical neutral range around PPP that makes the CNY look like an outlier on our chart. At around 5 percent, the actual deviation from its central PPP rate against the US dollar is still relatively small, however. While this may not seem like much compared to how other currencies have traded relative to the dollar, it represents a significant change for the Chinese renminbi.

The currency regime in India is very different from that of China. India's exchange rate regime takes a more classically free-floating emerging markets approach within the context of a nominally independent central bank, a history of higher inflation and capital controls. This has resulted in a currency that deviates from its central purchasing power parity rate for extended periods of time and trades outside its neutral range, both on the up- and the downside. At present, after a period of substantial overvaluation, our estimates show the Indian rupee spot rate being close to its US dollar PPP rate. But even here the US dollar remains on the stronger side for now.

Valuation and momentum: Tracking global currencies versus the US dollar



Source: Thomson Reuters Datastream, Wellershoff & Partners

Economic activity

In the Eurozone, sentiment indicators lost ground again in January. With the exception of Spain, none of the major European economies is currently able to generate upbeat sentiment. The United Kingdom has been one of the losers in recent months, as the ongoing uncertainty surrounding Brexit is evident in the subdued mood of business and consumers. Germany offers surprisingly little dynamism, with its industrial sector only partially recovering from last year's third-quarter slump.

In line with the Eurozone, sentiment in the US also deteriorated slightly in January. On the industrial side, sentiment picked up again after a sharp decline in December. At the same time, however, the outlook for the services sector has dimmed. In addition, US consumers were much less optimistic in January than they were in the previous month. Looking ahead to the coming months, we remain positive about the US economy. In particular, the mood of US consumers is likely to revive. Fundamentally, the environment continues to be favourable for consumers as both wage growth and job creation continue at high levels.

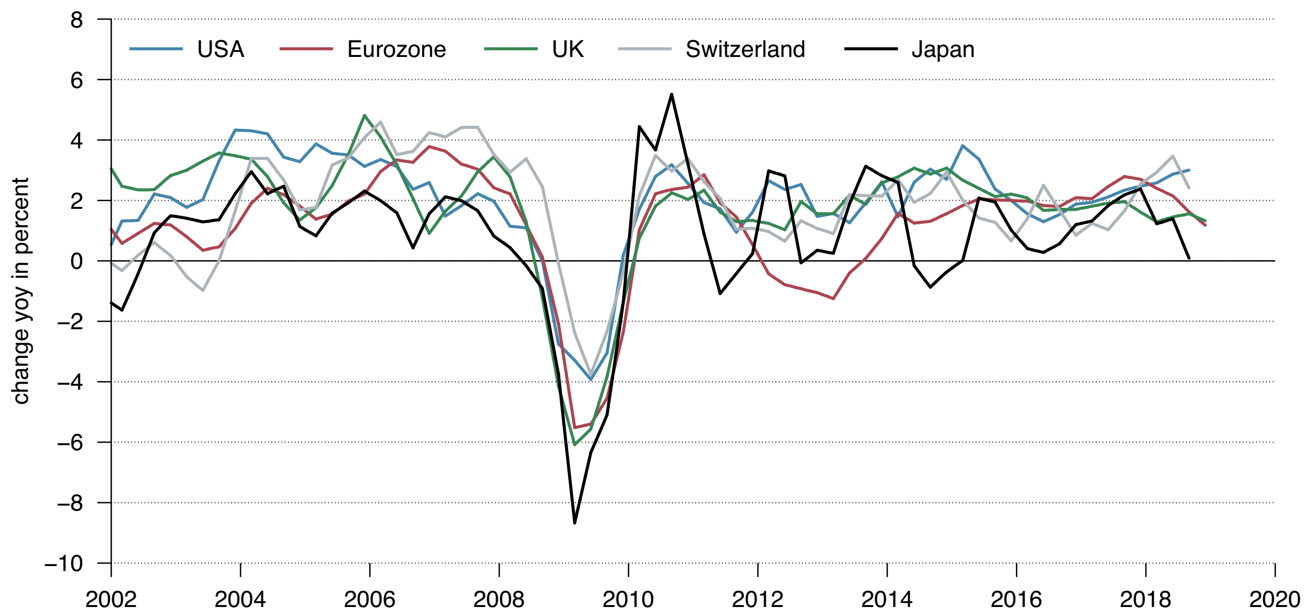
Growth overview

	Trend growth[1]	Real GDP growth[2]				W&P economic sentiment indicators[3]			
		Q1/2018	Q2/2018	Q3/2018	Q4/2018	10/2018	11/2018	12/2018	1/2019
United States	1.7	2.6	2.9	3.0	–	3.8	4.0	3.1	3.1
Eurozone	1.0	2.4	2.2	1.6	1.2	2.8	2.7	2.4	2.3
Germany	1.4	2.0	2.0	1.2	–	3.3	3.3	3.0	2.8
France	0.7	2.2	1.7	1.3	0.9	1.6	1.7	1.4	1.5
Italy	0.2	1.4	1.2	0.6	0.1	1.3	1.1	1.0	0.8
Spain	1.6	2.8	2.5	2.4	2.4	2.7	2.7	2.3	2.3
United Kingdom	1.8	1.3	1.5	1.6	1.3	2.6	2.3	2.3	2.1
Switzerland	1.5	2.9	3.5	2.4	–	2.2	2.5	2.3	2.1
Japan	0.4	1.2	1.4	0.1	–	2.5	2.5	2.5	2.5
Canada	1.6	2.3	1.9	2.1	–	1.8	1.8	0.6	0.9
Australia	2.4	3.0	3.1	2.8	–	3.0	3.0	2.9	2.7
Brazil	1.4	1.3	0.9	1.3	–	2.7	2.8	3.2	–
Russia	0.1	1.3	1.9	1.5	–	1.2	2.4	1.6	0.8
India	7.7	7.7	8.2	7.1	–	6.8	6.8	6.7	6.8
China	7.4	6.8	6.7	6.5	6.4	6.4	6.5	6.2	5.5
Advanced economies[4]	1.4	2.3	2.4	2.1	–	3.4	3.4	2.9	2.8
Emerging economies[4]	6.0	5.7	5.6	5.2	–	4.8	5.0	4.7	4.4
World economy[4]	3.5	4.0	4.1	3.7	–	4.2	4.3	3.9	3.6

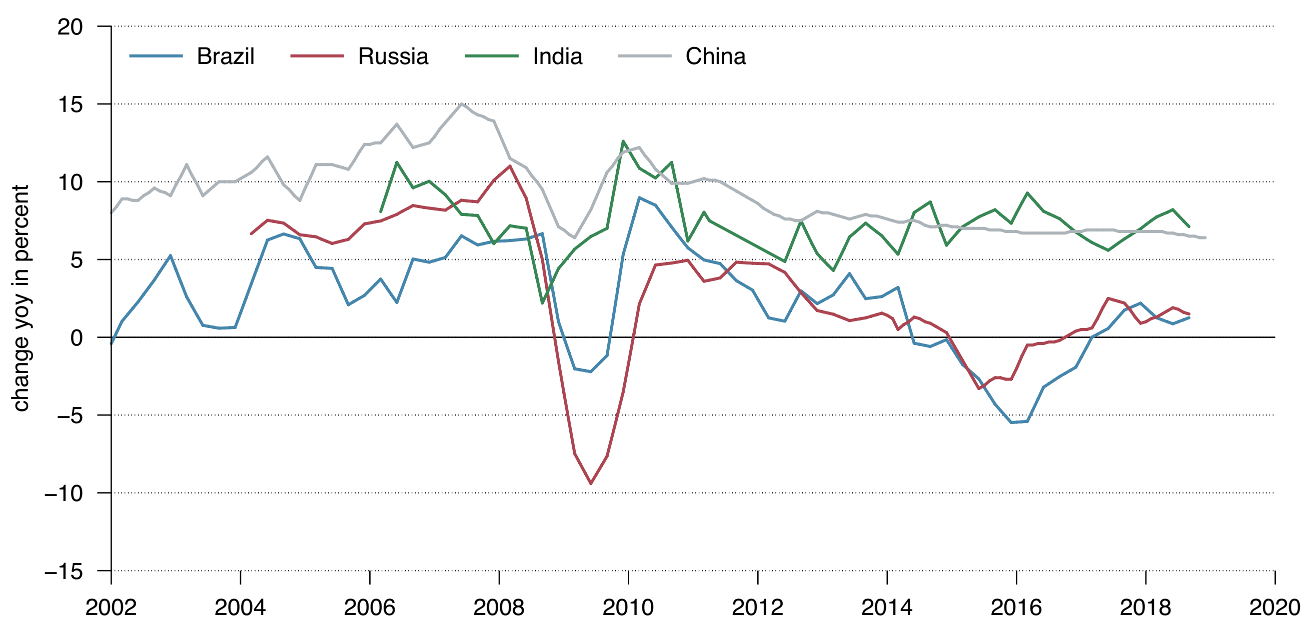
[1] Current year-on-year trend growth rate of real GDP, in percent, according to the proprietary trend growth model of Wellershoff & Partners.
[2] Year-on-year growth rate, in percent.
[3] Wellershoff & Partners economic sentiment indicators are based on consumer and business surveys and have up to 6 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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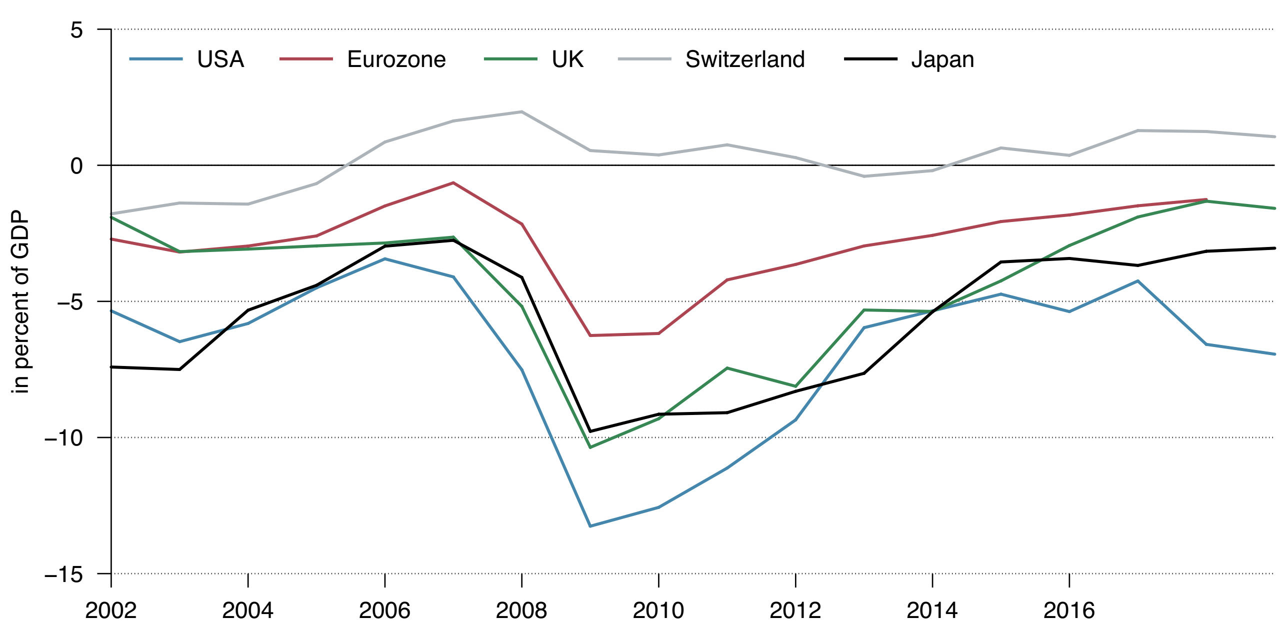
Economic indicators

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	24.0	24.4	-2.3	-2.9	105.4	109.9	-5.3	-6.9	4.9	4.0
Eurozone	16.1	15.9	3.8	–	109.2	–	-1.8	–	10.0	7.9
Germany	4.7	4.7	8.1	7.2	75.6	65.8	1.0	1.1	6.0	5.0
France	3.3	3.2	-0.6	-0.2	123.2	125.5	-3.3	-2.9	9.7	8.8
Italy	2.5	2.4	2.3	2.5	156.6	152.7	-2.5	-2.5	11.6	10.5
Spain	1.7	1.7	1.5	1.0	116.1	113.1	-4.3	-1.8	19.7	14.3
United Kingdom	3.6	3.2	-4.4	-3.3	114.3	114.6	-3.2	-1.6	4.9	2.8
Switzerland	0.9	0.8	10.0	10.7	42.0	39.0	0.7	1.0	3.1	2.8
Japan	6.1	5.9	3.0	2.6	221.6	227.9	-3.8	-3.0	3.1	2.4
Canada	2.1	2.1	-3.0	-2.5	88.7	84.7	-0.7	-1.1	6.6	5.8
Australia	1.7	1.7	-3.3	-3.1	38.8	40.7	-2.3	-1.1	5.7	5.0
China	14.8	16.1	1.8	0.7	44.4	53.9	-3.1	-4.4	4.0	–
Brazil	2.5	2.2	-2.1	-1.6	77.1	90.5	-8.2	-8.0	10.3	11.6
India	3.0	3.4	-1.6	-2.5	69.6	68.1	-7.1	-6.5	–	–
Russia	2.0	1.9	3.6	5.2	15.9	15.4	-1.6	1.8	5.3	4.8

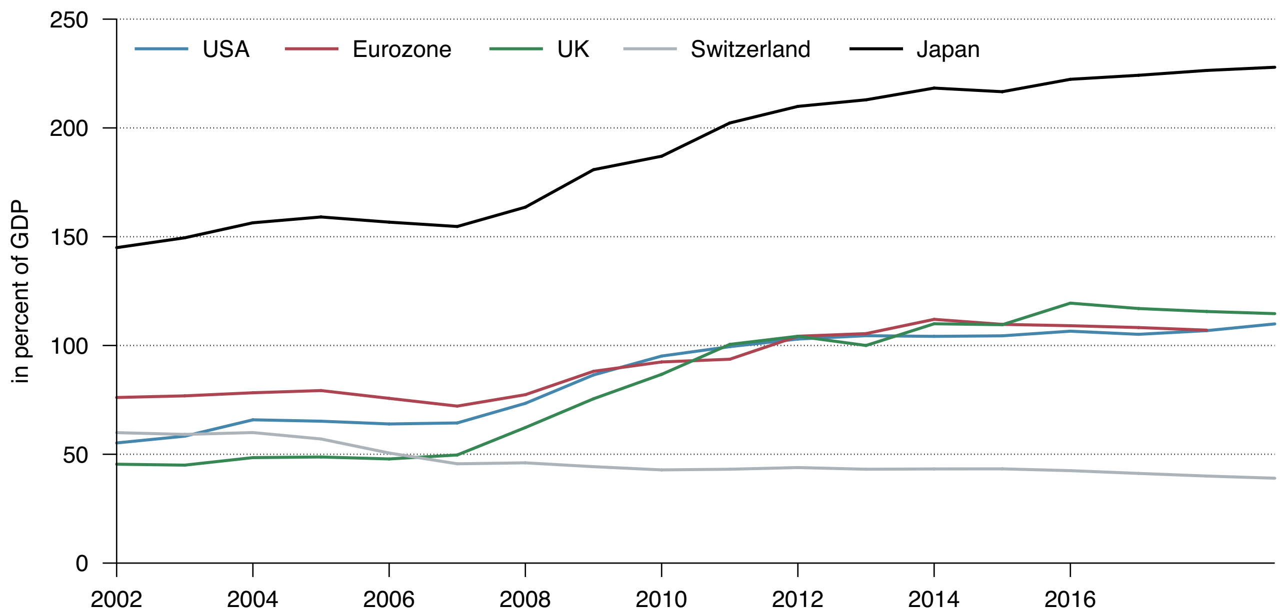
[1] In percent; calculations based on market exchange rates. [2] In percent of nominal GDP. [3] In percent.

Budget deficits in advanced economies

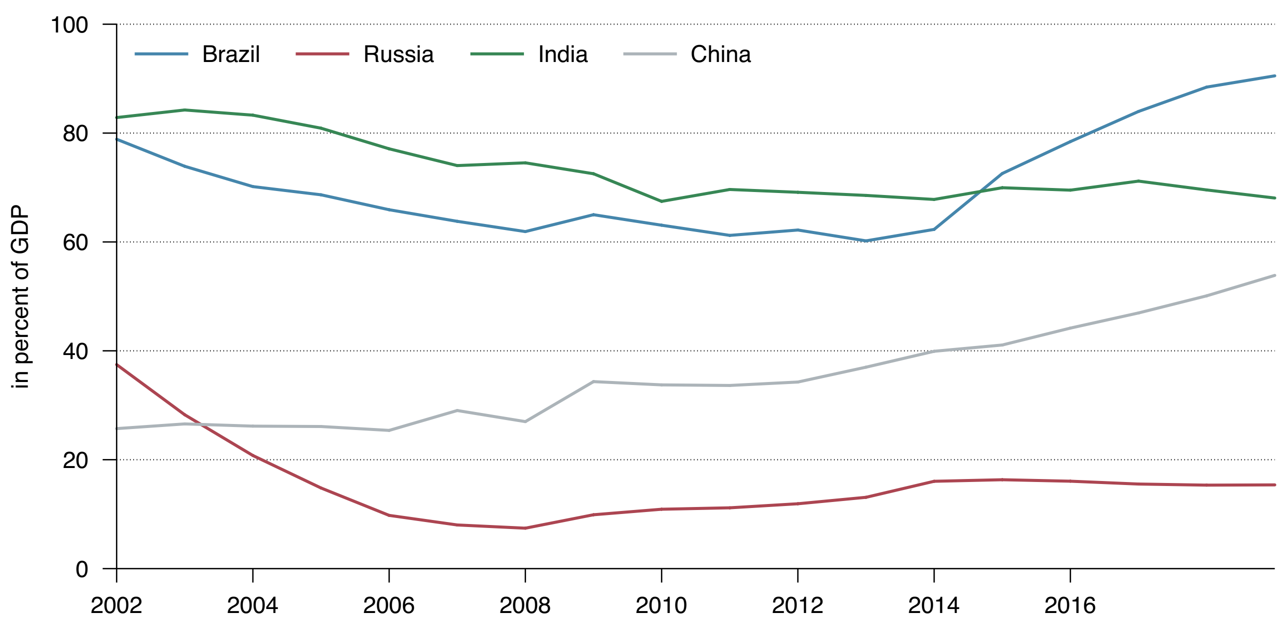


Source: Thomson Reuters Datastream, Wellershoff & Partners

Public debt in advanced economies



Public debt in emerging economies



Source: Thomson Reuters Datastream, Wellershoff & Partners

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Inflation

The expiring base effects of lower oil prices have driven inflation rates towards core rates in recent months. This is particularly evident in Japan, where within just a few months inflation has fallen from over 1 percent to close to the zero mark. The Bank of Japan has taken the recent drop in inflation as an opportunity to once again lower its inflation forecast. Now the monetary authorities are calling for inflation of between 1.0 and 1.3 percent for the fiscal year 2019. Although lower, we think this forecast is likely very optimistic. Japan's economy has already lost momentum in recent months. Moreover, the rejection by the Japanese Business Federation, the *Keidanren*, of a concrete recommendation for annual collective bargaining on wages suggests that a significant increase in wages, which could provide inflationary stimulus, is unlikely in the coming fiscal year.

In the United Kingdom, a declining inflation trend is also currently evident. At 2.1 percent, inflation in December was just above the Bank of England's target rate. In addition to fading external price pressure, the introduction of upper limits for gas prices will dampen UK inflation in the coming months, in our view.

Inflation overview

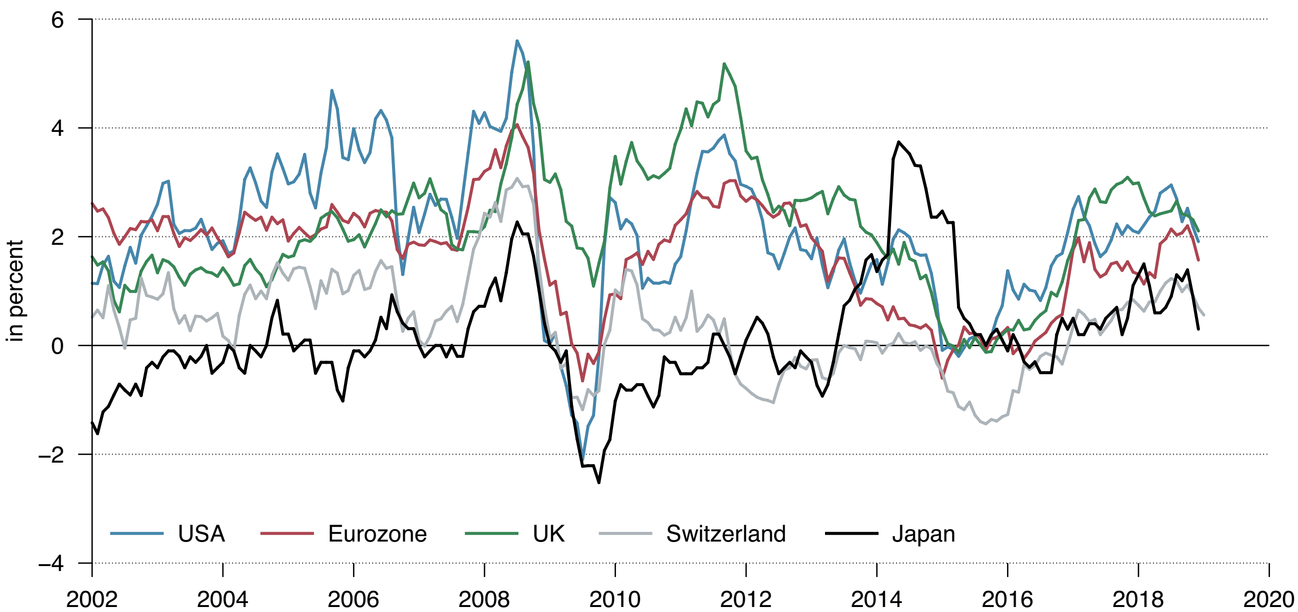
	Ø 10 years[1]	Inflation[2]				Core inflation[3]			
		10/2018	11/2018	12/2018	1/2019	10/2018	11/2018	12/2018	1/2019
United States	1.6	2.5	2.2	1.9	–	2.1	2.2	2.2	–
Eurozone	1.2	2.2	2.0	1.6	–	1.1	1.0	1.0	–
Germany	1.2	2.5	2.3	1.7	–	1.8	1.5	1.4	–
France	1.0	2.2	1.9	1.6	1.2	–	–	–	–
Italy	1.2	1.6	1.6	1.1	0.9	0.7	0.7	0.6	0.5
Spain	1.1	2.3	1.7	1.2	1.0	1.0	0.9	0.9	–
United Kingdom	2.3	2.4	2.3	2.1	–	1.9	1.8	1.9	–
Switzerland	-0.1	1.1	0.9	0.7	0.6	0.4	0.2	0.3	0.5
Japan	0.3	1.4	0.9	0.3	–	0.4	0.3	0.3	–
Canada	1.6	2.4	1.7	2.0	–	1.6	1.5	1.7	–
Australia	2.1	1.9	1.8	1.8	–	1.4	1.5	1.6	–
Brazil	5.9	4.6	4.1	3.8	3.8	3.6	3.2	3.3	–
Russia	7.5	3.5	3.8	4.3	4.9	3.1	3.4	3.7	4.1
India	7.2	3.4	2.3	2.2	–	–	–	–	–
China	2.3	2.5	2.2	1.9	1.5	1.8	1.8	1.8	–
Advanced economies[4]	1.4	2.2	1.9	1.6	–	1.5	1.5	1.5	–
Emerging economies[4]	4.4	3.0	2.5	2.3	–	2.1	2.1	2.2	–
World economy[4]	2.7	2.6	2.2	2.0	–	1.6	1.6	1.6	–

[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.

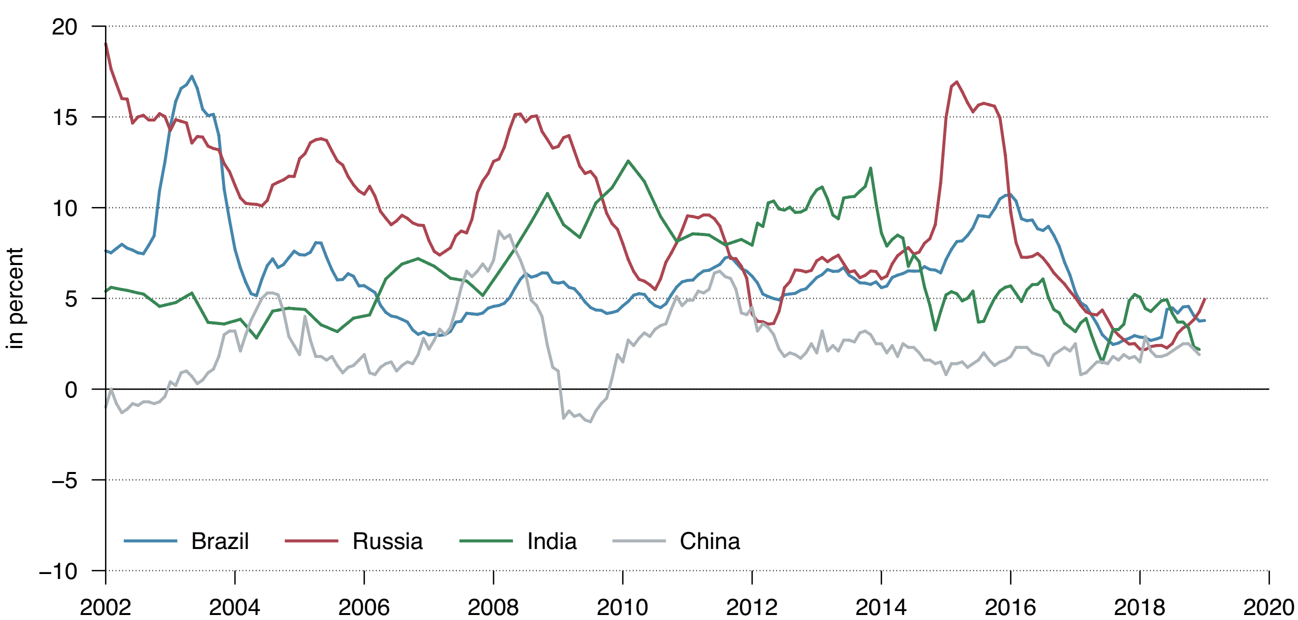
Source: Thomson Reuters Datastream, Wellershoff & Partners

Currency Asset Management

Consumer price inflation in advanced economies



Consumer price inflation in emerging economies



Source: Thomson Reuters Datastream, Wellershoff & Partners

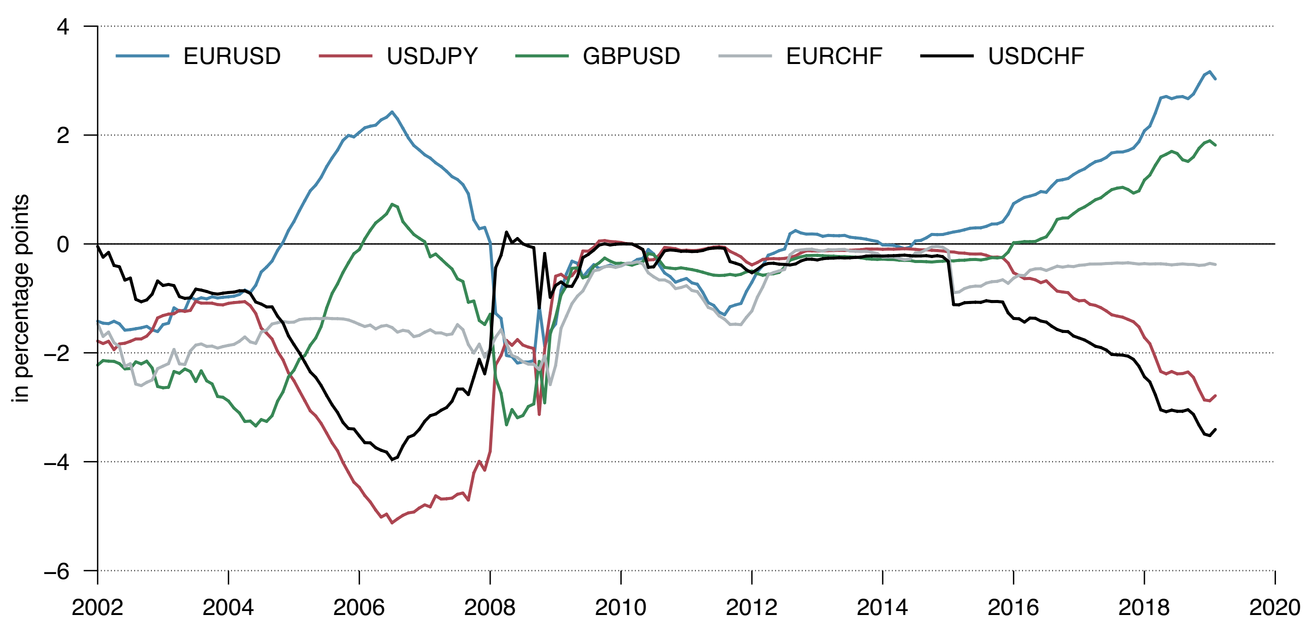
Interest rates

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	1.128	3.02	2.21	1.21	0.44	3.09	2.57	1.51	0.62
USDJPY	110.4	-2.79	-1.90	-1.01	-0.58	-2.84	-2.22	-1.33	-0.86
GBPUSD	1.286	1.82	1.30	0.48	0.04	1.79	1.46	0.59	0.08
EURCHF	1.132	-0.39	-0.37	-0.43	-0.50	-0.36	-0.28	-0.42	-0.60
USDCHF	1.004	-3.41	-2.58	-1.64	-0.94	-3.45	-2.85	-1.92	-1.22
GBPCHF	1.292	-1.59	-1.28	-1.16	-0.90	-1.66	-1.39	-1.33	-1.14
CHFJPY	109.9	0.62	0.68	0.63	0.36	0.62	0.64	0.59	0.36
AUDUSD	0.707	1.21	0.33	-0.78	-2.02	1.56	0.74	-0.27	-1.47
USDCAD	1.331	-0.54	-0.17	0.22	0.45	-0.50	-0.28	-0.02	0.22
USDSEK	9.300	-2.82	-2.28	-1.29	-0.15	-2.85	-2.52	-1.49	-0.34
USDRUB	65.8	4.80	4.77	8.83	7.77	4.86	4.28	8.30	7.52
USDBRL	3.765	13.54	13.54	11.90	9.83	3.87	4.35	9.32	9.25
USDCNY	6.780	0.17	2.86	2.86	3.06	0.28	2.43	2.52	2.68
USDTRY	5.280	21.32	12.10	12.17	10.06	20.91	12.65	12.11	10.16
USDINR	71.16	7.47	7.47	8.40	7.85	3.68	4.47	6.03	5.97

[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: Thomson Reuters Datastream, Wellershoff & Partners

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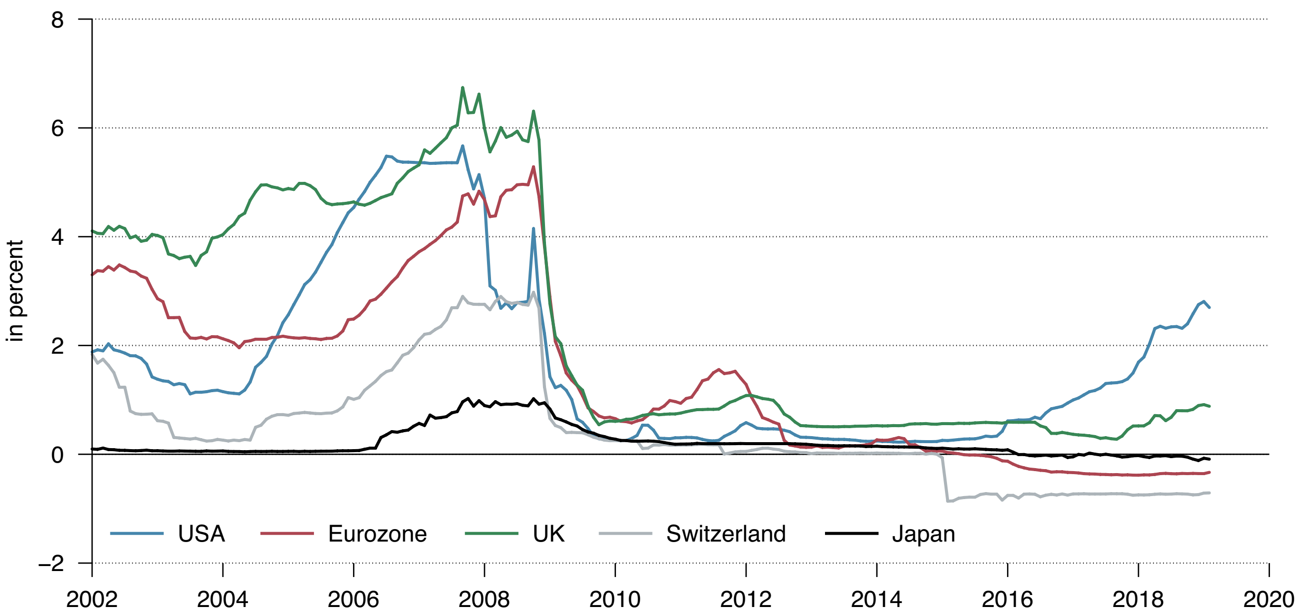
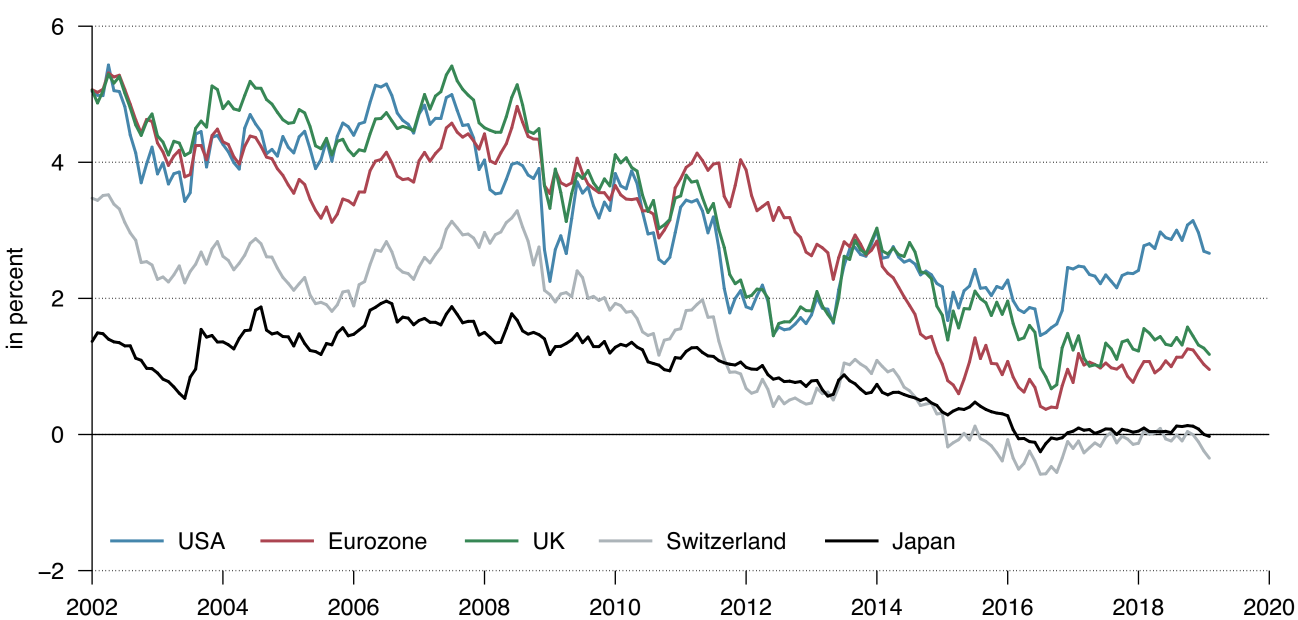
3-month Libor



10-year government bond yields



Source: Thomson Reuters Datastream, Wellershoff & Partners

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FX markets

In the wake of the robust developments on the stock markets in January, volatility on the currency markets remained low. The British pound can be counted among the big winners in the past month. Despite the persistent uncertainty associated with Brexit, Britain's currency appreciated noticeably at the beginning of the year. It was was up just over 3 percent versus the euro. At the end of January, the pound also enjoyed a growth spurt against the US dollar, gaining around 3.8 percent. In view of our PPP estimates, the pound still remains undervalued despite its recent gains.

On a trade-weighted basis, the Swiss franc again weakened slightly at the beginning of the year. According to our PPP estimate, the Swiss currency is still a bit overvalued, by just over 3 percent. Over the past month, the franc has depreciated significantly against the Australian dollar, declining 4.5 percent. Depreciating by approximately 4 percent, the franc also posted a notable loss against the British pound. By contrast, against the US dollar and the euro the franc's declines were modest. Compared to both of these major currencies, our PPP estimates continue to signal that the Swiss franc is close to its fair valuation.

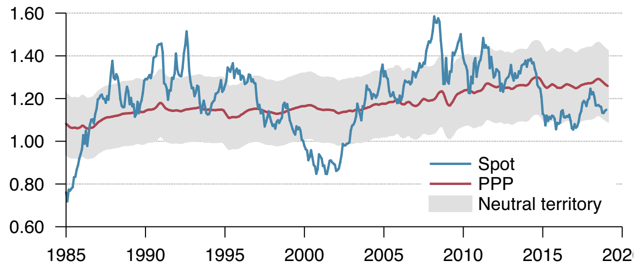
FX overview

	Current exchange rate	Performance[1]				Purchasing Power Parity[2]		
		YTD	3 months	1 year	5 years	PPP	Neutral territory	Deviation[3]
EURUSD	1.128	-1.4	0.0	-7.9	-17.6	1.26	1.09 - 1.42	-10.4
USDJPY	110.4	0.6	-3.1	1.6	7.8	87.0	71.7 - 102.2	26.9
GBPUSD	1.286	1.0	-1.0	-6.8	-22.0	1.64	1.46 - 1.88	-21.7
EURCHF	1.132	0.5	-0.5	-1.7	-7.5	1.19	1.1 - 1.27	-4.6
USDCHF	1.004	1.9	-0.5	6.8	12.2	0.94	0.82 - 1.06	6.5
GBPCHF	1.292	2.9	-1.5	-0.5	-12.4	1.55	1.33 - 1.76	-16.6
CHFJPY	109.9	-1.2	-2.6	-4.9	-3.9	92.3	78 - 106.6	19.1
AUDUSD	0.707	0.4	-2.0	-9.4	-21.8	0.73	0.63 - 0.88	-3.7
USDCAD	1.331	-2.5	0.5	5.5	20.5	1.21	1.11 - 1.31	10.2
USDSEK	9.300	4.9	2.6	15.0	44.7	7.57	6.53 - 8.6	22.9
USDRUB	65.8	-5.1	-3.2	12.9	89.3	46.2	36.8 - 55.5	42.6
USDBRL	3.765	-2.9	-1.0	14.2	56.1	2.95	2.39 - 3.5	27.8
USDCNY	6.780	-1.2	-2.5	7.6	11.9	6.35	6.14 - 6.56	6.8
USDTRY	5.280	-0.7	-4.1	38.0	140.2	3.94	3.57 - 4.3	34.1
USDINR	71.16	1.9	-2.1	10.5	14.3	68.0	63.8 - 72.3	4.6

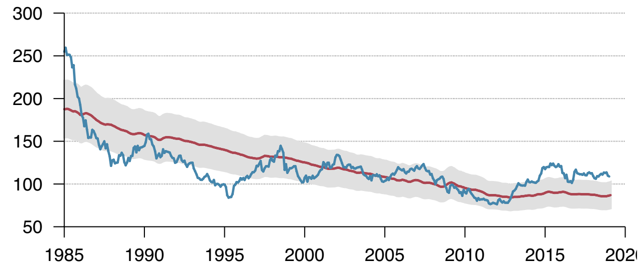
[1] Performance over the respective period of time, in percent.
[2] Purchasing power parity (PPP) is estimated based on the relative development of inflation rates in two currency markets; the neutral territory is determined by +/- 1 standard deviation of the historical variation around the PPP value.
[3] Deviation of the current spot rate from PPP, in percent.

Source: Thomson Reuters Datastream, Wellershoff & Partners

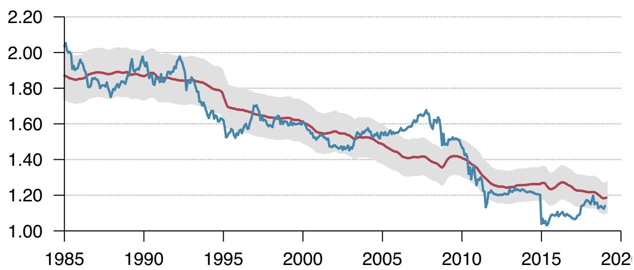
EURUSD



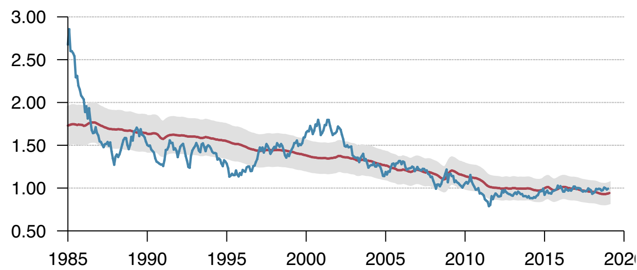
USDJPY



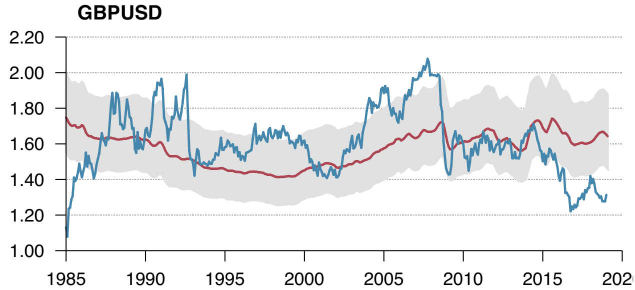
EURCHF



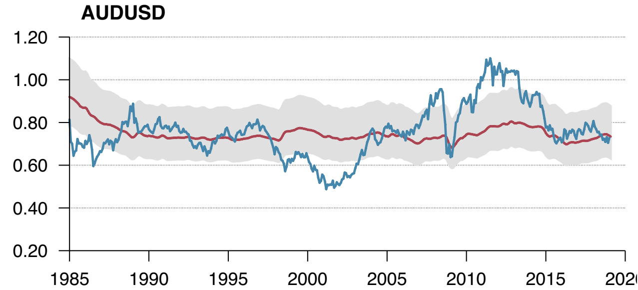
USDCHF



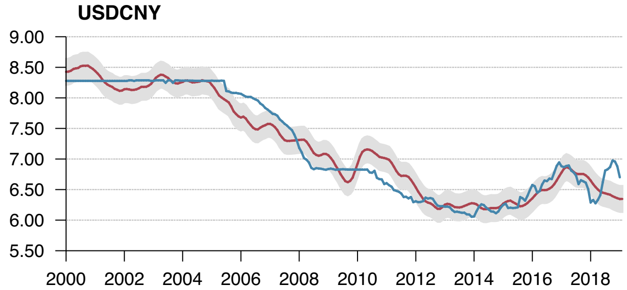
GBPUSD



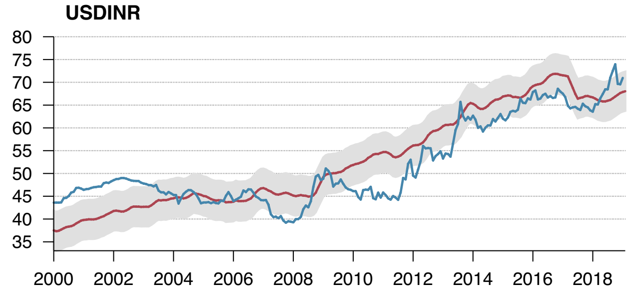
AUDUSD



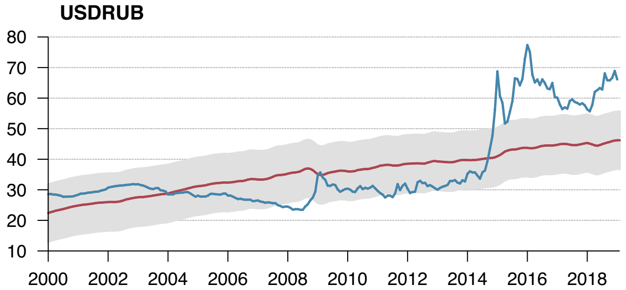
USDCNY



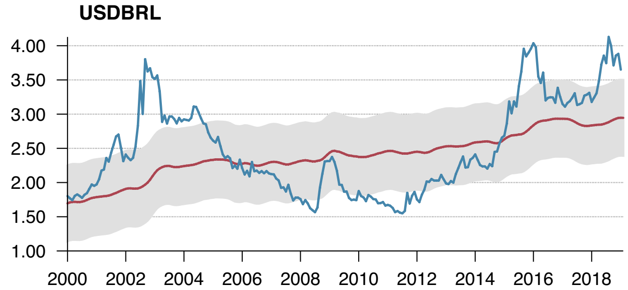
USDINR



USDRUB



USDBRL



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	1.128	6.7	6.6	8.4	9.9	6.9	7.3	8.6	10.4
USDJPY	110.4	7.4	6.9	9.1	10.2	6.7	7.9	9.6	11.0
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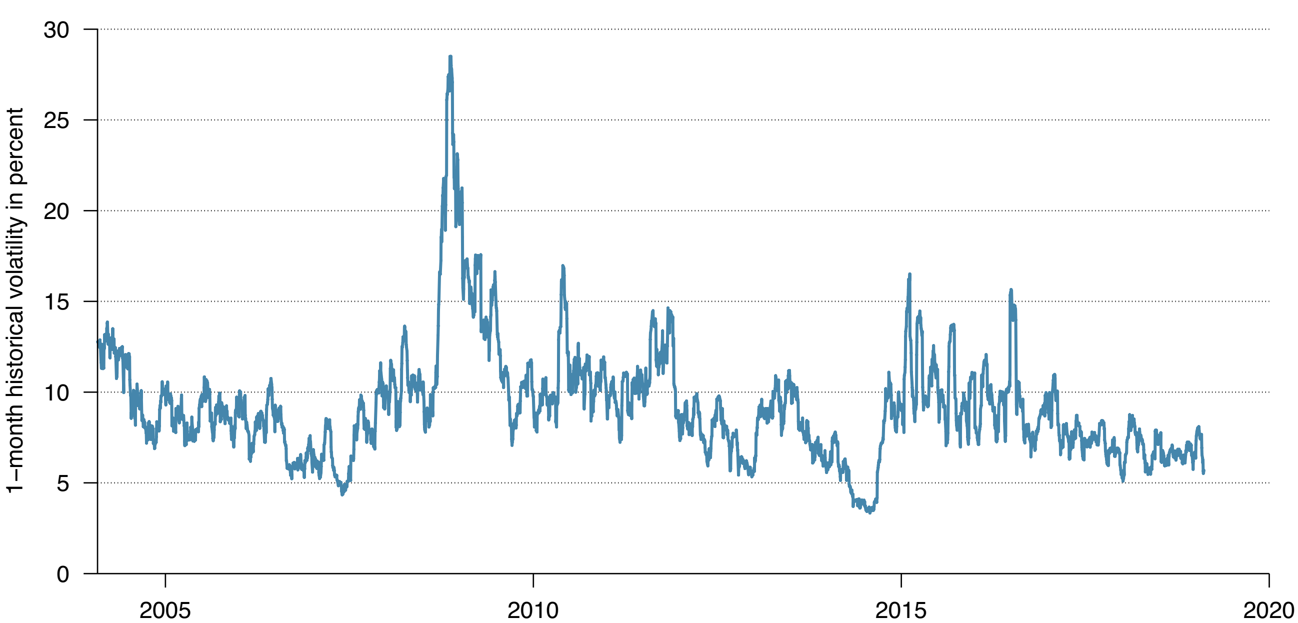
USDTRY	5.280	18.1	17.1	14.2	13.3	28.1	18.3	15.2	14.5
USDINR	71.16	7.8	7.1	6.9	8.8	6.4	8.2	8.1	9.9

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

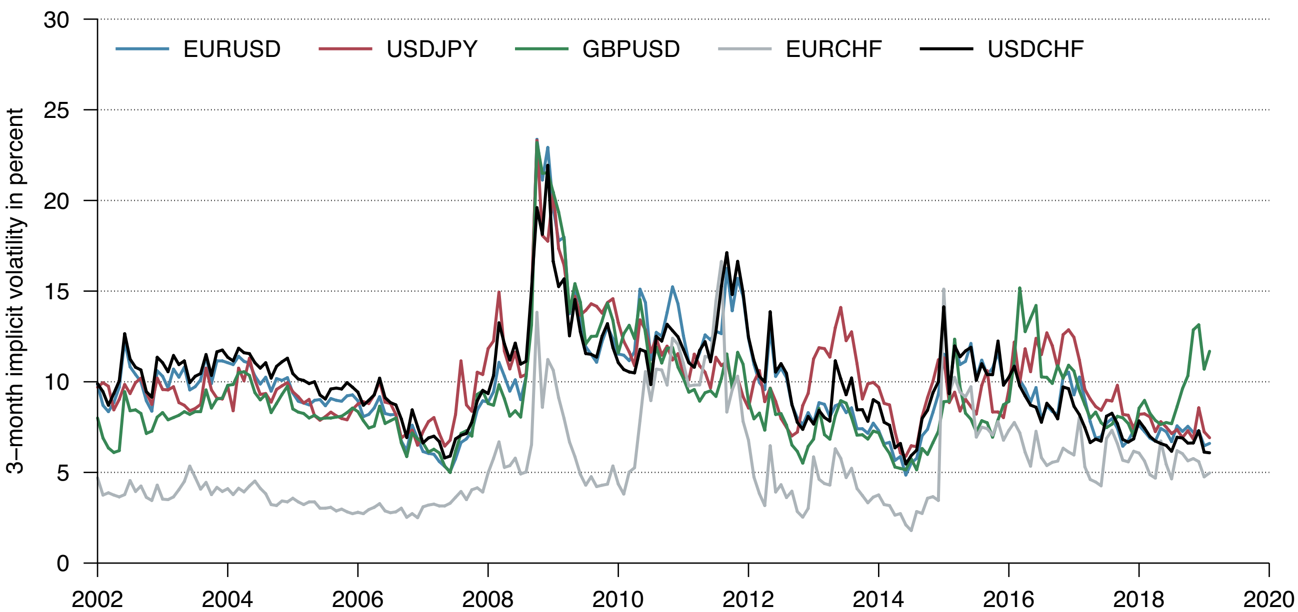
QCAM volatility indicator[3]



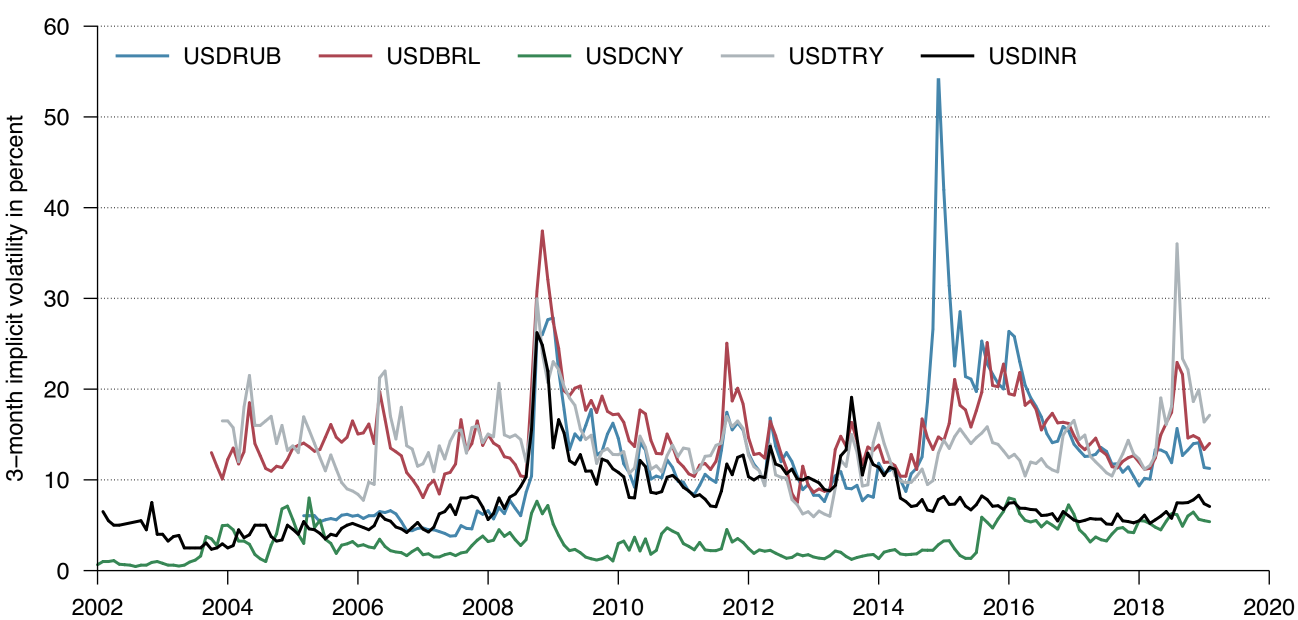
[3] The QCAM volatility indicator measures general volatility in global FX markets; the indicator is based on historical volatility of the main exchange rates, which are weighted by trading volume.

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

Implicit volatility



Implicit volatility



Source: Thomson Reuters Datastream, Wellershoff & Partners

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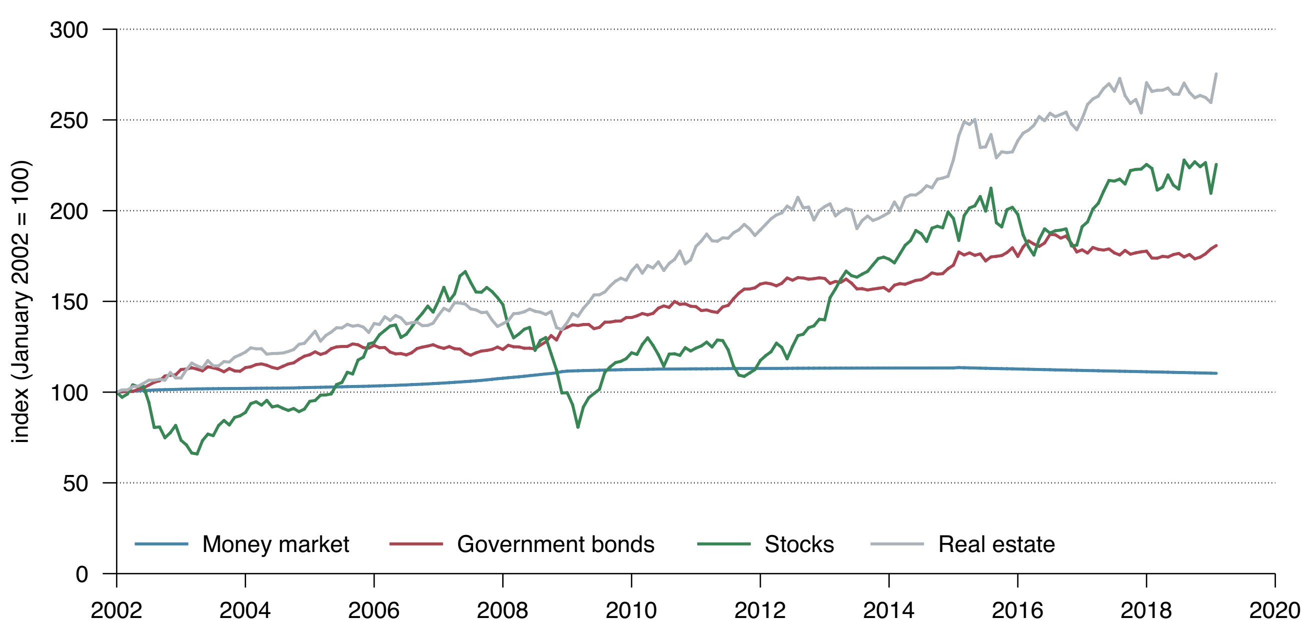
Financial markets

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	-2.6	-0.1	-0.2	-0.7	-2.6
Swiss government bonds	1.0	3.7	4.8	14.3	1.0	3.7	4.8	14.3
Swiss corporate bonds	0.8	2.1	2.4	10.6	0.8	2.1	2.4	10.6
Swiss equities (SMI)	7.6	0.6	8.1	27.1	7.6	0.6	8.1	27.1
European equities (Stoxx600)	7.1	-0.6	1.4	28.3	7.6	-1.1	-0.3	18.6
UK equities (Ftse100)	6.0	1.6	4.8	29.3	9.1	0.1	4.3	11.8
Japanese equities (Topix)	3.0	-5.8	-9.1	40.1	4.3	-3.3	-4.5	45.0
US equities (S&P 500)	8.3	0.1	5.5	65.0	6.3	0.5	-1.2	48.1
Emerging markets equities	7.3	7.7	-6.8	24.5	5.3	8.2	-12.7	11.7
Global equities (MSCI World)	7.5	0.2	1.1	39.8	5.5	0.7	-5.4	25.5
Swiss real estate	6.1	5.2	6.6	35.4	6.1	5.2	6.6	35.4
Global real estate	11.0	6.0	14.8	40.4	8.9	6.5	7.5	26.0
Commodities	3.8	-3.4	-7.0	-38.4	1.9	-2.9	-12.9	-44.7
Brent oil	15.5	-8.2	-3.2	-43.7	13.4	-7.8	-9.4	-49.4
Gold	2.2	8.7	-0.3	1.3	0.3	9.2	-6.6	-9.1

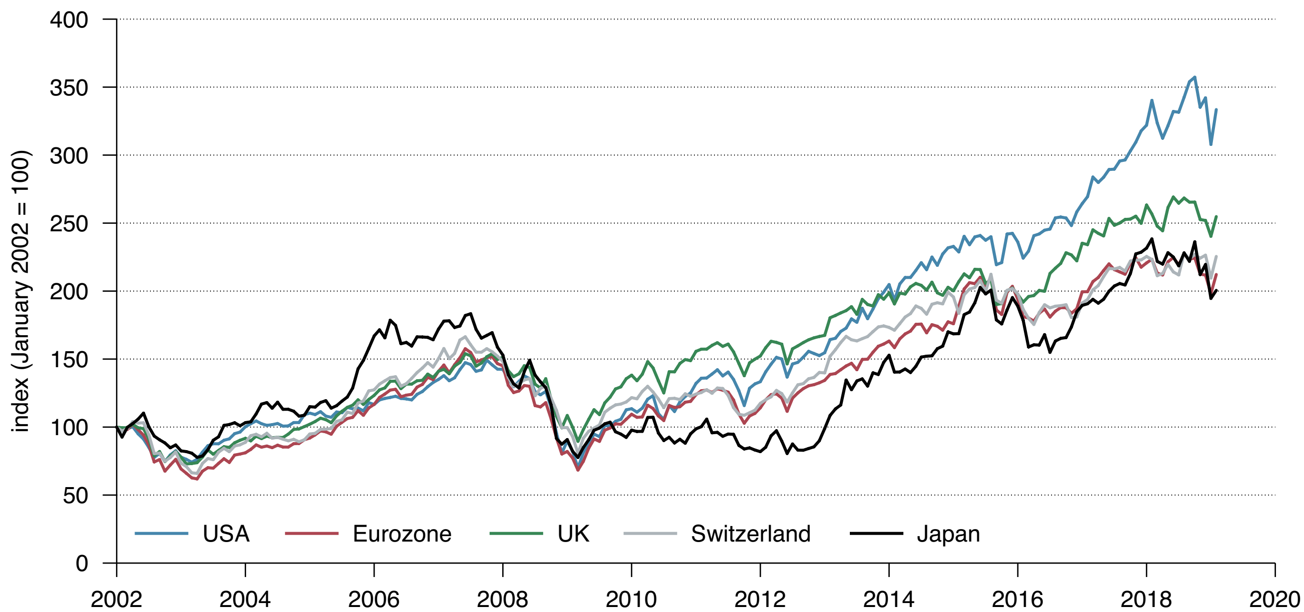
[1] Performance over the respective period of time, in percent.

Performance of selected Swiss asset classes

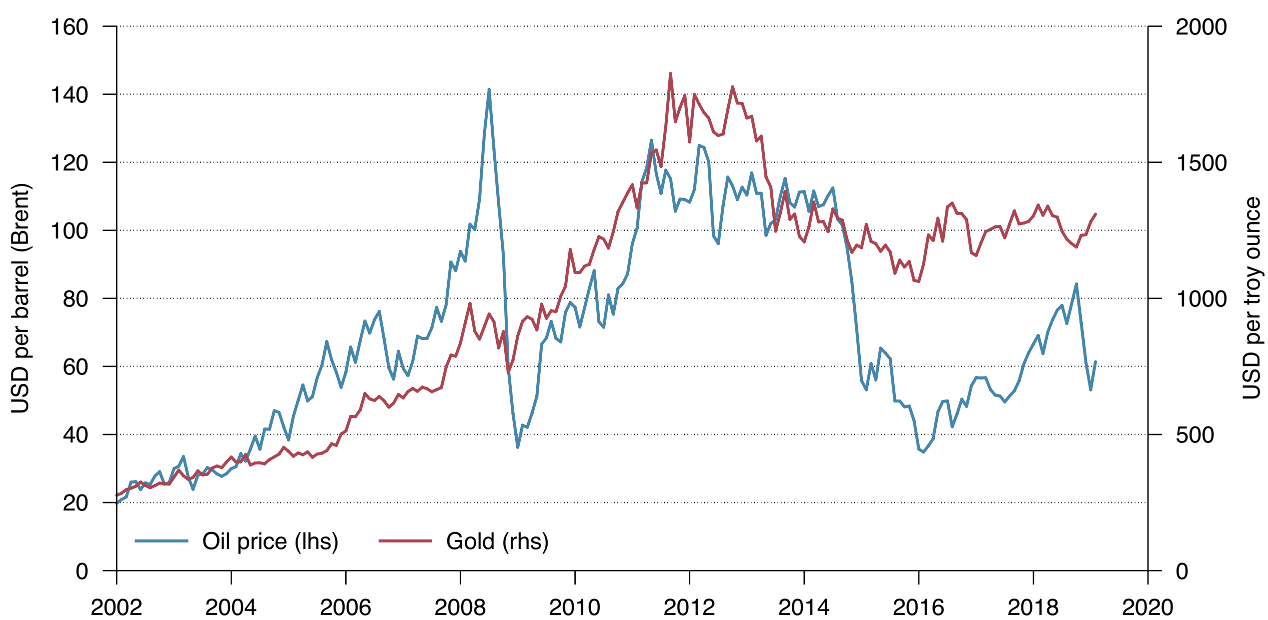


Source: Thomson Reuters Datastream, Wellershoff & Partners

Performance of selected equity markets (in local currency)



Performance of selected commodity prices



Source: Thomson Reuters Datastream, Wellershoff & Partners

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Number of the month

48.3 points

China's manufacturing PMI slipped from 49.7 to 48.3 points in January. Thus, as 2019 gets underway this indicator clearly points to decreasing industrial activity, which should cause the Chinese economy to cool down this year as well. The Chinese government is trying to counteract this slowdown. Whether it will succeed in achieving a significant reversal remains questionable, in our view.