

December 2020

QCAM MONTHLY

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QCAM Special

Introducing QCAM FX BIAS

The business cycle is an important exchange rate driver. At QCAM we have been using business surveys for many years to systematically capture the link between business cycles and exchange rate trends. This rule-based approach is now available as a total return alpha strategy via a UBS certificate. QCAM FX BIAS is diversified over 8 major currencies and delivers attractive returns at moderate volatility and low correlation with FX risk factors.

FX market participants have struggled in recent years to predict currency returns. Carry strategies suffer from the convergence of interest rates toward zero. Fair-value estimates and mean reversion have become less reliable. Momentum strategies are often slow to adapt to changing trends or follow the noise. Discretionary macro forecasts have not lost their appeal, but depend heavily on subjective judgment and often suffer from the “trembling hand” syndrome.

At QCAM, we deploy all available strategies depending on the nature of the currency and our clients’ preferences. However, we are convinced that economic fundamentals are the most important driver of currency trends. At the same time, we think it is important to use rule-based frameworks as much as possible and not rely too heavily on discretion.

Why business surveys?

Against that background, we have developed a rule-based strategy that uses business surveys to capture the link between economic fundamentals and exchange rate trends. Business surveys reveal the relative business cycle performance between two countries and shape markets’ expectations on relative economic growth and monetary policy. Business surveys have also important features that make them suitable for rule-based FX trading strategies:

- They are widely available for all major currencies;
- The surveys form large and independent samples in each country;
- The surveys are factual and not based on the judgment of financial market professionals;
- The surveys are timely (typically same month) with little delay between collection and publication dates and have a regular frequency (at least monthly);
- Most surveys have a sufficiently long history and the survey results are usually not revised, which is important for back-testing.

The mechanics

Most currencies are quoted versus the USD and the USD itself follows the global business cycle. The USD typically appreciates in global downturns and depreciates in global upswings. We compare the business surveys of individual countries with US business surveys. Countries with stronger business surveys versus the US should see their currencies appreciate against the USD and vice versa. Given different numerical standards of individual business surveys, we compare the directional momentum of the survey results to produce trading signals. The currency whose business surveys have a stronger directional momentum gets a positive signal.

EURUSD: A case study

Chart 1 shows the EURUSD exchange rate and the signals produced by comparing the business survey results in both currency blocks. Two observations stand out:

- First, the signals captured all major trends in EURUSD since 2011. The signals perform even well around most turning points, capturing trend changes in a timely fashion.

- Second, the signals do not change very often unlike many technical strategies. That means tolerating some volatility within the trend but avoiding the noise.

Two thirds of the signals generated by the business surveys were followed by the predicted moves in EURUSD. Most false signals were caused by volatility within the trend and not systematic errors. The strong relationship between the signals and EURUSD suggests that business surveys have a direct impact on the expectations and positioning of FX market participants.

Adding more currencies

After the successful launch of the business survey strategy in EURUSD in 2016, we expanded the approach to other currencies. Chart 2 (next page) and the inserted table show the performance of the business survey strategy for EUR, JPY, GBP, CHF, CAD, AUD and SEK versus the USD. The strategy is a long-short rule with no leverage (i.e. the long-short positions are not larger than the

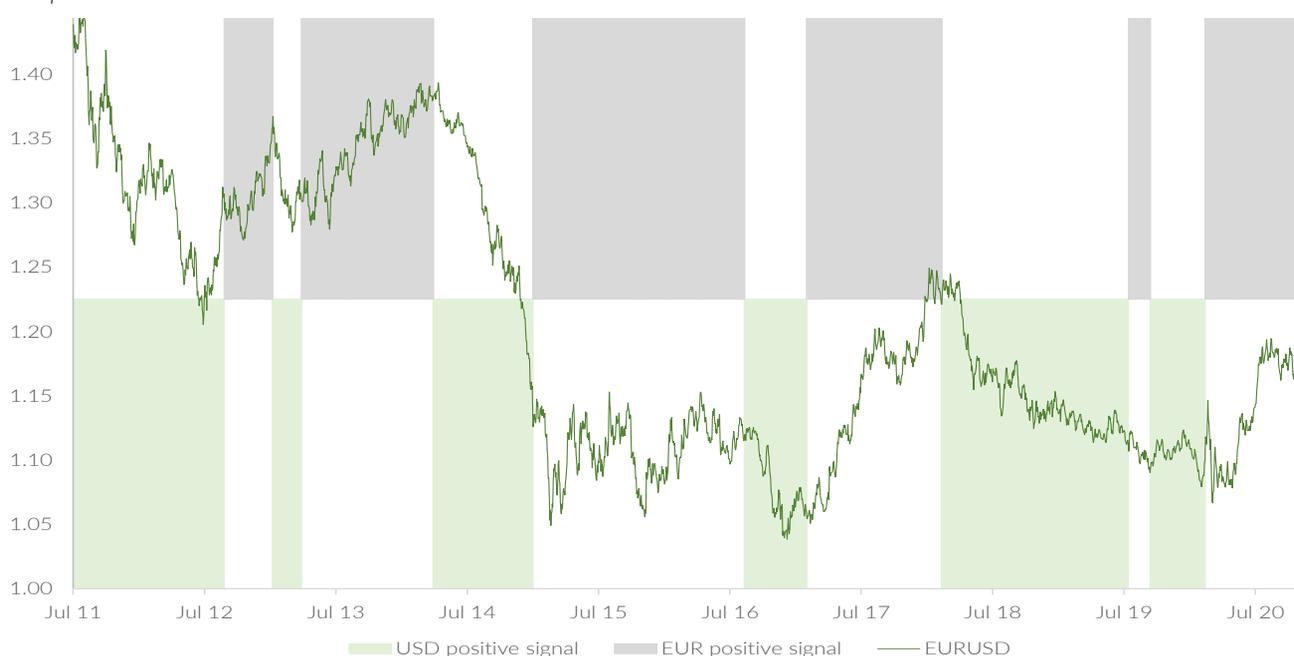
investment) and the returns are spot only (no carry and fees). The performance of all currency pairs points broadly in the same positive direction, but there are some differences. The JPY strategy, for example, performed well until early 2017, when USDJPY started to move into a flatter and tighter range.

Forming QCAM FX BIAS

Given the successful application of our business survey strategy in currency overlay mandates, we decided to turn the approach into a total return product. FX BIAS stands for *FX Business Intelligence Alpha Strategy* and is the combination of the positions generated by the individual business survey strategies for EUR, JPY, GBP, CHF, CAD, AUD and SEK versus the USD. We have weighted the positions by the trading volume of each currency pair using the BIS foreign exchange trading data (currently 40.0% EURUSD, 20.8% JPYUSD, 15.9% GBPUSD, 8.4% AUDUSD, 6.2% CADUSD, 6.1% CHFUSD and 2.5% SEKUSD). The idea behind the weighting is that more liquid currencies

Chart 1: EURUSD and business survey signals

USD per EUR



Source: Bloomberg and QCAM

are more likely to respond to the survey results and less to idiosyncratic factors. Theoretically, the combination could produce a mix of long and short USD positions that offset each other. In practice, the USD positions follow a pattern similar to the global business cycle with short USD positions dominating in upswings and vice versa (see Chart 3).

The table below shows the performance features of QCAM FX BIAS back-tested until 2011 (again pure spot returns with no leverage, carry and fees). The return is high by FX standards but lower than the return of some of the individual business survey strategies. However, the volatility is also much lower. The diversification over 8 currencies produces a sharpe ratio of 1.39 that is significantly higher than the weighted sharpe ratio of the individual strategies (0.97). Two thirds of the months are positive with no longer periods of significant negative performance. Chart 4 shows the cumulated return of QCAM FX BIAS and the JPMorgan G-7 implied FX volatility index. The performance of QCAM FX BIAS is relatively steady in both risk-on as well as risk-off periods.

At the moment, the positions are: short USD (45.3%), JPY (32.2%), AUD (13.0%) and CHF (9.5%) ver-

sus long EUR (61.9%), GBP (24.5%), CAD (9.7%), and SEK (3.9%). QCAM FX BIAS is offered as a certificate by UBS in USD, EUR and CHF. Investors can also choose different levels of leverage, which increases return and volatility proportionally 1:1. For further information and the fact sheet please contact us at info@q-cam.com or +41 55 417 00 50.

QCAM FX BIAS Performance

Year-to-date	6.59%
Since inception	66.95%
Annualized Return	5.59%
Best month	3.65%
Worst month	-2.58%
Average month	0.47%
Worst drawdown	-3.24%
% pos. Month	66.96%
Volatility	4.04%
Sharpe ratio	1.38

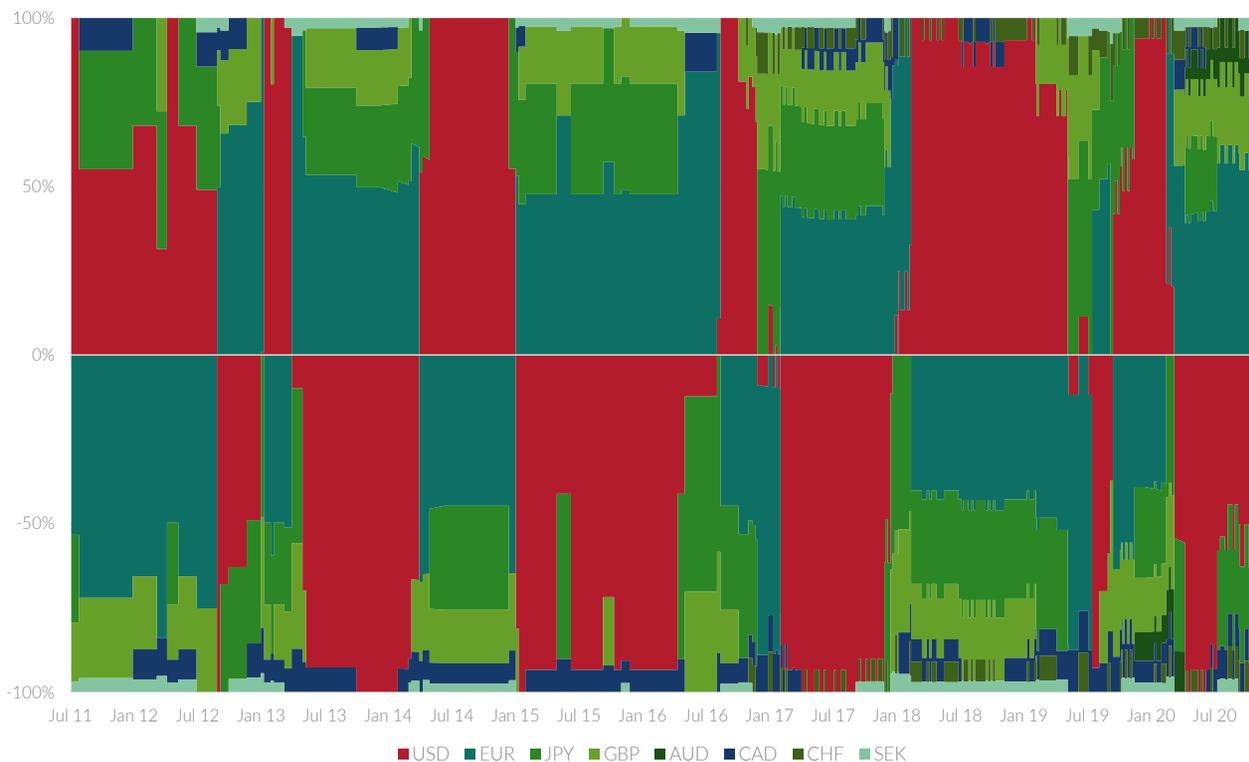
Source: QCAM (back-tested returns reflecting partly underlying live mandates)

Chart 2: Returns of single currency business survey strategies versus USD



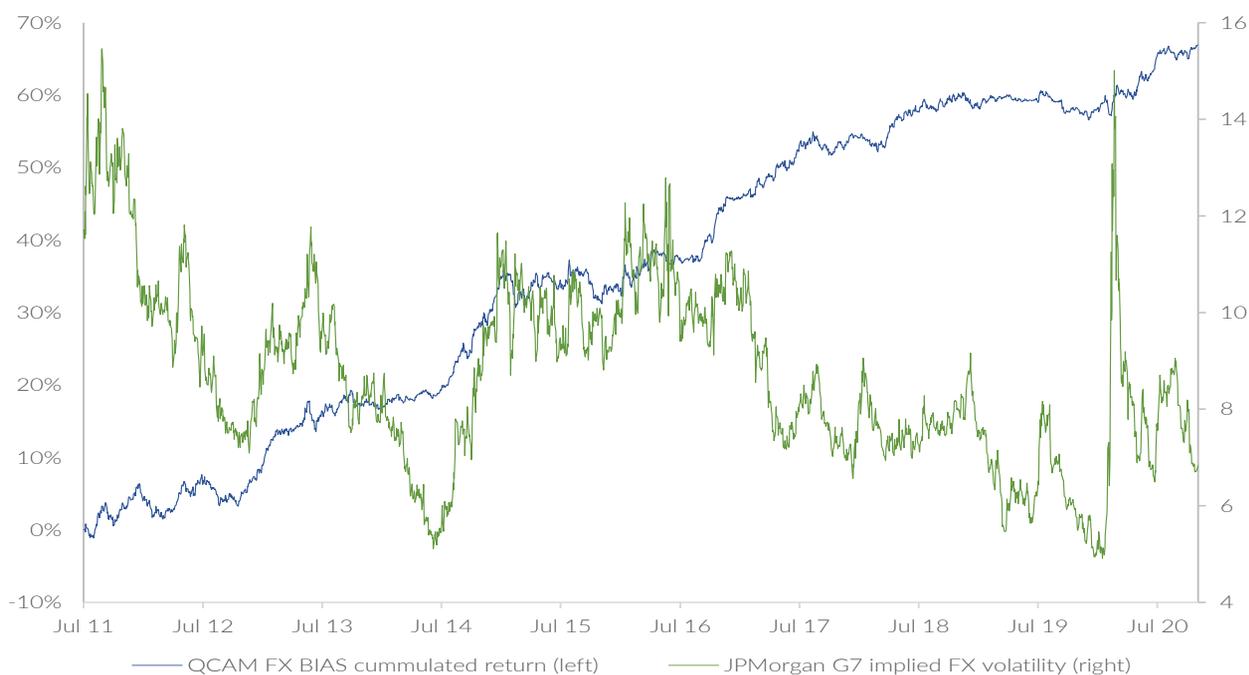
Source: QCAM (back-tested returns reflecting partly underlying live mandates)

Chart 3: QCAM FX BIAS positioning since July 2011



Source: QCAM (back-tested returns reflecting partly underlying live mandates)

Chart 4: QCAM FX BIAS cumulated return and FX market volatility



Source: JPMorgan and QCAM (back-tested returns reflecting partly underlying live mandates)

QCAM Insight

Taking a first peek at 2021

Bernhard Eschweiler, PhD, Senior Economist
QCAM Currency Asset Management AG

Vaccine enthusiasm is helping financial markets to finish 2020 on a positive note. We expect global reflation to dominate in 2021, which should be USD negative. However, we are not prepared to take just any risk. We stay away from deficit currencies with idiosyncratic risks like the GBP. In our view, safe-haven currencies with surplus buffers like the JPY still have upside potential. Even better are surplus currencies with superior economic performance, like the CNY

The Corona Pandemic has changed the world in many ways with lasting effects. Nevertheless, the main theme for 2021 will be a return toward economic “normalcy”. Vaccine deployment will broaden the recovery and unleash pent-up demand in those areas hardest hit by the pandemic. The new US administration will add to the sense of more “normality”, especially in foreign and trade policy, and the political event risk calendar will become quieter.

These positive prospects will probably help financial markets to overcome the near-term challenges caused by the high level of Corona infections, especially in Europe and the US. Corporate balance sheet and labor market distortions will take a long time to heal and require more fiscal and monetary support but reflation will significantly help ease the pain.

More USD weakness

Global reflation is typically associated with USD weakness. Besides that, the USD’s own fundamentals are weak. The main handicap for the USD remains the

twin deficit which is not offset by stronger economic growth or higher interest rates. Especially the low level of US interest rates makes forward hedging a much cheaper option for corporates and real money investors with long USD positions.

On the other hand, not all is well elsewhere, which should limit the USD downside potential. Many countries and currencies that typically benefit from improving risk sentiment have problems of their own.

Mind the gap!

One way of looking at currency vulnerabilities is to compare the external balance with the policy stance. Vulnerable currencies are those with a current account deficit and lax monetary policy (i.e. negative real interest rates). The chart shows the wide range of current account positions and real interest rates for the major currencies as well as the largest EM currencies.

- Among the major currencies, the **GBP** looks the most vulnerable with a large current account deficit and deep negative real interest rates. The UK economy has been hit hardest by the Corona Pandemic among peers and still could suffer more if the fallout from BREXIT is worse than expected.
- The **CAD** has a current account deficit and negative real interest rates as well, but not as deeply as the GBP and faces less uncertainties. We are not convinced the oil price will rise much as we expect supply to rise, but that is where the CAD has upside potential versus its peers.
- The **AUD** sits on the divide between surplus and

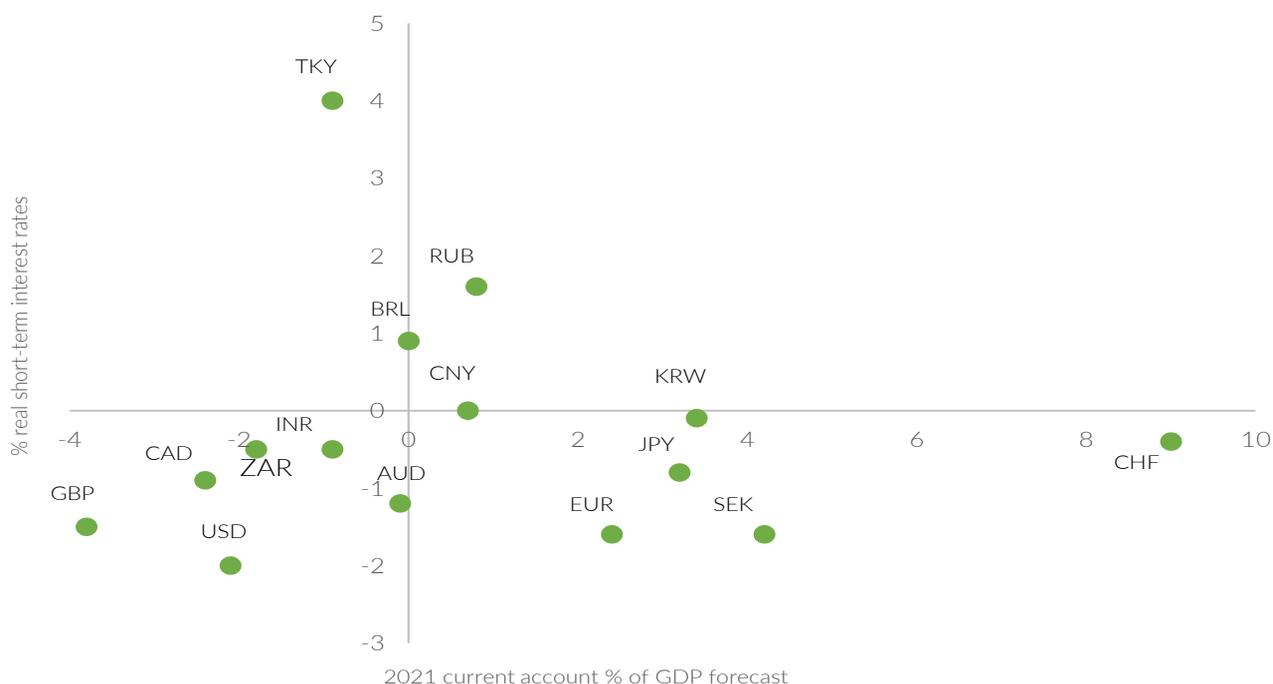
deficit currencies but has similarly negative real interest rates. Its upside potential is tied to commodity prices and the relationship with China, which so far deteriorated.

- On the other side of the divide are the major currencies with current account surpluses. The **EUR** will be a natural benefactor of USD weakness, but the upside could be limited by its own problems, like the fiscal imbalances within the currency union.
- The **JPY** probably benefits more than any other currency from the convergence of nominal interest rates among major currencies as it curtails carry-trade outflows, while the current account remains in a solid surplus.
- Within Europe, we think the **SEK** will outperform the EUR. Whether Sweden's Corona policy is better remains unclear, but it has a large surplus, is cyclically geared and the Riksbank is determined to keep nominal interest rates positive.
- The **CHF** should be in less demand as a safe-haven currency, especially versus the EUR, but its huge

current account surplus and EUR link should give it upside versus the USD.

- EM currencies typically pay a premium relative to the majors. In that light, negative real interest rates and current account deficits are not good news for the **INR** and **ZAR**.
- Well positioned among EM currencies are probably the **CNY** and the **KRW**. Current account surpluses and nominal interest rates well above zero are a plus. Both countries handled the Corona Pandemic well and have recovered faster than the rest of the world, especially China. CNY and KRW have already rallied this year, but are still far away from their highs in 2014.
- **BRL, RUB** and **TKY** were among the big losers in 2020 and offer positive real interest rates, most notably Turkey. Whether that will be enough to build confidence is unclear. The RUB is best positioned given its current account surplus but its potential probably depends more on the development of oil prices.

Current account balances versus real short-term interest rates



Source: Bloomberg, IMF and QCAM

Economy & Interest Rates

The near-term outlook is clouded by the rise in Corona infections in Europe and the US, which will probably depress economic activity around the turn of the year. The outlook for 2021 improves with the spring and the expected wide-spread vaccine deployment. This is likely to unleash pent-up demand. However, significant corporate balance sheet

and labor market distortions remain and most economies – with the notable exception of China – are unlikely to reach the pre-Corona level before the end of next year and some even later. As a result, fiscal deficit and debt projections remain high and monetary policy is expected to stay easy.

	Real GDP growth ¹		Unemployment rate ¹		Inflation rate ¹		Current account ²		Fiscal balance ²		Public debt ²	
	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
Global	-4.0	5.0	n.a.	n.a.	1.5	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Developed	-5.5	4.0	n.a.	n.a.	0.7	1.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
USA	-3.5	3.5	8.0	7.0	1.5	2.0	-2.5	-2.5	-16.0	-9.0	131	134
Canada	-5.5	4.0	9.5	8.0	1.0	2.0	-2.5	-2.5	-16.0	-11.0	115	115
Euro-area	-7.0	4.5	8.0	9.0	0.0	1.0	2.5	3.0	-9.0	-5.0	101	100
Sweden	-3.5	3.5	8.5	9.0	0.5	1.0	2.5	3.5	-6.0	-3.5	42	42
Switzerland	-4.5	3.5	3.0	3.5	-0.5	0.0	8.0	9.0	-4.5	-2.0	49	49
UK	-11.0	6.0	5.0	7.5	1.0	2.0	-3.0	-4.0	-17.0	-8.0	108	112
Japan	-5.0	3.0	3.0	3.0	0.0	0.0	3.0	3.5	-12.5	-9.0	266	264
Australia	-3.0	3.0	6.5	7.0	1.0	2.0	2.0	0.5	-6.0	-10.0	60	70
Emerging	-2.0	7.0	n.a.	n.a.	3.0	2.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
China	2.0	8.5	4.0	4.0	2.5	1.5	2.0	1.0	-12.0	-10.0	62	67
India	-9.5	11.0	n.a.	n.a.	6.0	4.5	0.5	0.0	-14.0	-11.0	89	90
Russia	-4.0	3.0	6.0	5.5	3.5	4.0	1.5	2.0	-5.0	-2.5	19	19
Brazil	-5.0	2.5	13.5	12.5	3.5	3.0	0.0	-0.5	-17.0	-7.0	101	103

Source: OECD, IMF World Economic Outlook and QCAM estimates 1) In percent 2) In percent of GDP

OECD business and consumer confidence*



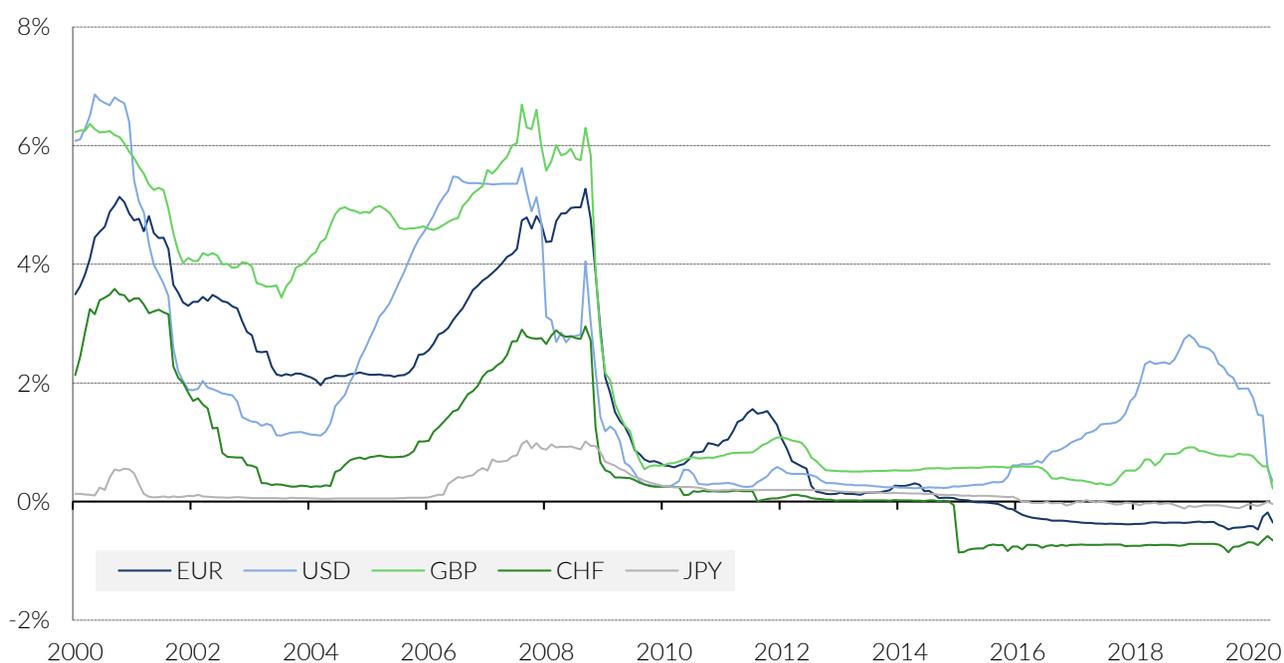
Source: OECD and QCAM, *the last observations are QCAM estimates based on other surveys

Interest Rates

Interest Rate Level Overview

	Short Term Interest Rate (3month OIS)					Long Term Interest Rate (10year Swap)				
	Current	1M ago	3M ago	12M ago	Ø 3 years	Current	1M ago	3M ago	12M ago	Ø 3 years
USD	0.08%	0.08%	0.07%	1.56%	1.48%	0.93%	0.85%	0.66%	1.74%	2.02%
EUR	-0.48%	-0.49%	-0.47%	-0.45%	-0.41%	-0.23%	-0.27%	-0.20%	0.12%	0.38%
JPY	-0.04%	-0.04%	-0.04%	-0.07%	-0.06%	0.05%	0.06%	0.06%	0.10%	0.14%
GBP	0.05%	0.04%	0.05%	0.67%	0.50%	0.52%	0.40%	0.39%	0.95%	1.07%
CHF	-0.74%	-0.74%	-0.73%	-0.74%	-0.75%	-0.34%	-0.41%	-0.37%	-0.28%	-0.07%
AUD	0.04%	0.05%	0.12%	0.70%	0.96%	0.97%	0.75%	0.81%	1.30%	1.88%
CAD	0.22%	0.22%	0.24%	1.72%	1.26%	1.28%	1.13%	1.02%	1.97%	2.00%
SEK	-0.07%	-0.06%	-0.04%	-0.08%	-0.26%	0.39%	0.29%	0.33%	0.61%	0.77%
RUB	4.10%	4.18%	4.12%	6.23%	6.49%	6.18%	6.34%	6.12%	7.02%	7.68%
BRL	0.91%	1.43%	1.63%	3.74%	4.46%	7.92%	8.19%	7.52%	7.21%	9.04%
CNY	2.57%	2.44%	2.47%	2.69%	2.61%	3.07%	2.82%	3.03%	3.17%	3.19%
TRY	16.27%	16.06%	12.25%	13.07%	17.19%	12.58%	13.72%	11.29%	11.70%	14.53%
INR	3.47%	3.52%	3.76%	5.01%	5.48%	5.07%	4.93%	4.94%	5.12%	5.94%

3-month Libor



Source: Bloomberg, QCAM Currency Asset Management, as of December 2nd, 2020

FX Markets

FX Performance vs. PPP

The USD depreciated versus all major currencies over the last months as vaccine euphoria boosted risk sentiment. Even safe-haven currencies like the CHF and the JPY held up well. EM currencies also appreciated and even the TRY rallied after the central bank raised interest rates sharply. The USD remains oversold but short speculative USD position

decreased slightly despite the selloff. Forward hedging remains a cheap option given low interest rate spreads. FX volatilities have broadly inched lower. PPP estimates have not changed and the USD remains overvalued against all major currencies although a bit less.

Overview

	Current Exchange Rate	Performance ¹				Purchasing Power Parity ²		
		YTD	1M	12M	5 years	PPP	Neutral Range	Deviation ³
EURUSD	1.209	7.69%	4.00%	9.19%	14.25%	1.29	1.15 - 1.43	-9%
USDJPY	104.510	-3.75%	-0.32%	-4.15%	-15.39%	95.62	84.8 - 106.4	9%
GBPUSD	1.335	0.67%	3.46%	3.23%	-10.58%	1.58	1.41 - 1.76	-18%
EURCHF	1.084	-0.14%	1.29%	-1.36%	0.02%	1.10	1.04 - 1.16	-3%
USDCHF	0.896	-7.26%	-2.62%	-9.67%	-12.45%	0.87	0.77 - 0.97	5%
GBPCHF	1.197	-6.65%	0.75%	-6.74%	-21.72%	1.26	1.15 - 1.37	-6%
CHFJPY	116.614	3.78%	2.35%	6.10%	-3.35%	92.54	81.7 - 103.4	24%
AUDUSD	0.740	5.31%	5.07%	8.52%	1.25%	0.79	0.69 - 0.88	-9%
USDCAD	1.293	-0.35%	-2.41%	-2.75%	-3.22%	1.20	1.12 - 1.29	9%
USDSEK	8.483	-9.27%	-5.00%	-11.13%	-2.39%	7.94	7.02 - 8.86	11%
EURSEK	10.259	-2.28%	-1.20%	-2.96%	11.52%	8.68	8.14 - 9.23	19%
USDRUB	75.139	21.11%	-6.75%	17.03%	11.72%	52.02	43.9 - 60.1	50%
USDBRL	5.235	30.24%	-8.85%	23.96%	36.14%	3.28	2.70 - 3.85	73%
USDCNY	6.547	-5.95%	-2.13%	-7.06%	1.50%	6.45	6.25 - 6.65	3%
USDTRY	7.871	32.29%	-6.65%	36.96%	172.17%	4.70	3.73 - 5.68	79%
USDINR	73.724	3.51%	-1.05%	2.89%	10.76%	69.33	64.3 - 74.4	7%

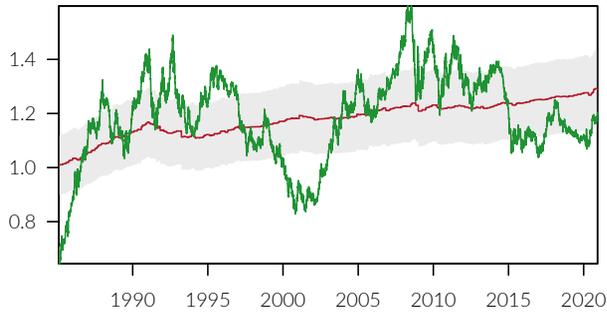
¹ Performance over the respective period of time, in percent

² Purchasing power parity (PPP) is estimated based on the relative development of inflation rates in two currency markets; the neutral range 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.

Purchasing Power Parity

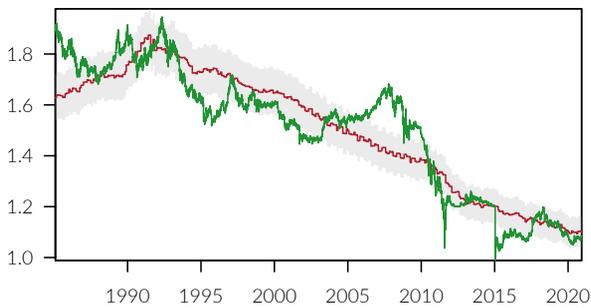
EURUSD



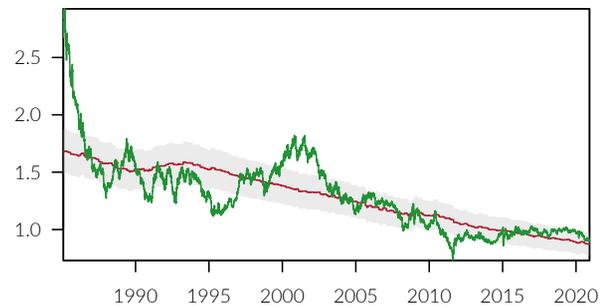
USDJPY



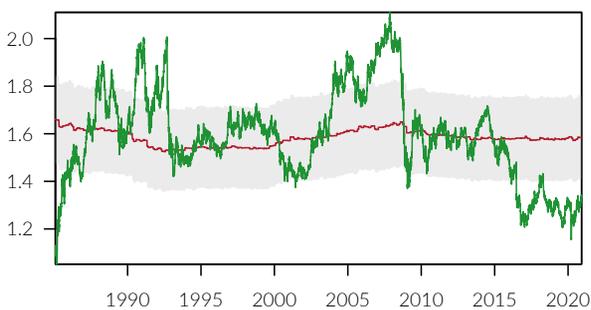
EURCHF



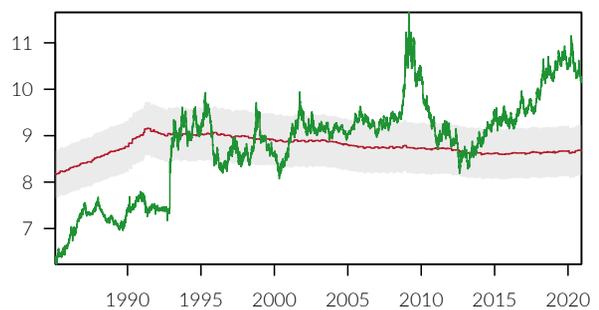
USDCHF



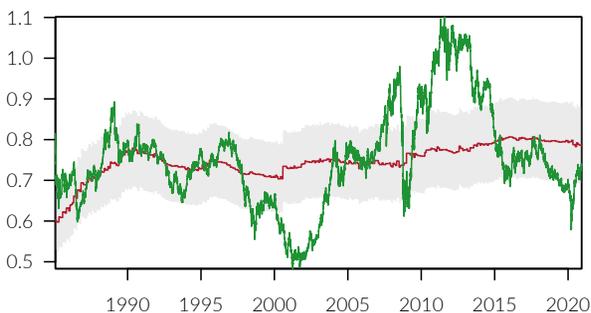
GBPUSD



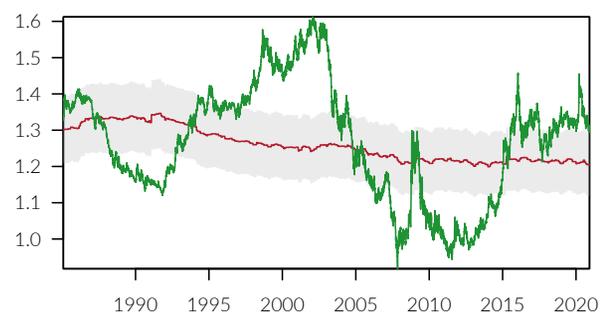
EURSEK



AUDUSD



USDCAD



— PPP — Spot — Neutral Range

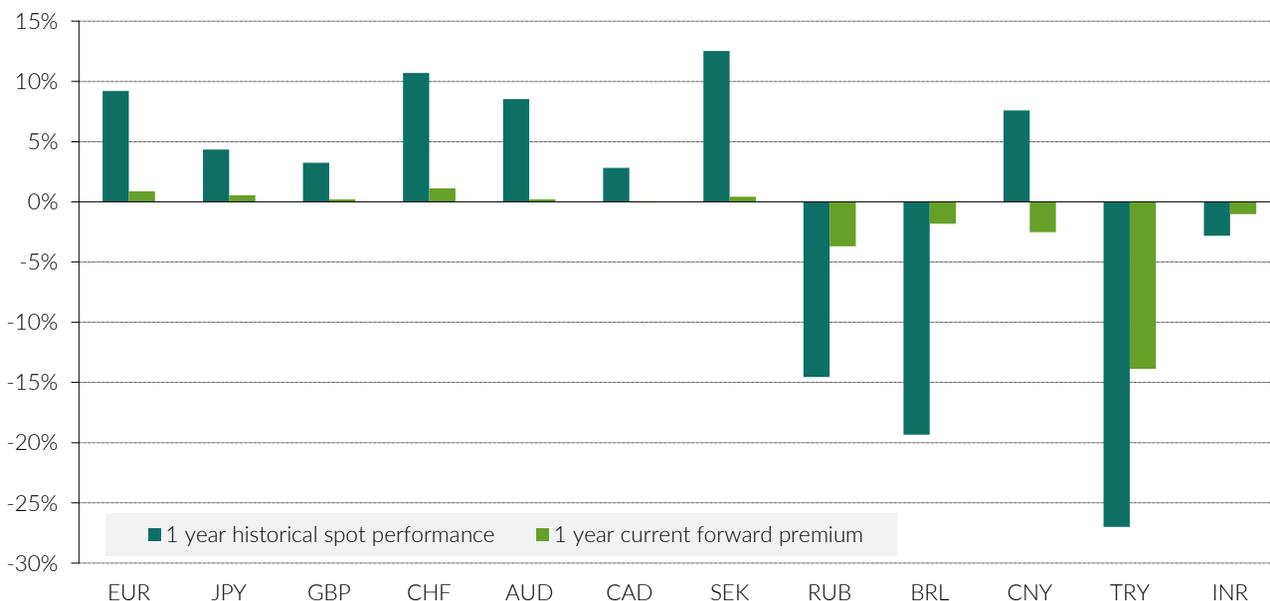
Source: Bloomberg, QCAM Currency Asset Management, as of December 2nd, 2020

FX Spot vs Forwards

FX Forwards Level and Premium

	Current Exchange Rate	Forward Level			Premium p.a.		
		1M	3M	12M	1M	3M	12M
EURUSD	1.209	1.2106	1.2122	1.2197	1.23%	0.95%	0.85%
USDJPY	104.510	104.4261	104.3510	103.9485	-0.93%	-0.61%	-0.53%
GBPUSD	1.335	1.3359	1.3363	1.3379	0.65%	0.34%	0.20%
EURCHF	1.084	1.0836	1.0832	1.0811	-0.28%	-0.25%	-0.25%
USDCHF	0.896	0.8950	0.8935	0.8862	-1.51%	-1.19%	-1.09%
GBPCHF	1.197	1.1957	1.1941	1.1857	-0.86%	-0.85%	-0.89%
CHFJPY	116.614	116.6717	116.7844	117.2898	0.57%	0.58%	0.57%
AUDUSD	0.740	0.7400	0.7403	0.7412	0.43%	0.31%	0.20%
USDCAD	1.293	1.2930	1.2928	1.2927	-0.27%	-0.15%	-0.04%
USDSEK	8.483	8.4759	8.4697	8.4468	-1.01%	-0.64%	-0.42%
EURSEK	10.259	10.2610	10.2670	10.3026	0.23%	0.31%	0.42%
USD RUB	75.139	75.4172	75.8195	78.0222	3.42%	3.62%	3.78%
USDBRL	5.235	5.2354	5.2428	5.3324	0.18%	0.62%	1.83%
USDCNY	6.547	6.5629	6.5925	6.7164	2.74%	2.75%	2.53%
USDTRY	7.871	7.9640	8.1485	9.1400	13.25%	14.09%	15.90%
USDINR	73.724	74.4636	74.4676	74.4917	11.65%	4.04%	1.02%

Historical Spot Performance and Current Forward Premium vs. the US Dollar



Source: Bloomberg, QCAM Currency Asset Management, as of December 2nd, 2020

FX Volatility

Historical vs. Implied Volatility

	Current Exchange Rate	Historical Volatility ¹				Implied Volatility ²			
		Current	1M	12M	Ø 5 years	Current	1M	12M	Ø 5 years
EURUSD	1.209	6.11%	6.28%	4.38%	6.89%	6.63%	7.23%	4.68%	7.49%
USDJPY	104.510	6.46%	5.61%	4.55%	8.05%	6.35%	7.33%	5.35%	8.50%
GBPUSD	1.335	9.02%	9.16%	8.79%	9.31%	9.50%	10.58%	9.48%	9.65%
EURCHF	1.084	2.92%	3.61%	4.19%	4.31%	4.22%	4.50%	4.10%	5.51%
USDCHE	0.896	6.55%	6.15%	4.72%	6.81%	6.55%	6.70%	5.05%	7.25%
GBPCHF	1.197	8.43%	8.11%	8.97%	8.87%	8.93%	9.50%	9.38%	9.19%
CHFJPY	116.614	5.89%	6.36%	4.34%	7.10%	6.35%	6.78%	4.73%	7.90%
AUDUSD	0.740	9.23%	9.14%	5.72%	9.02%	9.35%	10.98%	5.90%	9.35%
USDCAD	1.293	6.18%	5.97%	4.12%	7.08%	6.58%	7.70%	4.13%	7.31%
USDSEK	8.483	9.10%	9.08%	6.64%	8.62%	8.98%	10.18%	7.48%	9.08%
EURSEK	10.259	6.03%	5.55%	5.14%	5.65%	5.75%	6.93%	5.50%	6.33%
USDRUB	75.139	12.87%	12.69%	6.92%	13.59%	14.25%	17.79%	7.54%	13.83%
USDBRL	5.235	14.41%	14.79%	10.33%	14.89%	18.38%	19.18%	11.68%	15.65%
USDCNY	6.547	5.16%	4.77%	4.05%	4.46%	5.78%	7.08%	4.90%	5.51%
USDTRY	7.871	19.32%	11.45%	10.12%	14.68%	18.33%	22.13%	10.30%	15.94%
USDINR	73.724	4.30%	4.89%	5.41%	5.53%	6.45%	7.28%	5.43%	6.46%

¹ Realised 3-month volatility (annualised) ² Market implied 3-month volatility (annualised)

QCAM Volatility Indicator³



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, QCAM Currency Asset Management, as of December 2nd, 2020

FX Analytics

QCAM has developed an analytical framework to take scalable exchange rate positions. The QCAM exchange rate strategy for each currency pair has three principle components:

- **Macro**
- **Business Sentiment**
- **Technical**

The positioning signals from each component are aggregated into an overall positioning score for each currency pair. This score is used for the dynamic exposure management.

The Macro component consists typically of economic growth, balance of payments, fiscal and monetary policy and in some cases commodity fundamentals.

The Sentiment component is a rule-based framework built on economic sentiment surveys and complemented with risk sentiment estimates.

The Technical component consists primarily of the technical analysis of daily exchange rates (trend

following and mean reversion). We also consider speculative futures positions and the deviation of exchange rates from purchasing power parity.

The summary table below and the following pages show the QCAM strategy framework and the positioning for the major currency pairs actively covered by QCAM. The tables divide each of the three strategies into subcomponents with an indication of the current impact. The charts show the respective exchange rate with past QCAM positions and their scale.

Current positioning

Most strategies have moved from neutral to either long or short. The balance of our strategies is clearly negative versus the USD led by the EUR and the CAD. Within Europe, the SEK stands out to gain more versus the EUR. Technical signals have become more pronounced as exchange rates moved out of the range trading pattern of the prior two months.

Overview¹

	Macro	Business Sentiment	Technical	Comment
EURUSD	+	+	+	Technical moved from neutral to long EUR putting all three strategies back into long EUR
USDJPY	-	+	-	The long JPY position is based on Macro and Technical, while business sentiment still favors USD
EURCHF	0	+	+	Business Sentiment and Technical have both turned short the CHF, but we retain the long CHF Macro position versus the USD
USDCHF	-	+	+	
GBPUSD	-	+	+	Business Sentiment and Technical support the GBP but we have turned short on the Macro side
EURSEK	-	-	0	All three strategy components were unchanged leaving the overall position long SEK
USDCAD	-	-	-	All three strategy components were unchanged leaving the overall position long CAD

¹ The signs relate to the first currency of the exchange rate pair

EURUSD

We retain our long EUR Macro position given less favorable USD fundamentals (see also Insight section). Business Sentiment and Technicals support that position. The risk environment is clearly more

balanced as we enter 2021, but internal EUR problems are not gone, notably the fiscal and debt imbalances.

	FX Factors	EUR Impact	Comment
Macro	Current Account Balances	+	The US deficit surged in recent months while the Euro-area surplus consolidated
	Fiscal Balances	+	US deficit has widened faster than Euro-area deficit
	Interest Rate Differentials	0	USD-EUR rate differential to remain small
	Oil prices	0	Oil prices seen in range
Sentiment	Business Sentiment	+	Euro-area surveys have rebounded more strongly from initially weaker levels, but momentum is fading
	Risk Sentiment	+/-	Risk sentiment improved significantly in November and looking ahead we see a more balanced risk environment than in 2020
Technical	Price Action	+	Price developments have again become EUR friendly
	Spec Positions	-	Large USD oversold positions have declined somewhat but still pose some correction risks
	PPP Valuation	+	EUR still undervalued by $2/3 \sigma$

EURUSD and QCAM Strategic Positioning



Source: Bloomberg, QCAM Currency Asset Management

USDJPY

We favor the JPY from a Macro perspective on strong BoP fundamentals and the decline in carry flows. This view is supported by the Technical side and we expect that Business Sentiment will follow as well on the back

of improving economic surveys. The JPY has not suffered much in recent weeks despite the rise in risk sentiment yet offers a strong safe haven, should risk sentiment deteriorate.

	FX Factors	JPY Impact	Comment
Macro	Current Account Balances	+	Surplus lower on declining trade but already recovering
	FDI Flows	+	Net outflows have plunged and are unlikely to rebound quickly to offset the current account surplus
	Interest Rate Differentials	0	The drop in interest rate differentials and higher uncertainty have decimated the carry trade
Sentiment	Business Sentiment	-	Surveys are improving but lagging behind
	Risk Sentiment	-	Strong risk sentiment is a headwind but not derailing the JPY
Technical	Price Action	+	Price action remains long JPY
	Spec Positions	0	Modest net long JPY positions
	PPP Valuation	+	JPY undervaluation unlikely to reverse quickly

USDJPY and QCAM Strategic Positioning



Source: Bloomberg, QCAM Currency Asset Management

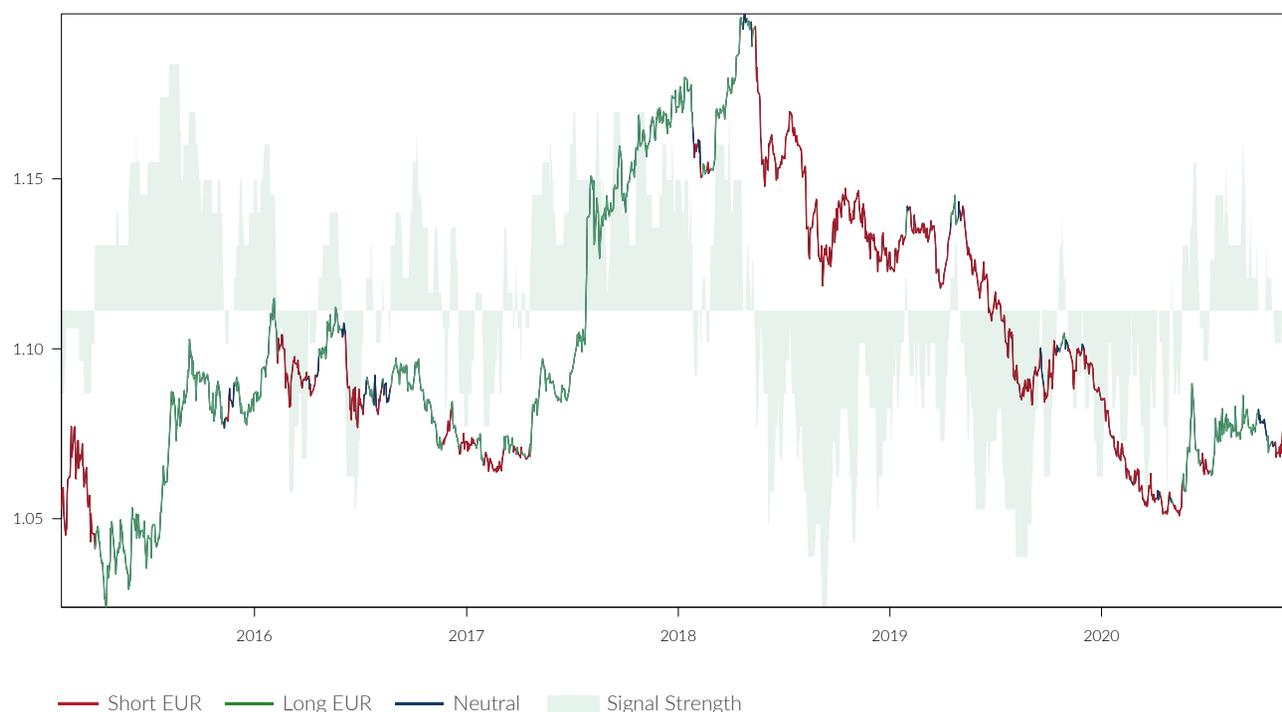
EURCHF

The CHF lost its earlier gains versus the EUR as risk sentiment improved. The SNB was only in early November active in the market. Overall, we continue to

see the CHF trading in a range of 1.07 to 1.09 versus the EUR.

	FX Factors	CHF Impact	Comment
Macro	Current Account Balances	+	Surplus likely to remain stable
	Capital Flows (Safe Haven)	0	Inflows have eased on reduced Euro concerns
	Interest Rate Differentials	+	Substantially reduced differential detracts bond market flows and increases USD hedging
	SNB Policy Intervention	0	SNB not expected to intervene vs. USD
Sentiment	Business Sentiment	-	Swiss economy trails somewhat in the surveys
	Risk Sentiment	-	Risk-on rally is negative for the CHF, but impact was small while risk conditions look more balanced going forward
Technical	Price Action	-	Technicals have shifted back to short CHF
	Spec Positions	0	Modestly long CHF positions likely to stay in range
	PPP Valuation	0	CHF close to fair value

EURCHF and QCAM Strategic Positioning



Source: Bloomberg, QCAM Currency Asset Management

USDCHF

Macro fundamentals, especially the current account surplus are CHF favorable. We see USDCHF still linked to EURUSD and retain the long CHF Macro position in parallel to EURUSD. The CHF is near its

PPP fair-value level and not significantly overbought, which gives it still some upside potential versus the USD. The CHF should benefit once the current vaccine euphoria eases.

	FX Factors	CHF Impact	Comment
Macro	Current Account Balances	+	Surplus likely to remain stable
	Capital Flows (Safe Haven)	0	Inflows have eased on reduced Euro concerns
	Interest Rate Differentials	+	Substantially reduced differential detracts bond market flows and increases USD hedging
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USDCHF and QCAM Strategic Positioning



Source: Bloomberg, QCAM Currency Asset Management

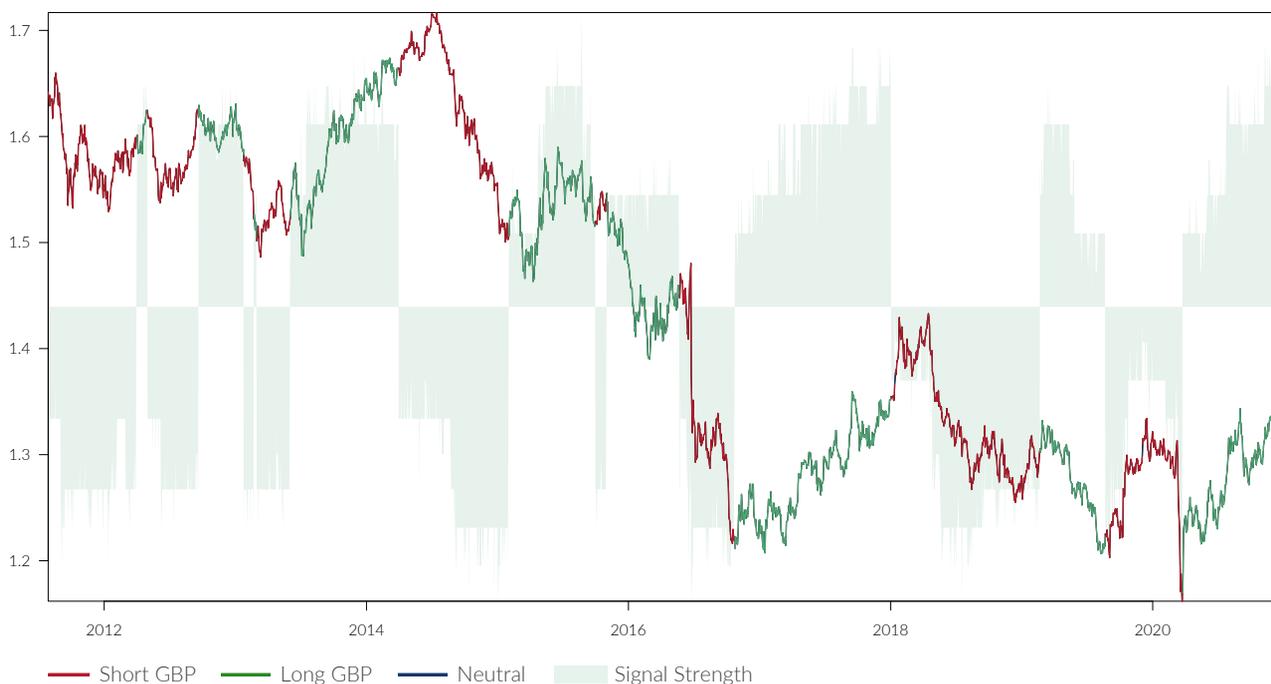
GBPUSD

A persistent current account deficit, the possibility that policy rates move negative, a surging fiscal deficit and the risk that a free-trade deal with the EU may fail leave the GBP vulnerable. The handling of the Corona pandemic is another risk factor for

the GBP. On the other hand, the GBP has responded extremely well to improvements in general risk sentiment. We are taking a short Macro position on the weak fundamentals and to balance the long GBP positions in Business Sentiment and Technical.

	FX Factors	GBP Impact	Comment
Macro	Current Account Balances	0	US and UK twin deficits both seen deteriorating
	Interest Rate Differentials	0/-	US and UK interest rates are about equal, but UK likely to fall lower versus US
	Oil Price	0	Neutral range with some upside potential
Sentiment	Business Sentiment	+	UK surveys have bounced strongly but the risk is that business conditions deteriorate in 2021 as BREXIT fallout materializes
	Risk Sentiment	+	GBP benefitted strongly from vaccine euphoria
Technical	Price Action	+	Technicals turned long GBP on upmove
	Spec Positions	0	Net positions are close to flat
	PPP Valuation	+	Unlikely to mean revert soon, PPP trend may deteriorate as well

GBPUSD and QCAM Strategic Positioning



Source: Bloomberg, QCAM Currency Asset Management

EURSEK

The balance of scores and strategy models favors the SEK versus the EUR. Sweden is impacted by the new Corona wave as well, but not as badly as other parts of Europe. Whether Sweden's Corona

strategy is ultimately better is not clear, but the refusal of the Riksbank to return to negative interest rates is a clear plus for the SEK.

	FX Factors	SEK Impact	Comment
Macro	Current Account Balances	0/+	Positive, but similar to Euro-Zone
	Interest Rate Differentials	+	The Macro interest model has shifted to long SEK and we view a move to negative interest rates as unlikely
Sentiment	Business Sentiment	+	Surveys have switched in support of the SEK
	Risk Sentiment	0	Risk perceptions concerning Sweden's different Corona strategy have faded
Technical	Price Action	+	Technicals remain long SEK
	PPP Valuation	+	SEK undervaluation unlikely to reverse quickly

EURSEK and QCAM Strategic Positioning



Source: Bloomberg, QCAM Currency Asset Management

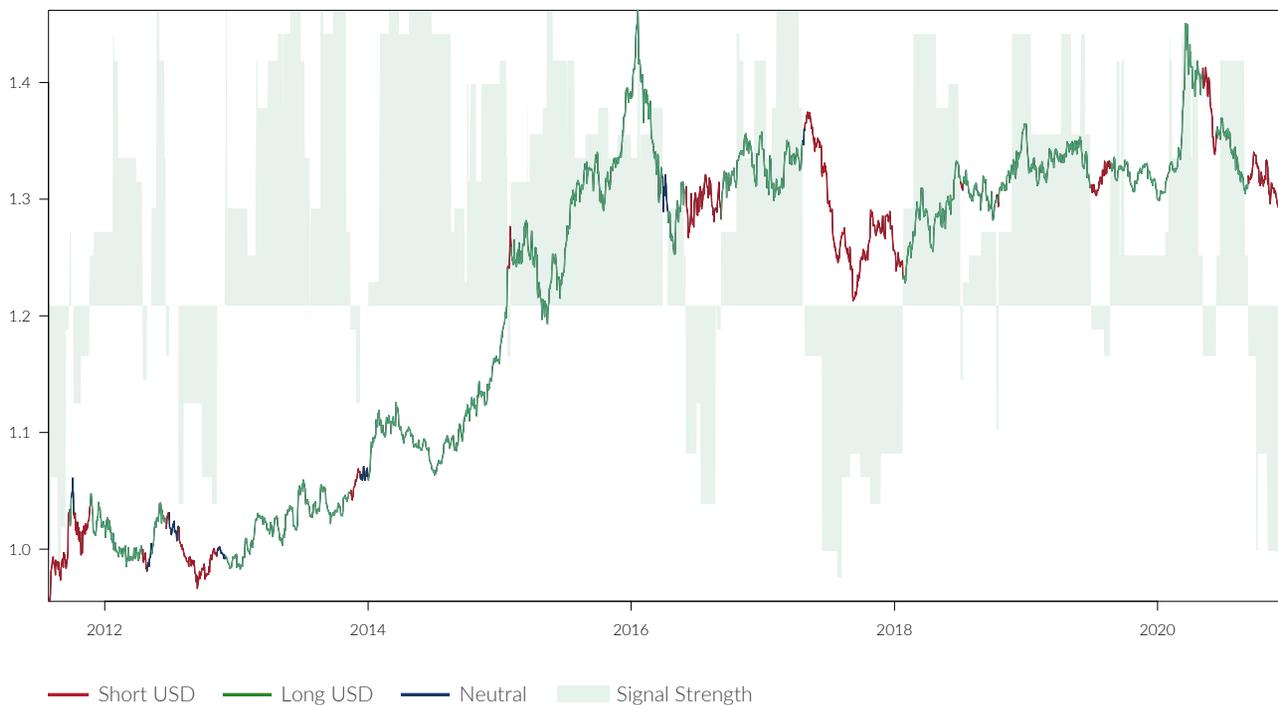
USDCAD

The Macro oil-price model remains long CAD as actual prices stay below prices predicted by market experts. Macro fundamentals are otherwise around neutral. Business Sentiment is long CAD on the back of better

Canadian surveys. Short and long-term Technicals are now both long CAD. Overall, the balance of factors has reconfirmed the long CAD position.

	FX Factors	CAD Impact	Comment
Macro	Current Account Balances	0	Canada's current account deficit moves similar to the US current account deficit
	Oil Prices	0	Oil price seen in a range with a potential to move higher
	Interest Rate Differentials	0	USD and CAD interest rates likely to stay close together
	USD DXY Trend	+	The decline of the USD DXY has been positive for the CAD
Sentiment	Business Sentiment	+	Canada has started to outperform the US
	Risk Sentiment	+/-	Risk issues are more balanced following the US election outcome
Technical	Price Action	+	Short and long term technicals are both long CAD
	Spec Positions	0	Neutral range
	PPP Valuation	+	CAD undervaluation unlikely to correct quickly

USDCAD and QCAM Strategic Positioning



Source: Bloomberg, QCAM Currency Asset Management

QCAM Products and Services

Our edge derives from a focus on professional currency management, the absolute transparency and the careful examination of risk. It is our mission to offer our clients innovative transparent solutions, in a thoughtful and risk-controlled environment, and to surpass investment goals.



Currency Overlay

Risks under control – opportunities in sight: QCAM Currency Overlay offers customised solutions for individual needs and investment goals. Our Passive Overlay focuses on risk management, reduction of transaction costs and the customer specific management of resulting cash flows. Our Dynamic Overlay aims to generate returns based on QCAM's proprietary FX Analytics, embedded in a strict risk budgeting framework.

FX Best Execution

With larger foreign currency transactions, even a small difference in pricing leads to a major impact on costs and revenues. While it is unattainable for most players to keep the full overview of the deals available in the market, independence and transparency are essential. We carry out a Transaction Cost Analysis for our clients to evaluate potential cost savings. Also, QCAM assists its clients in the design of an optimal multibank-setup and conducts clients FX transactions transparently, independently and in the client's best interests.



Optimized Liquidity Management

QCAM's Optimized Liquidity Management Strategy «OLM» enhances yield via the use of the FX interbank swap-market. Also, we take advantage from excellent conditions which we receive from our large pool of partner banks and highly rated debtors for money market and currency transactions QCAM's OLM strategy has outperformed its peers for many years on a constant basis.



FX Alpha

Currencies as an attractive portfolio diversification via QCAM FX BIAS. The focus on QCAM's Business Intelligence Alpha Strategy is on business indicators which we have successfully used for many years. The strategy is market-neutral, no specific market environment necessary. Diversification via a pool of eight different currencies and their respective trading signals.



QCAM Profile

About us

QCAM Currency Asset Management AG is an independent financial services provider with a specific focus on currency and liquidity management. QCAM brings together a team of internationally experienced Currency and Asset Management specialists, who are managing assets of institutional clients of approx. USD 5 billion.

Our core competences are Currency Overlay Services, FX Transaction Execution according to „Best Execution“ principles, FX Alpha and Liquidity Management.

Long-standing customers of QCAM are pension funds, family offices, investment funds, companies, NGOs and HNWLs.

Headquarters

Zug, Switzerland

Founded

2005

Regulation

FINMA since 2007
 SEC since 2014

Independent and Transparent

- Interests directly aligned with those of our clients

- Client focused solutions, tailored to each individuals requirements

- Independent selection of suitable external services providers

- No principal-agent conflicts

- Transparent fee model – no hidden costs

- Transparent reporting

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