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US dollar's global dominance remains intact; EUR and RMB still far behind but for how long?

Global currencies are widely used in cross-border monetary operations, finance and trade. For the issuing sovereigns, these currencies come with both benefits and costs and can therefore have significant implications for creditworthiness. In this report, we explore the drivers of global currency status and the prospects for change in the international monetary system, specifically, whether the dominance of the US dollar can be challenged by a rise of the euro and the renminbi.

Global currency status can be gained or lost, most recently in the aftermath of World War II, when the US dollar overtook the British pound as the world's leading currency. Now, the dominance of the dollar is being tested, with China's rising economic and political clout and Europe renewing its efforts to strengthen the euro's global role.

But what could drive a systemic change in the international monetary system?

To answer this question, we examine the various dimensions of the uses of major global currencies by central banks and private investors. Crucially, our analysis focuses on the dollar and its two *credible* long-term challengers, the euro and the renminbi. Any change in the role of international currencies will be driven by i) policymakers shaping the international monetary system; ii) private actors reacting to those changes; and, crucially, iii) central banks, which play a dual role as both the shapers and users of the system.

Figure 1. What can lead to a change in the use of the euro, renminbi or US dollar?

⬆ EUR	⬆ RMB	⬇ USD
Complete CMU and BU; Create euro safe asset; Benchmark prices for commodities; Regional supply chains	Strengthen macro-economic stability, rule of law; Open capital account; Benchmark prices for commodities; Regional supply chains	Adversarial foreign and trade policies; Persistent and concerning fiscal and current account deficits
Increased liquidity, safety and availability of EUR/ RMB assets		Loss of confidence in USD

Our findings highlight the following key takeaways:

- The liquidity, safety and availability of underlying assets, together with confidence in the currency's value (underpinned by macroeconomic and political stability), are key to the widespread adoption of currencies by public and private actors.
- Considerable synergies between the various functions of money result in inertia, which has a dual effect: First, the dominance of the US dollar will persist until EU and Chinese governments implement policies that support the international use of their respective currencies. Once they do, switching from the US dollar to the euro or renminbi may take place more precipitously than currently thought possible.
- For European authorities, completing the Capital Markets and Banking Unions (CMU and BU) would greatly increase the attractiveness of euro-denominated assets, the availability of which would also benefit from the creation of a euro area safe asset.
- For Chinese authorities, the further opening of capital accounts to foreign investors, progress in enhancing the supervision and reduction of financial system vulnerabilities, a strengthening of the rule of law and improved sovereign creditworthiness will be key to raising the renminbi's international appeal.
- US foreign and trade policies may incentivise governments to reduce their reliance on the US dollar while persistent fiscal and current account deficits in a highly politically polarised environment may gradually weaken investor's confidence in the currency.

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Related Research (w/ link)

The Unparalleled Status of the US Dollar in an Evolving Global Environment
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Uses, benefits and costs of global currencies

International currency status is multifaceted…

Uses of an international currency extend well beyond its role as a foreign exchange reserve for central banks. It fulfils the three traditional functions of money for both private and public actors: a medium of exchange, a unit of account, and a store of value. **Figure 2** outlines the six roles of a global currency. The US dollar has dominated these areas for several decades, conferring considerable advantages for the United States (AA/Stable) in terms of public debt sustainability as well as economic and political leverage.

Figure 2. The six functions of international currencies

Functions of money	Private actors	Central banks
Store of value	Investment/financing	Reserve
Unit of account	Invoice/settlement	Anchor
Medium of exchange	Payment vehicle	FX intervention

Source: Adapted from Krugman, P. (1991)

… with both benefits and costs for the issuing country.

An international currency provides a host of benefits for the country that issues it. First, domestic banks in the issuing country have access to the central bank's liquidity facilities, which translates into a competitive advantage over foreign banks. Domestic firms also benefit as their exchange rate risks are lower than those of foreign firms. In addition, borrowing costs for the issuing sovereign are reduced due to high demand for its currency, increasing fiscal space and the ability to raise spending without materially affecting debt sustainability. Finally, a global reserve currency can be used by the issuing country politically, for instance, via sanctions, bolstering the country's global hegemonic status.

But an international currency also has its costs. During times of global distress, such currencies can appreciate strongly due to their safe-haven status, adversely affecting the cost-competitiveness of domestic producers. In addition, the absence of credible fiscal rules, low borrowing costs and sustained elevated demand for its debt securities may induce governments to pursue a fiscally expansive policy, resulting in high public debt. Countries issuing international currencies also face policy constraints as strong debt movements can increase interest rate volatility, complicating monetary policymaking.

One-sided dominance leads to global financial stability risks

Finally, a single dominant currency poses challenges for the stability of the international monetary system. Widespread use of a currency beyond its national borders increases spill over risks; changes in domestic monetary policy and exchange rates can significantly threaten financial stability in other countries. Similarly, the one-sided dominance of a single currency can lead to global liquidity shortages, as shown during the financial crisis when many banks reported severe US dollar funding shortages[1].

Determinants of currency choice for central banks

Reserves are a key element of central banks' toolkits

Reserve managers hold official foreign reserves to maintain confidence in the country's monetary policies, exchange rate management and value of the domestic currency. Foreign reserves also ensure the country can meet external obligations by maintaining foreign currency liquidity[2].

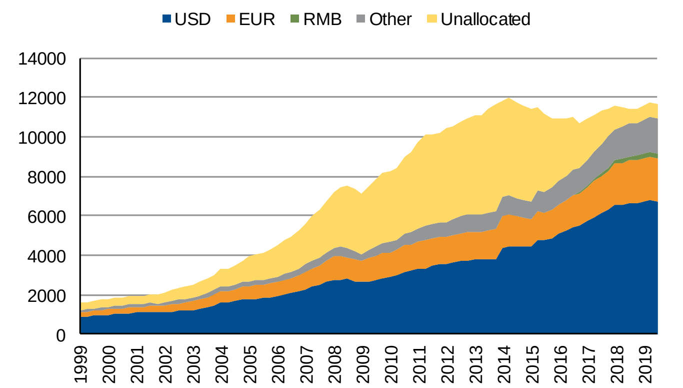
Reserve holdings dominated by USD…

Over the past two decades, global holdings of foreign exchange reserves have increased almost seven-fold from USD 1.8trn in 1999 to 11.8trn in Q4 2019 (**Figure 3**). This was driven mostly by the rapid increase in reserve holdings among emerging and developing

[1] McGuire, P. and Goetz von Peter (2009), "The US dollar shortage in global banking", BIS Quarterly Review.
[2] IMF (2014), "Revised Guidelines for Foreign Exchange Reserve Management".

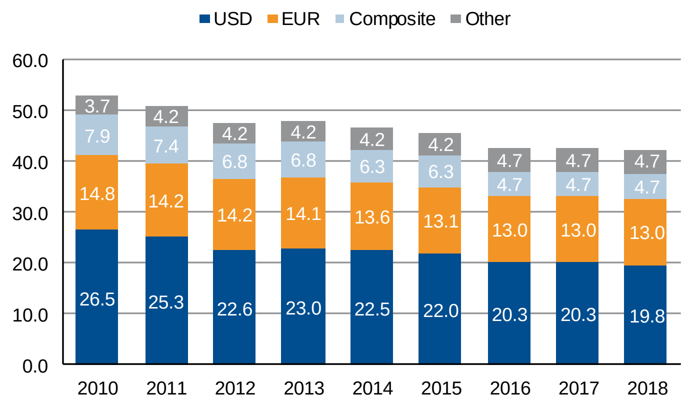
countries as they opened their economies to global trade and finance. They now hold 59% of global FX reserve holdings as of April (with China itself having 26% of all global FX reserves). US dollar-denominated assets represent about 61% of global allocated reserves as of Q4 2019, although, importantly, this share has seen a steady decline, from 71% in 1999. The euro’s share lags far behind at present, representing only 20.5% of holdings, after peaking in 2009 at 28%. The use of the renminbi, although marginal today, has almost doubled over the last three years to 2%.

Figure 3. Global forex reserve holdings
USD bn



N.B. Unallocated reserves are those with undisclosed currency compositions
Source: IMF, Scope Ratings GmbH

Figure 4. Exchange rate anchors
% of IMF members



Source: IMF, Scope Ratings GmbH

- **What drives currency choice for central banks?**

The currency composition of reserves is dependent on three key factors: i) the monetary and exchange rate policy settings of the country; ii) the intrinsic liquidity and safety of available assets; and iii) the currency composition of external obligations.

… underpinned by monetary and exchange rate policies…

First, the currency composition of reserves is underpinned by a country’s monetary and exchange rate policies. A central bank that uses a key currency as an anchor typically holds reserves in that currency for the purpose of foreign exchange intervention. The degree to which the central bank’s own currency moves in tandem with the key currency has been found to significantly impact the composition of its reserves[3].

The share of IMF member countries that adopt the US dollar as an exchange rate anchor, although high relative to other currencies, has been steadily declining, from 26.5% in 2010 to 19.8% in 2018 (**Figure 4**). If this trend persists, there could be less incentive to hold US dollar-denominated assets in order to stabilise exchange rates. The euro has been less affected here: the share of countries adopting the euro as an exchange rate anchor decreased only moderately, by 1.8pps over the same period to 13%. This period also saw the entry of three countries into the euro area (Estonia, Latvia and Lithuania) – eliminating former needs in anchoring national currencies to the euro.

In general, countries using the euro as a currency anchor have historical ties with European countries, such as the CFA franc zone countries. They are less likely to abandon their currency anchor in the foreseeable future. In addition, euro membership could increase in the coming years, given the ambitions of Bulgaria, Croatia and Romania to join the

[3] Ito, H. and Robert N. McCauley (2019), “Currency composition of foreign exchange reserves”, Journal of International Money and Finance.

European exchange rate mechanism. The renminbi's use as an anchor remains marginal, and a declaration of a stable renminbi currency bloc remains premature[4].

… as well as asset-specific characteristics…

Second, central banks must ensure reserve assets are liquid enough to be able to sell them quickly, at minimal cost when needed. Reserves must also be able to retain their value even in crisis times. As such, the depth and liquidity of domestic bond markets[5] as well as credit ratings (sovereign ratings, in particular) play a large role in determining the currency composition of reserves[6]. Therefore, the availability of safe assets per currency is a key determinant in that currency's widespread adoption in central banks' reserves.

In addition, reserve management aims to optimise risks versus returns. With interest rates at historic lows, holding traditional – but low-yielding – reserve currencies such as the US dollar and euro may become less tempting among central banks.

… and external macro-fundamentals.

Finally, the composition of forex reserves is also driven by the currency composition of the external obligations of the country's government, financial institutions, corporates and households (for example, for imports and external debt). This is because forex reserves serve as a hedge against loss of access to foreign goods, services or financial markets. Therefore, changes in external macro fundamentals, which are linked to currencies used for trade invoicing and debt issuance, will impact the composition of forex reserves.

Determinants of currency choice in the private sector

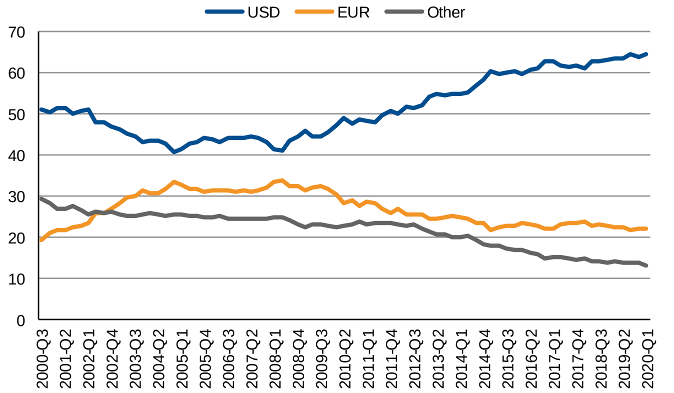
International currency status is also driven by its use by the private sector. While trading or issuing debt in domestic currency mitigates exchange rate risks, other factors incentivise the use of international currencies.

- **What drives currency choice for private actors?**

Liquidity, returns and risk management impact investment/financing behaviour

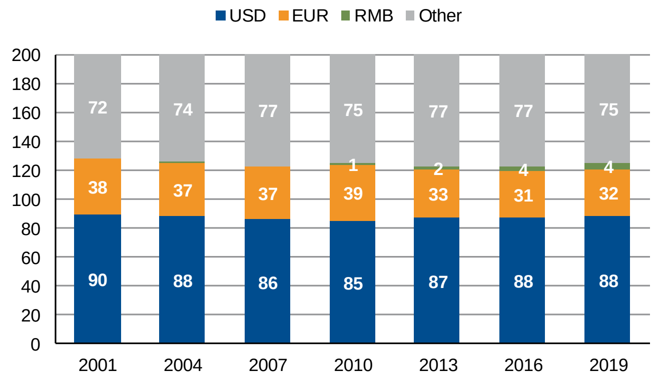
Drivers of currency choice among private actors for cross-border flows for investments and financing include i) the size of the domestic capital market, as issuers/investors may need to look abroad if borrowing/liquidity is limited locally; ii) expected returns for investors and the access to a broad investor base for issuers; iii) the ability for issuers/investors to hedge cash flows in other currencies; and iv) economies of scale and transaction costs.

Figure 5. Outstanding international debt securities
%



N.B. Narrow definition, at current exchange rates
Source: BIS, Scope Ratings GmbH

Figure 6. Turnover of over-the-counter forex instruments
%



N.B. The sum of transactions in individual currencies comes to twice the total reported turnover.
Source: BIS, Scope Ratings GmbH

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[4] McCauley, R.N. and Chang Shu (2019), "Recent renminbi policy and currency co-movements", Journal of International Money and Finance.
[5] Eichengreen, B. et al. (2014), "When did the dollar overtake sterling as the leading international currency? Evidence from bond markets", J. of Development Economics.
[6] IMF (2018), "Central Bank Reserve Management and International Financial Stability – Some Post-Crisis Reflections".

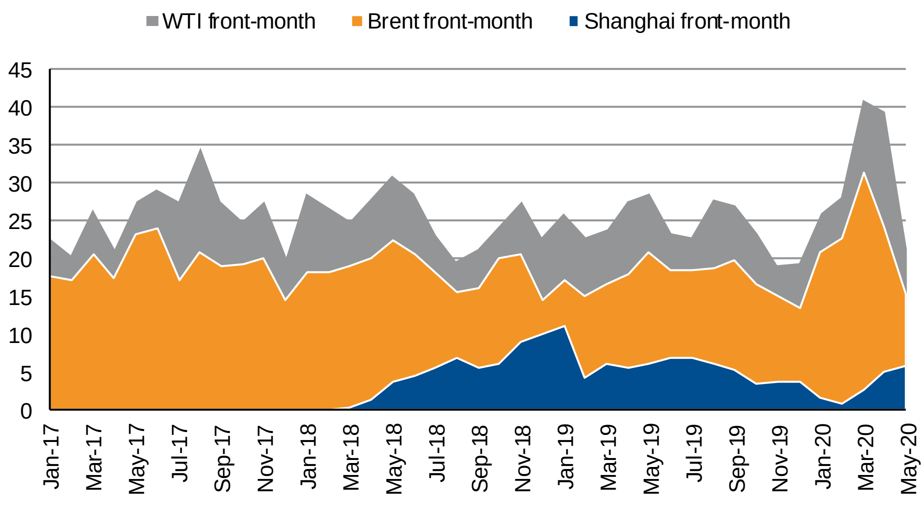
The share of outstanding international debt securities denominated in US dollars has risen, to 64.7% as of Q1 2020 versus 61.8% in Q4 2017 (**Figure 5, previous page**). However, looking at flows, the issuance of USD-denominated debt securities increased by just 2% in 2019, while the euro debt issuance increased by 10%. This could be a result of the factors mentioned above, particularly i) the ECB's expansionary monetary policy, leading to lower financing costs in euro; ii) the need to diversify the investor base and/or achieve a desired currency structure; and iii) the existence of close political/economic links with the euro area (for example, in the case of Turkey).

Intuitively, we would suppose that exporting firms would choose the domestic currency for trade invoicing in order to reduce their exchange rate risk. However, several factors may lead to the use of non-domestic currencies. For example, over 60% of extra-euro area exports are invoiced in euro, but trade with the US is largely invoiced in US dollar. This might be explained by inertia or tradition: firms are more likely to choose a currency that is already widely used in their respective sectors.

Dollar's historical dominance in commodities supports USD invoicing

Here, the US dollar has long dominated cross-border currency flows by private actors, well beyond what can be explained by the US's share in international trade. A big reason is the US dollar's long history in commodity and energy markets, especially in oil production, whose benchmarks are expressed in dollars. As such, the US dollar is the dominant currency worldwide in the energy sector. For example, around 85% of extra-EU oil imports are invoiced in US dollars. However, the dollar's role in oil benchmarks may be slowly reduced by international initiatives such as the 2018 launch of the Shanghai crude oil future contracts denominated in renminbi, whose trading volumes have not been too far off from those of the Brent or West Texas Intermediate (**Figure 7**)[7].

Figure 7. Trading volumes in oil future contracts
million lots



N.B. One lot = 1,000 barrels
Source: Bloomberg

Low transaction costs and market power support attractiveness

Low transaction costs, which are typical for highly liquid currencies, are another driver of private-sector currency use. This is particularly true for homogeneous products whose markets tend to demonstrate herding behaviour in the choice of currency. Alternatively, markets for differentiated, more sophisticated products are more subject to market and/or bargaining power dynamics. Companies with strong market power are more likely to

[7] ECB (2019), "The international role of the euro".

invoice in their currency of choice (typically their local one). This may explain in part why many large, market dominant multinationals from the US can easily invoice imports and exports in US dollars. However, the rise of competitive Chinese multinationals such as Huawei could change bargaining power dynamics in international trade.

Country-specific features may also influence the currency chosen for invoicing or trade settlement. These include the presence of established financial centres as well as more structural factors such as the economy's size and macro-economic and exchange rate stability.

Payment function largely dependent on trade and financing roles

As for money's role as a medium of payment, economies of scale are the most important determinant for currency choice and largely depend on the currency use of the private sector in trade and financing functions. Here, the US dollar has consistently been on one side of almost nine of every 10 foreign exchange transaction (**Figure 6, on page 4**). This is mostly due to the US dollar's dominance in the first two private functions of money.

Prospects for the international monetary system

Figure 8. Drivers of international currency status

Driver	Central banks	Private actors
Exchange rate anchor	✔	✔
Strong liquidity	✔	✔
Availability of safe assets	✔	✔
Diversification incentives	✔	✔
Macroeconomic/exchange rate stability	✔	✔
External obligations denomination*	✔	✔
Access to broad investor base		✔
Low interest rates		✔
Market dominance of domestic firms		✔
Oil benchmark denominations		✔

*Refers to obligations of the government, financial institutions, corporates and households. NB. Arguably all drivers apply to central banks and private actors. The table aims to highlight those that are predominant.

International currency status is supported by…

The adoption of a global currency thus depends on central banks as well as private actors, whose choices are driven by their respective objective functions and the operating environment. Our analysis of the different roles played by an international currency allows us to draw key conclusions regarding what drives international currency status:

… strong liquidity, safety, availability and stability.

First, highly liquid currencies are attractive to both public and private actors as they have low transaction costs and can be traded quickly and easily. Therefore, currencies whose domestic economies benefit from large, open and deep financial systems are more likely to be adopted globally.

Secondly, the availability of large quantities of safe assets are crucial in supporting the widespread adoption of a country's currency. Confidence in the currency's value, underpinned by macroeconomic and political stability, also matters for both public and private actors.

Synergies highlight need for comprehensive strategies but also risk of inertia

Third, there are strong synergies between the various functions of an international currency: a currency's greater use in one role will incentivise its adoption in others. This means that governments can only effectively support internationalisation of their currencies if they adopt holistic, coherent and long-term strategies. However, policymakers can prioritise cross-border use of the nation or region's home currency in selective functions, depending on the objectives and needs.

Conversely, this also means that the use of international currencies is subject to network externalities, which strongly favour the dominant currency and can lead not only to inertia but also to sudden shifts once certain tipping points have been reached.

➢ **So, what can lead to real change for the euro, renminbi compared with the US dollar?**

US dollar dominance hinders greater adoption of the euro and renminbi

As we have outlined above, the US dollar remains overwhelmingly prominent across all roles played by a currency. Network externalities and tradition strongly favour the dollar and constitute a major impediment to the rise of alternative international currencies. The dollar's dominance will persist unless EU and Chinese governments take measures to bolster the international use of their respective currencies.

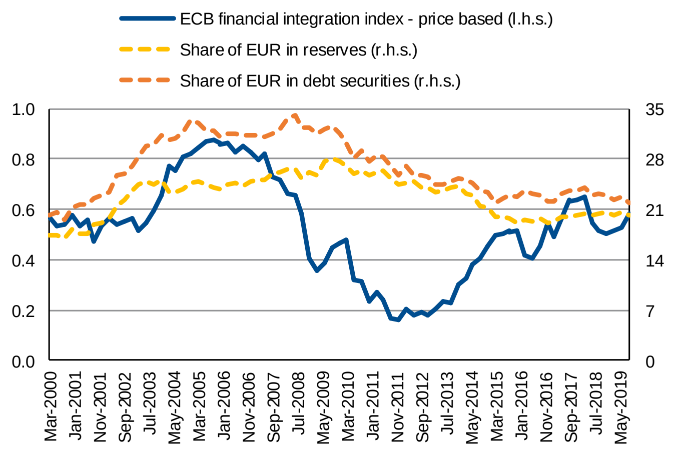
Multiple opportunities to increase euro use including…

Given the weight of the euro area countries in world GDP (15%) and trade (25%), as well as their growing prominence in global capital markets, the euro is perhaps the most plausible rival for the US dollar. EU institutions are increasingly calling for strengthening the euro internationally[8]. Several developments already point to a stronger euro such as: the upgrade of the ECB's payment systems infrastructure; Rosneft's and Novatek's (the biggest Russian oil and liquid gas producers) decision to switch to the euro from the US dollar for all exports (reflecting broader objectives in Russia to de-dollarise the economy); or the European Commission's sectoral consultations to promote euro adoption[9].

…the completion of the Economic and Monetary Union…

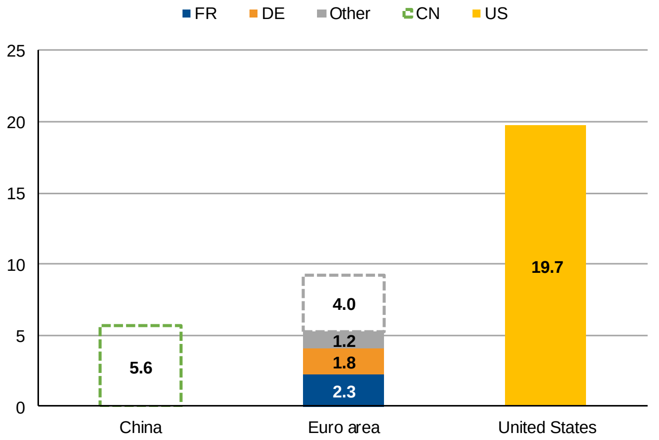
More progress is needed, however, for developing deeper, more integrated financial markets, which would greatly favour euro liquidity and the stability of the monetary union[10]. As depicted in **Figure 9**, the degree of euro area financial integration is strongly correlated with the international use of the euro. Advancing the completion of the Capital Markets and Banking Unions would thus greatly increase the appeal of euro-denominated assets and improve risk-sharing among its own member states.

Figure 9. Euro area integration and euro use
index (l.h.s.); % of total (r.h.s.)



N.B. The ECB financial integration index ranges from 0 (full fragmentation) to 1 (full integration).
Source: ECB, IMF, BIS, Scope Ratings GmbH

Figure 10. Public debt securities rated AA and above by Scope
USD trn



N.B. Columns that are in dotted lines represent public debt securities rated below AA
Source: BIS, Scope Ratings GmbH

[8] European Commission (2018), "Towards a stronger international role of the euro".
[9] European Commission (2019), "Strengthening the International Role of the Euro", Commission Staff Working Document.
[10] Regling, K. (2020), "Regling's Take: Why we need to boost the euro's international role".

… and increasing the supply of safe assets.

Similarly, the scarcity of euro-denominated safe assets – more specifically, highly rated sovereign debt securities – is another key issue[11]. Of close to USD 9.3trn in outstanding euro-area public-debt securities, only USD 5.3 trn (or 57%) are rated by Scope AA or above, far below the level of the United States (**Figure 10, previous page**). A reduction of sovereign risk across the European region (e.g. through improvements in fiscal fundamentals or reductions in political uncertainty) or greater debt issuance of highly rated sovereigns would greatly support the euro's international role. The creation of a euro area safe asset would also be a considerable step, allowing the union to mobilise its combined fiscal capacity and increase the supply of low-risk securities. Present negotiations around a Next Generation EU recovery fund followed by joint EU debt issuance goes in this direction.

A stronger euro entails overcoming several political hurdles

We note that these initiatives require major reforms to the Economic and Monetary Union and face various political hurdles before they can be implemented. Discussions are progressing but may be constrained by opposing views among member states. The nature of the EU's political system, with its diverse set of national interests and views, may constitute another (although surmountable) barrier to developing a comprehensive, holistic and long-term strategy for greater euro adoption.

An open capital account and the rule of law will be key to increasing the renminbi's role

Several factors also point to the renminbi being a credible challenger to the dollar. China also represents a large share of world GDP (16%) and trade (10%), and its economic clout is projected to steadily increase over the long term. Chinese authorities have successfully implemented several initiatives to support the greater use of the renminbi in cross-border flows, such as its launch of renminbi-denominated crude oil futures and advancement of the Belt and Road global development network. However, the Chinese currency's share remains small despite increasing significantly. Securing international currency status for the renminbi will critically depend on i) further opening up of capital accounts to foreign investors; ii) progress in enhancing the supervision and reduction of financial vulnerabilities; iii) a strengthening of the rule of law; and iv) improved sovereign creditworthiness. The stable and authoritative Chinese political system is well suited to develop the ambitious, long-term initiatives needed to promote greater adoption of the renminbi[12].

Protectionism, rising imbalances and policy uncertainty undermine the dollar's status

Finally, recent developments could weigh adversely on the US dollar's dominance in the international financial system. The inward-looking policies of the current administration, as evidenced by protectionist measures and greater use of international sanctions, have incentivised diversification away from the US dollar. For example, both the Russian and Chinese central banks sold part of their US-dollar-denominated reserves in 2018-19, likely triggered by sanctions or intensification of trade conflicts.

Another issue is the growing fiscal and external imbalances in the US. Sustained current account and fiscal deficits[13] in a politically polarised environment create uncertainty and may erode confidence in the value of the US dollar.

Concluding remarks

The dollar remains the dominant global currency by far to this stage. However, with increased political support and multiple policy levers to increase the global role of the euro and renminbi, the persistence of the US dollar as the international currency hegemon can be challenged. Significant progress in the areas highlighted above could put the prospect of a multipolar system within reach. This would grant EU and Chinese governments more

[11] Ilzetzki, E., Carmen Reinhart and Kenneth Rogoff (2019), "Why is the euro punching below it weight?".
[12] China's ability to project power abroad through ambitious, long-term initiatives is also evidenced by the Belt and Road initiative.
[13] Krugman, P. (2007), "Is This the Wile E. Coyote Moment?", Paul Krugman's New York Times blog.

monetary, financial and political autonomy while fostering a more stable international financial system.

Governments should assess the costs and benefits associated with international currency status and need to formulate a clear, coherent and comprehensive roadmap. Alternatively, a more sudden shift may occur, for example, if the US dollar suffers an unprecedented loss in confidence, leaving no clear alternative and potentially leading to a global liquidity crisis with severe economic consequences. Thus, the question is whether the shift will be gradual or abrupt. As MIT-economist Rudi Dornbusch has observed: a fundamental change takes much longer to arrive than one thinks, but when it happens, it happens much faster than one would have thought.

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