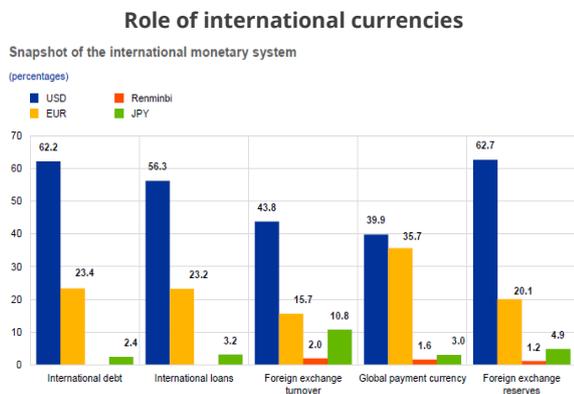


## US dollar as a dominant currency: implications for multi-currency risk management

The dollar remains the world's dominant currency, as shown by its place and weight in international reserves, capital markets operations or trade transactions. When translated into exchange rate movements across a large number of different currencies, this dominance is statistically confirmed with a "driving" role of USD movements against most if not all currencies. But this "domination" is heterogeneous, by country as by time-periods. For large companies managing a multi-currency exposure, the role of EUR / USD management is therefore both central and insufficient, particularly in a context of more frequent "currency crises"<sup>1</sup>.

### Dominant role of US dollar: evidence and statistical findings

The dominant role of the USD has been much analyzed and documented. The primary metrics for the various role of potentially "international" currencies include share in official foreign exchange reserves, capital market operations, transaction and trade. On all front, the share of USD is massively dominant, with an ambiguous exception for transactions: here the fact that intra-Euro Zone transactions are still registered as international transactions provides an artificial boost to the Euro's share.



Source: ECB

We conducted a thorough econometric analysis on 103 currencies, with each country's exchange rate against a "neutral" currency (here, CHF) explained by change in "international" currency's exchange rate against the same neutral currency. The basket of international currencies includes USD, EUR, GBP, JPY and CNY, and the computation is made over two sub-periods, one from 2000 to 2008, the second from 2010 to 2018.

The results show a very clear reinforcement of the dominant role of the dollar since the European crisis of 2010, whereas the previous period had seen a "rebalancing" of the roles. Since the Great Depression of 2008-09, 81% of exchange rates are significantly influenced by the USD, while only 42% are influenced by the EUR. All non-USD currencies have seen their role and influence decline over the past 8 years.

### % of exchange rates (on a total of 103) with a statistically significant role of a « driving international currency »

|     | 2000-2008 | 2010-2018 |
|-----|-----------|-----------|
| USD | 61%       | 82%       |
| EUR | 60%       | 42%       |
| GBP | 26%       | 17%       |
| JPY | 47%       | 12%       |
| CNY | 41%       | 24%       |

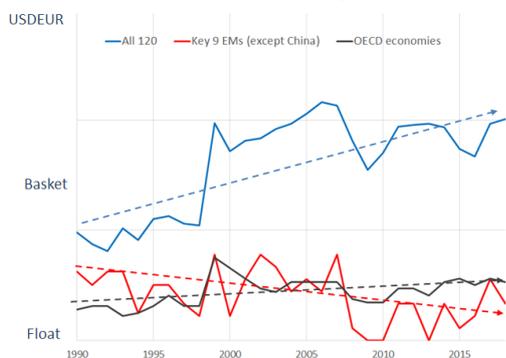
Source: TAC ECONOMICS

We complement this econometric analysis with a more complex observation and quantitative assessment of countries' "exchange rate regime", i.e. what is the de facto policy in a large range from fully floating to fixed / pegged exchange rates. The technique also identifies the driving forces among USD, EUR and CNY for all different regimes. The exercise is conducted on 120 different countries / exchange rates. The chart below shows some of the interesting results, notably the global trend towards more influence of the USD exchange rate on semi-floating regimes, though not for the mature economies and the largest Emerging Markets

<sup>1</sup> This note is derived from a recent presentation made at the 10<sup>th</sup> Annual Meeting of Debt and Currency Professionals, Paris, February 19, 2019

(10KeyEM on the chart), for which floating regimes (and therefore less direct influence of endogenous USD dynamics) have been increasing.

#### Trend in exchange rate regimes: reinforcement of the number of currencies loosely aligned on the USD/EUR



Source: TAC ECONOMICS

#### Changing correlations over time and by country / currency

Finally, we wanted to observe time- and country-specifics in the relation to the US Dollar. We took a sample of 18 bilateral exchange rates (16 EM, plus EUR and JPY) against the USD and computed rolling correlations on different sub-periods since 2000. The charts with correlations are presented next page, with blue colors denoting positive correlations, red colors denoting negative correlations, and darker areas indicating higher absolute values for the correlation coefficient.

We derive a couple of simple but robust conclusions from this computation.

- Splitting the whole period into two similar sub-periods centered around the global financial crisis, we observe a confirmation of the increasing role of the USD, with the matrix turning almost uniformly blue in 2009-2018, whereas the CNY, MXP, ZAR, KRW and JPY showed lower or negative correlations during the pre-crisis period;
- Focusing more on the recent period and changes in correlations since 2014, we observe significant changes on 2-year windows: in particular, we observe that during the more turbulent 2015-

2016 time-window, darker colors appear both blue and red, suggesting larger differences during more uncertain economic outlook and higher global risks. Conversely, the relatively "positive" mood and favorable macro-performances in 2016-2017 have induced a re-correlation movement and a greater role of the USD in overall exchange rate dynamics worldwide. Overall, the trend since 2014 is one of lower but same-direction correlation after periods of much higher but more diverse correlation factors. Indeed, the latest matrix is more uniformly blue but with overall lighter colors.

- Some countries have remained more "independent" from the USD (or more dependent to other factors, e.g. China or commodity prices), notably Brazil, Russia, South Africa and Japan.

#### Implications for currency management

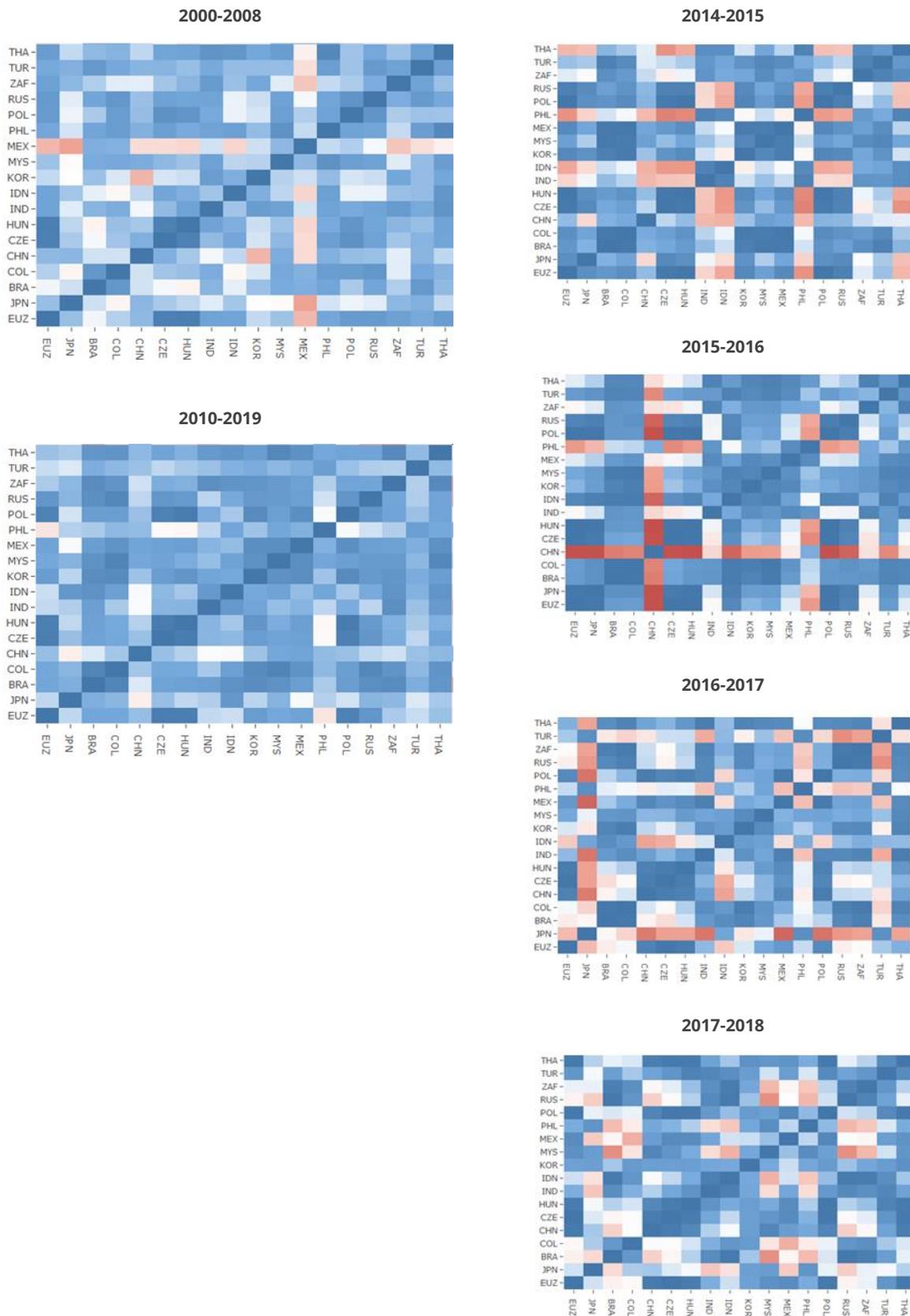
The dominant role of the dollar mechanically indicates that EUR / USD remains central for all FX exposure, including other mature currencies and emerging markets.

It is not enough, given the variations between countries and by period of the economic and financial cycle. A central issue is the ability to neutralize non-EUR / USD risks through a currency portfolio: it is possible, but very dependent on the portfolio.

The period is conducive to "unanticipated shocks" or sudden ruptures: geopolitical context, currency divergences, systemic and cyclical uncertainties, political issues in the "heart" of the international system:

- Changes in the "macroeconomic exchange rate regime" more frequent on the EUR / USD rate: oscillations between financial regime versus economic regime.
- Increased risk of sudden depreciation in certain emerging countries, with strong differentiations by country / geographical area and complex contagion effects.

Monthly correlations of exchange rates against the USD – Analysis since 2000



Source: Datastream, TAC ECONOMICS