



Mature Economies

Quarterly Currency Outlook

MarketQuant Research

2019 Q1

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1. Key elements of background for mature market currencies

2018 was a transition year compared to 2017, from broad based and robust to heterogeneous and decelerating economic growth, from accommodative to tightening monetary policy, from low volatility and supporting valorization to sell-off episodes in financial markets. This transition occurs in an uncertain environment with growing concerns over trade protectionism and rising strategic tensions between US and China. Mature and EM economies have entered the downside phase of the economic cycle at an uneven pace (still upside from the US, slowdown in the EZ, risk materialization in specific EM countries).

2019 will be a year of synchronized slowdown and materialization of equity markets reversals

For 2019H1, an unstable phase with still supportive domestic economic environment (robust labor markets and modestly increasing purchasing power because of lower oil prices on households' finance, neutral/accommodative monetary policy and mildly expansionary fiscal policy) but combined with unresolved uncertainties (high volatility regime, trade tensions, political events) and high probability of equity markets reversal. The negative impact of rising interest rates spreading into reduced margins, weaker earnings to negative US corporate profits will trigger a sharper US equity bear market during this first phase.

In 2019H2, the large equity markets adjustment will spread into the real economy (from the US to the other mature economies and accentuated by the ongoing economic adjustment in China) with a rapidly slowing demand and financial restructuring for borrowers with excess leverage. For most of mature economies, our 2019 GDP growth scenario is almost unchanged compared to our previous forecasts and still below the consensus: 2.3% in the US, 1.6% in the EZ, 1.2% in Japan, except for the UK (at 1.5%) assuming our baseline scenario of an "orderly Brexit" deal with the EU materializes.

Progressive consensus adjustment

The recent decline in equity markets and growing uncertainties / worries about 2019 probably reflect a convergence of markets' perceptions with our negative cyclical scenario for 2019H2 and 2020H1, with most risks skewed to the downside (political / geopolitical, pockets of systemic vulnerabilities in both banks and non-bank financial institutions). Though our quantitative models continue suggesting that both real economic drivers and financial variables are not yet at "breaking-points"; the overall negative sentiment could prevent the materialization of a short-term rebound in early 2019 with

persistently volatile and mediocre market performances.

Central bank's ability to adjust their monetary policy will be key in determining the economic transmission toward 2019/2020

Going forward into 2020, systemic (banking) risk appears so far limited, implying a "normal cyclical unfolding": the financial adjustment should be strong but temporary, and its impact on real economic expansion concentrated in 2020H1 (1.3% y/y in the US, 0.9% in the EZ, 1.4% in the UK, 0.1% in Japan). Oil prices and inflation should decline (with potential resurgence of deflation threats) with end-2019 CPI projections at 1.7% in the US, 1.4% in the EZ, 2.1% in the UK, 1.7% in Japan (VAT hike impact). Central bank's ability to adjust their monetary policy towards 2019/2020 will be key in determining the economic transmission. After 1 rate hike in 2019H1, the Fed will have fully "normalized" its policy instruments and therefore be ready to lower Fed Funds (25bp cut by the end of 2019) and provide further "unconventional" liquidity if needed inducing a large decline in US long-bond yields. Other central banks that were unable to normalize their monetary policy (ECB, BoJ) will have to activate existing "non-conventional" tools, alongside a plausible relaxation of budget policies and rules.

Real GDP growth projections (% y/y)

	2017	2018	2019	2020H1
United States	2.2%	2.9%	2.3%	1.3%
Eurozone	2.5%	1.9%	1.6%	0.9%
UK	1.5%	1.3%	1.5%	1.4%
Japan	1.9%	1.1%	1.2%	0.1%

Source: TAC ECONOMICS

2. Detailed Currency Outlook

Summary tables

Currency projections in June 2020
(month average)

	Spot Jan. 14	June 2019	Dec. 2019	June 2020	Changes from last projections (Oct. 2018)
EUR/USD	1.15	1.12	1.23	1.17	Unchanged scenario but expected large oscillations at the 18-month horizon in the range 1.05-1.25.
GBP/EUR	1.13	1.14	1.11	1.12	Relative stabilization around 1.13 given assumption of positive Brexit negotiations.
USD/JPY	108	114	119	121	Trend depreciation (with irregular movements) of the Yen in the range 115-120.

Source: TAC ECONOMICS

Cross-rates in June 2020
(Month Average)

	USD	EUR	GBP	JPY
USD		0.86	0.77	121
EUR	1.17		0.89	140
GBP	1.31	1.12		157
JPY	0.01	0.01	0.01	

Source: TAC ECONOMICS

Euro & US Dollar

As well expected, the USD has continued its appreciation trend over the previous quarter, from a high at 1.23 in April to 1.14 in December 2018. At the 18-month horizon, our EUR/USD projections remain unchanged with large oscillations, pointing to a sequence in three steps:

- (1) **A continued period of USD appreciation until 2019Q1 towards 1.10**, supported by favorable long-term interest rate differential between the US and Germany leading to “carry trade” strategy.
- (2) **A reversal in EUR/USD in 2019 with US overheating risk materializing**, while EZ growth slightly improve, leading EUR to appreciate against USD potentially above 1.20 in 2019Q4.
- (3) **A renewed period of USD appreciation** in the context of increasing risk aversion translating in “flight to safety” market behavior and EUR/USD towards 1.15-1.20 in 2020H1.

Such projections are built upon a Markov switching model which identifies (without a priori) two different regimes over the 2005-2018 period: a financial regime, where the currency is primarily driven by bond yield differentials, and a real economy regime, where the currency is much more sensitive to GDP growth and inflation differentials.

For 2018-2019, our models currently suggest that the business cycle gap between the US and the EZ plays a decisive role on EUR/USD. While EZ growth outperformed US in 2017 and confidence reached historically high levels, both have slowed in 2018. This supports a change in favor of the financial regime, which explains the strong rally of US dollar against Euro since April 2018.

Moreover, the financial regime means that long-term interest rate differentials also drive EUR/USD dynamics and confirms that the renewed phase of USD appreciation will continue until 2019Q1, towards the range 1.05-1.10. Then, our models indicate a change towards the real economy regime in 2019 when the US will reach an overheating point, anticipating an USD depreciation in 2019-2020H1 toward levels close to 1.15 in 2020H1.

However, an earlier than expected equity market shock or increasing fears about economic slowdown in the US would modify EUR/USD perspectives, particularly the continued USD appreciation period expected until 2019Q1 that would not occur.

Consensus Projections

(end of period values against USD)

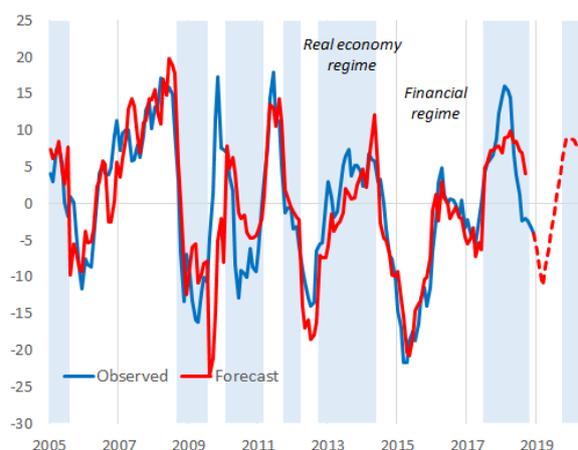
	Mean	Divergence	High	Low
Jan. 2019	1.14	8.7%	1.20	1.10
Mar. 2019	1.15	10.9%	1.21	1.09
Dec. 2019	1.19	21.9%	1.31	1.05
Jun. 2020	1.21			

Source: Consensus Inc.

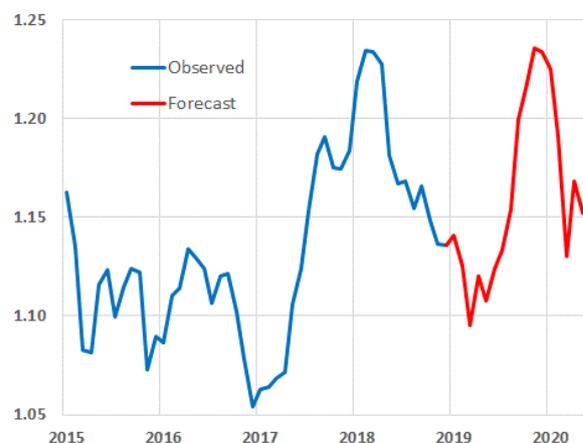
TAC ECONOMICS Projections

	Spot Jan. 14	June 2019	Dec. 2019	June 2020
EUR/USD	1.15	1.12	1.23	1.17

EUR/USD Markov Switching model

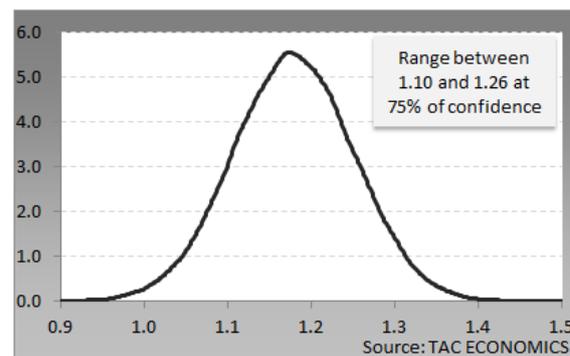


EUR/USD projections



Monte-Carlo simulations

Monte-Carlo simulations - EUR/USD				
Confidence interval at 18 months - June 2020				
	75%	90%	95%	99%
High	1.26	1.30	1.32	1.37
Low	1.10	1.06	1.04	0.99



British Pound

The Sterling has roughly stabilized against EUR around 1.13 over the whole year 2018. **Despite strong uncertainties about Brexit outcome, our GBP/EUR perspectives are relatively unchanged and suggest an overall stabilization in the range 1.10-1.15, as observed over the past year.**

However, uncertain Brexit outcome suggests potential for strong volatility and possible renewed period of GBP depreciation in case of no deal.

A divorce deal agreement obtained before March 2019 remains our central scenario despite strong uncertainties. Assuming this scenario, our forecast suggests a GDP growth stabilization around 1.5%, supported by domestic consumption and a potential growth “catch-up” partly mitigating the economic transmission from a more negative international environment in 2019.

Then, our scenarios expect a stabilization in inflationary pressures (slightly above 2.0%) up to 2020H1. In this context, the Bank of England (BoE) will maintain a wait-and-see behavior until March 2019 while monitoring closely growth path in the back of UK exit from the European Union and expected global economic slowdown.

Consequently, our models suggest a relative stabilization of the GBP/EUR until mid-2020. At the short-term, our scenario of Euro depreciation (against USD) until 2019Q1 and interest rate differential support the GBP. Then, renewed period of Euro appreciation in 2019H2 when the US will reach an overheating point, will weigh down on the Sterling.

However, Brexit outcome remains strongly uncertain and the probability of an alternative “extreme” scenario (no deal, hard Brexit or new referendum) have increased considering current negotiations. In this case, GBP would be negatively affected with potential strong volatility over the next six months.

Consensus Projections

(end of period values against EUR) *

	Mean	Divergence	High	Low
Jan. 2019	1.13	14.0%	1.24	1.08
Mar. 2019	1.14	19.1%	1.29	1.07
Dec. 2019	1.15	25.3%	1.32	1.02
Jun. 2020	1.15			

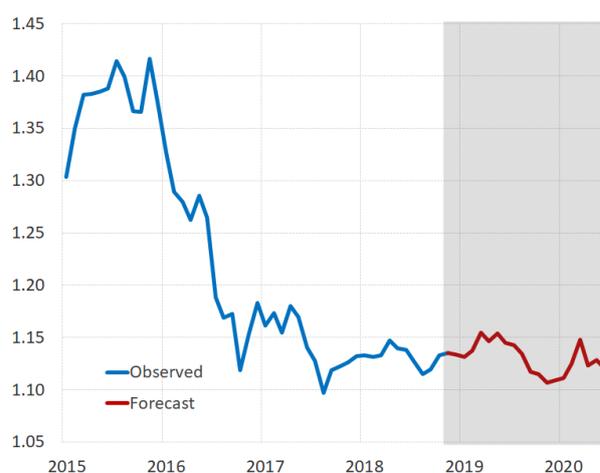
Source: Consensus Inc.

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

TAC ECONOMICS Projections

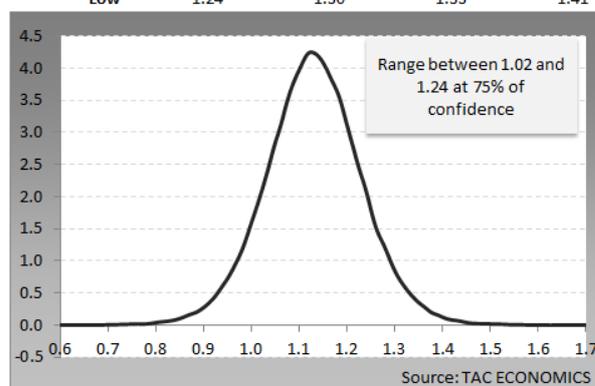
	Spot Jan. 14	June 2019	Dec. 2019	June 2020
GBP/EUR	1.13	1.14	1.11	1.12

GBP/EUR projections



Monte-Carlo simulations

Monte-Carlo simulations - GBP/EUR				
Confidence interval at 18 months - June 2020				
	75%	90%	95%	99%
High	1.02	0.97	0.93	0.85
Low	1.24	1.30	1.33	1.41



Japanese Yen

Despite rising global risk aversion since Oct. 2018, likely to encourage safe-haven demand supporting JPY appreciation, JPY has stabilized around 113 almost all 2018Q4. The JPY appreciation trend (around +4.0%) only materialized in the second half of December.

It seems premature to question the yen's role as a safe-haven status. Thereby, without a more global risk aversion likely to discourage Japanese investors from buying foreign assets, the yen is likely to stay weak, consistent with macro fundamentals.

Our USD/JPY perspectives are relatively unchanged with the continuation of JPY depreciation trend until 2020H1 to reach level close to 120 at the end of period.

Our models thus suggest that the safe-haven status of the currency may be weaker, with no significant reappreciation when expected financial tensions will pick-up, despite bouts of volatility.

Our macro scenarios for 2019 are unchanged with GDP growth slightly above 1.5% until 2019Q3 followed by an economic slowdown (possible temporary recession) in the context of consumption tax hike planned for October 2019. Then, our inflation projections remain below 1.0%, implying unchanged monetary policy and 10-year bond yield around 0.1%.

The Bank of Japan would not raise rates for a long-time, despite the context of progressive monetary policy normalization in the US. Therefore, the expected widening of the Japan/US bond yield spread and the strengthening USD explain the expected USD/JPY depreciation trend in 2019 and 2020H1.

Consensus Projections

(end of period values against USD)

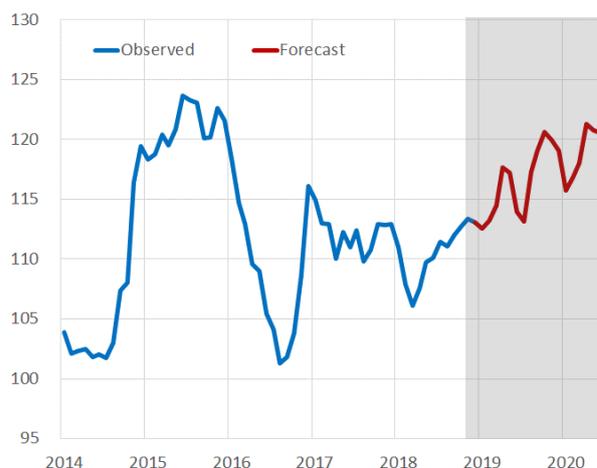
	Mean	Divergence	High	Low
Jan. 2019	112.5	5.3%	115	109
Mar. 2019	112.2	16.0%	118	100
Dec. 2019	110.6	22.6%	125	100
Jun. 2020	108.9			

Source: Consensus Inc.

TAC ECONOMICS Projections

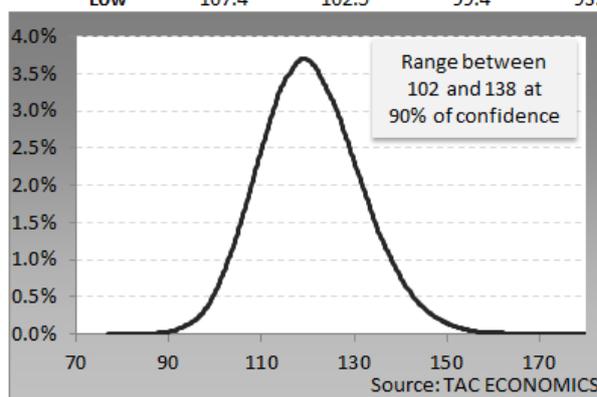
	Spot Jan. 14	June 2019	Dec. 2019	June 2020
USD/JPY	108	114	119	121

USD/JPY projections



Monte-Carlo simulations

Monte-Carlo simulations - USD/JPY				
Confidence interval at 18 months - June 2020				
	75%	90%	95%	99%
High	132.4	138.2	141.9	149.7
Low	107.4	102.5	99.4	93.4



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

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