Mature Economies

Quarterly Currency Outlook

MarketQuant Research

2018 Q1

Writing completed on January 31, 2018

Content

1. Key elements of background for mature market currencies

At the onset of 2018, we find the same contradictory signals and drivers as a year ago.

On one side, real economic cyclical tensions still appear limited despite the length of recovery in the US, explained by rapid acceleration in the Eurozone leading to robust growth on both sides of the Atlantic as well as in China, with self-reinforcing effects through accelerating international trade;

On the other side, the risk of financial reversal is growing, with potential materialization in 2019H1 or earlier if market expectations change brutally. Excess valuations of asset markets have continued unabated, pointing to both higher risks in financial institutions and high correlations across asset classes; adding this element to the progressively tightening financial conditions in the US (higher Fed Funds, higher bond yield) during 2018 strongly support the assumption of a likely reversal.

An exogenous shock (China, geopolitics…), as well as a widening of corporate spreads in the US, would be the early warning signs of the upcoming stock market reversal, itself triggering a decline in confidence and reduced spending, thus the first leg of the downward phase of the US cycle.

Enjoy 2018 performances…

Eurozone GDP growth acceleration in 2018 in the range 2.5%-3.0% in 2018, from 2.4% in 2017. Solid confidence and improving labor market conditions ensure robust household consumption, supporting fixed investment and corporate profitability. Thus, stronger domestic factors support our scenario of a broad-based and self-sustaining recovery.

Still robust US GDP growth close to 2.5% in 2018. Agreement on the fiscal reform is likely to deliver a short-term boost to US GDP growth despite signs of maturing cycle. However, the logic of progressively tightening financial conditions remain fully valid with its inescapable outcome for cyclical reversal: monetary policy tightening (an equivalent of 175bp increase in Fed Fund rates by end-2018 when including the interest-rate equivalent of the Fed's declining balance sheet) and a gradual increase in long-term yields, both eroding the positive impact of the fiscal reforms on corporate profits; our models suggest that it would take about a year before observing a decline in profits, which would create the (expected) reversal in US equity market and complete the conditions for reversal in demand and production. Our early warning models have highlighted corporate spreads, capacity utilization and housing market as critical elements able to create a non-linear break, plausible for 2019Q1.

Moderate GDP growth scenarios in UK (deceleration) and Japan (acceleration), close to 1.5% in 2018. The implications of Brexit continue to weigh down on the UK cyclical performance and outlook, with compressed real incomes, declining confidence and challenges for economic policies. Conversely, economic activity should remain favorable in Japan as tensions on labor market and supportive policies enhance domestic demand.

GDP growth projections

	2016	2017	2018
United States	1.5%	2.3%	2.5%
Eurozone	1.8%	2.4%	2.6%
UK	1.8%	1.6%	1.5%
Japan	0.9%	1.6%	1.5%

Source: TAC ECONOMICS

… But cross your fingers and prepare for market and cyclical reversal

Risk of renewed market volatility. As long as economic performances in the US and Eurozone are strong, market volatility will remain low despite economic policy and geopolitical uncertainties (historically strong correlated). However, increasing risks of US and China economic reversal with progressive exit from ultra-accommodating monetary policy could trigger volatility index to jump.

ECB changing tone at mid-2018, no change from the Fed. The current divergence in monetary policy is likely to diminish in 2018, in accordance with our "better than expected" economic performances in the Eurozone (strong GDP growth and stable inflation). In this context, the ECB is likely to end its net asset purchase program by the end of 2018, with probably an announcement at mid-year, but no deposit rate hike is expected before 2019. In parallel, the US policy is well on track and our models continue to suggest three 25bp Fed Funds rate increases in 2018.

US/EZ bond yield widening at the short-term. Despite solid EZ GDP growth, the 10-year Bund yield will stay at low level, in a range between 0.25% and 0.50% until mid-2018 and should slightly increase towards 0.7% end-2018. In parallel, US 10-year Treasury yield would gradually increase towards 3.4% end-2018.

2. Detailed Currency Outlook

Summary tables

Currency projections in June 2019
(month average)

	Spot Jan 26, 2018	Apr. 2018	Jan. 2019	June 2019	Changes from last projections (Oct. 2017)
EUR/USD	1.24	1.21	1.32	1.32	Switch to a *real economy* regime from end-2017 leading to a large revision of our EUR/USD scenario towards 1.25 mid-2018 and 1.30 end-2018. *(More details in Hot Topics about EUR/USD, Jan. 2018)*
GBP/EUR	1.14	1.13	1.08	1.08	Modest depreciation in 2018, but high degree of uncertainty suggesting volatile movements
USD/JPY	109	120	121	127	Trend depreciation (with irregular movements) of the Yen towards 120-125 against USD

Source: TAC ECONOMICS

Cross-rates in June 2019
(Month Average)

	USD	EUR	GBP	JPY
USD		0.76	0.70	127
EUR	1.32		0.93	169
GBP	1.43	1.08		182
JPY	0.01	0.01	0.01	

Euro & US Dollar

The break in the EUR appreciation trend during the last quarter of 2017 (back in the range 1.17-1.19) was consistent with our models' continuous emphasis on US/EUZ real bond yield differential.

However, this scenario is now fully challenged by the recent EUR appreciation above 1.20 and recent events in the Eurozone (ECB changing its tone in jan.18, strong EZ confidence, advance on German coalition construction…). Therefore, we have calibrated a regime-switching model on the EUR/USD since 2005, based on all traditional determinants of exchange rate.

It highlights two very different "regimes" for EUR/USD determination, with large variations in weights of the different variables in the two regimes: (1) a *financial/monetary* regime where the currency is driven by real bond yield differential and monetary policies. (2) a *real economy* regime, where the EUR/USD is primarily driven by GDP growth and inflation differential.

Moreover, the model indicates a switch from *financial* to *real economy* regime from end-2017, explained by record sentiment index in the Eurozone (above 113). This is likely to persist in 2018 according to our GDP growth acceleration scenario in the EZ, above 2.5% for this year.

As a direct consequence, the move from one regime to the other implies a strong revision for the EUR/USD projections: despite tightening financial conditions in the US, the strength of the cyclical recovery or catch-up in the Eurozone will imply a further appreciation of the EUR, quite rapidly to 1.25 mid-2018 and close to 1.30 towards the end of the year 2018.

However, this comes with two different periods of higher uncertainty and higher volatility: (1) In the short-run, March may be more challenging for European confidence (Italian election, ECB monetary policy meeting) at the time of Fed tightening (2) at the end of the projection period, we are more uncertain about the exchange rate regime as further acceleration in the EZ will be more difficult (headwinds from a stronger currency and possible cyclical reversal in the US or China), plausibly creating a rapid depreciation of the EUR.

Consensus Projections

(end of period values against USD)

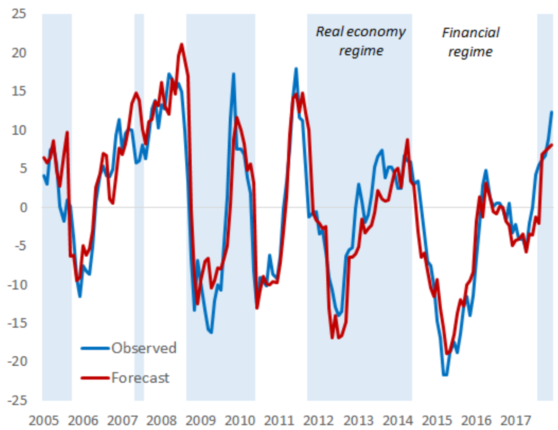
	Mean	Divergence	High	Low
Feb. 2018	1.18	10.2%	1.22	1.10
Apr. 2018	1.18	11.9%	1.25	1.11
Jan. 2019	1.19	17.7%	1.30	1.09
June 2019	1.19			

Source: Consensus Inc.

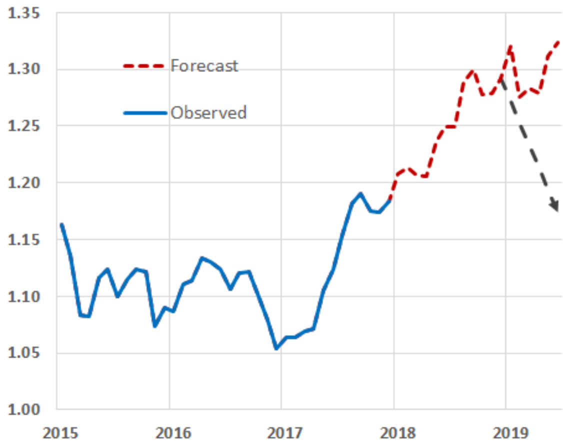
TAC ECONOMICS Projections

	Spot Jan, 26	Apr. 2018	Jan. 2019	June 2019
EUR/USD	1.24	1.21	1.29	1.32

EUR/USD Markov Switching model

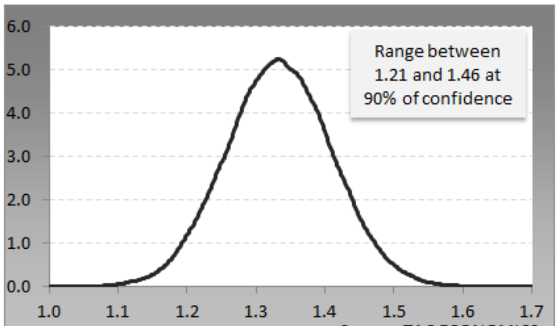


EUR/USD projections for 2018/2019



Monte-Carlo simulations

Monte-Carlo simulations - EUR/USD Confidence interval at 18 months - June 2019	75%	90%	95%	99%
High	1.42	1.46	1.48	1.53
Low	1.25	1.21	1.18	1.14



Source: TAC ECONOMICS

British Pound

We highlighted last October that the GBP would stop depreciating, as the currency hits PPP level, estimated close to 1.10 against EUR. From there, the currency has slightly rebounded to reach 1.13 against EUR on average in December. This recent GBP appreciation can be explained by the Nov. +25bp increase in interest rate to fight against inflationary pressures.

Inflationary pressures in the UK would ease in 2018, after the headline CPI inflation reached a high point at +3.1% in Nov.17. Our model foresees that inflation should decline towards 2.5% end-2018. The end of higher price pressure is positive for household's real income. However, signs of labor market weakening (with the employment growth stabilizing in 17Q3) and low household saving rate (1.1% in 17Q2) limit higher consumer spending in the UK in 2018.

Then, investment prospects seem insufficient to counter-act this deceleration trend given the Brexit uncertainties. Indeed, the Brexit negotiations 2nd phase will be complex both on the UK side (given the small parliamentary majority) and on the EU side (given each country specific political issues and priorities). The combination of such elements explains our scenario of UK GDP growth likely to stand around 1.5% in 2018, roughly equivalent to 2017.

However, "future interest rate hike will be gradual" as mentioned by Governor Mark Carney, as inflation is expected to ease (with diminishing pass-through effect) and increasing concern about GDP deceleration in the UK (around 1.5% in 2018).

In this context, our model suggest the Sterling should slightly depreciate against EUR towards 1.10 in 2018Q3 and stabilize around this level afterwards. However, uncertainties around Brexit negotiations are the main risk for UK with potential of volatile movements and further GBP depreciation in 2018 as negotiations are supposed to end early-2019.

Consensus Projections

(end of period values against EUR)*

	Mean	Divergence	High	Low
Feb. 2018	1.12	8.3%	1.18	1.08
Apr. 2018	1.12	13.7%	1.20	1.04
Jan. 2019	1.11	27.6%	1.29	0.98
June 2019	1.11			

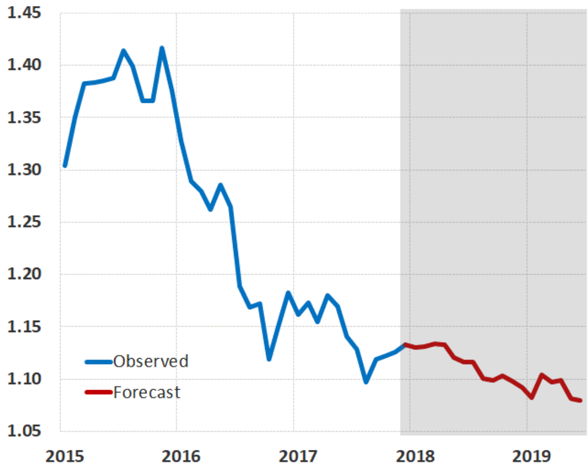
Source: Consensus Inc.

(*) The divergence index does not include divergence on EUR/USD.

TAC ECONOMICS Projections

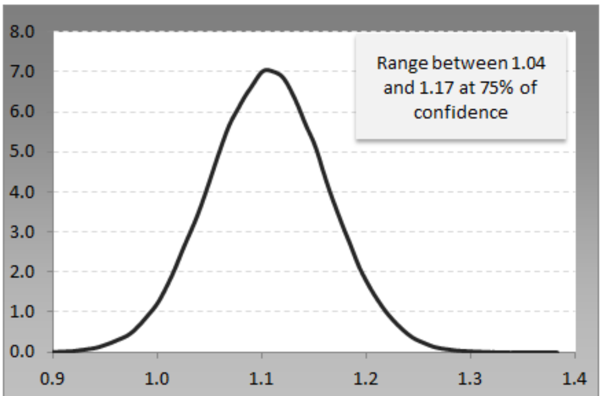
	Spot Jan, 26	Apr. 2018	Jan. 2019	June 2019
GBP/EUR	**1.14**	**1.13**	**1.08**	**1.08**

GBP/EUR projections for 2018/2019



Monte-Carlo simulations

Monte-Carlo simulations - GBP/EUR Confidence interval at 18 months - June 2019	75%	90%	95%	99%
High	1.04	1.01	0.99	0.96
Low	1.17	1.20	1.22	1.25



Source: TAC ECONOMICS

Japanese Yen

The Yen has recently depreciated against USD, from 110 in August to 113 in December. The recent trend is consistent with our model indicating the USD/JPY is strongly correlated with the US 10-year government bond yield.

On Japan, our projections remain globally unchanged with stable GDP growth around 1.5% in 2018 while inflation is excepted to stabilize in the range 0.0%-0.5%, below the 2.0% target, leading the BoJ to maintain its 0% target on the 10-year government bond yield.

The increase in corporate earnings and the tight labor market conditions did not translate into higher wages, but rather in cash surplus. Conversion of non-invested and undistributed corporate profits to household income and private consumption is required to achieve a higher and more sustainable GDP growth.

Japan cyclical strength up to end-2018, supported by favorable external environment and robust corporate profits but any acceleration is limited by subdued wages pressures. Our GDP growth model still points to 1.5% average annual GDP growth for 2018, with large oscillations in quarterly performances.

For 2019, transmission of potential Chinese and US GDP slowdown will affect the current strength. Moreover, the planned VAT hike (from 8% to 10% in October 2019) might create downward pressures on the economic activity (as observed in 2014), including through volatile "anticipation adaptation".

For 2018, interest rate differential between the US and Japan is likely to increase, in the back of Fed normalization and BoJ status quo, that would weigh on the Japanese currency. Our model suggests an irregular JPY depreciation against USD in the range 120-125 in 2018 and between 125 and 130 in 2019H1.

Consensus Projections

(end of period values against USD) *

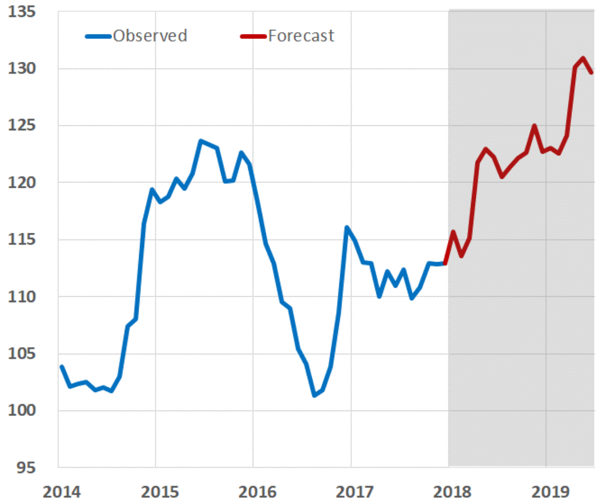
	Mean	Divergence	High	Low
Feb. 2018	113.3	7.1%	117	109
Apr. 2018	113.8	12.3%	120	106
Jan. 2019	114.2	14.9%	122	105
June 2019	113.8			

Source: Consensus Inc.

TAC ECONOMICS Projections

	Spot Jan, 26	Apr. 2018	Jan. 2019	June 2019
USD/JPY	109	122	123	130

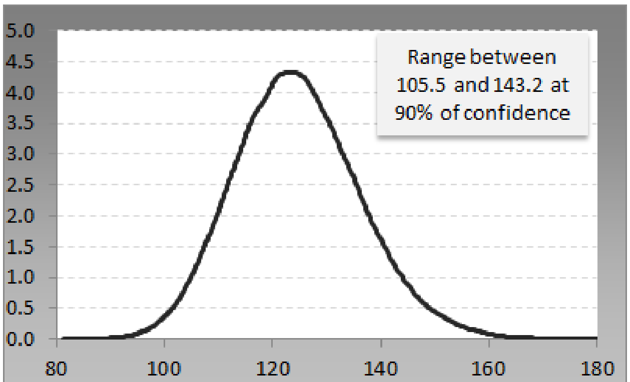
USD/JPY projections for 2018/2019



Monte-Carlo simulations

Monte-Carlo simulations - USD/JPY
Confidence interval at 18 months - June 2019

	75%	90%	95%	99%
High	136.8	143.2	147.4	156.6
Low	110.5	105.5	102.5	96.8



Source: TAC ECONOMICS

3. Methodology

This document and the analysis on currency projections are based on the combination of different sets of quantitative tools, associated with in-depth qualitative review and process of "challenging the models".

A first set of quantitative tools based on non-linear datamining models (Random Forest, Recursive Partitioning etc.) and econometric models based on theoretical concepts aims at providing an in-depth analysis and projections for critical macroeconomic variables, usually considered as having a large impact on currencies. They include GDP, inflation, policy rates and long-term interest rates.

A second set of quantitative tools uses traditional econometric equations relating nominal exchange rates (against the USD or EUR). Projections are based on our scenarios on critical variables (included in levels, changes, differentials or gaps with US) in addition to specific variables related to overall risk appetite / aversion, and commodity or oil prices. Estimations are calibrated on a long period (at least early 2000s) in order to capture as best as possible trends and underlying forces.

The robust estimate is afterwards associated with Monte Carlo simulation based on observed ranges for explanatory variables and incorporating covariances across variables. It provides confidence interval at the 18-month ahead horizon.

Finally, the quantitative results are commented, and sometime nuanced, by the more qualitative / policy driven analysis on currency development and outlook.

Disclaimer

These assessments are, as always, subject to the disclaimer provided below.

Your contacts at TAC ECONOMICS

Technical questions / hotline

TAC ECONOMICS team is available for any economic, financial, technical questions and requests at the following e-mail address: hotline@taceconomics.com

Customer relation

For any question relative to your subscription, please contact us by e-mail at taceconomics@taceconomics.com

Tel +33 (0)299 39 31 40
Web: http://www.taceconomics.com