

STUDY

Requested by the ECON committee

Monetary Dialogue, June 2020



# International Role of the Euro: A Monetary Policy View

---

Compilation of papers





# International Role of the Euro: A Monetary Policy View

---

Compilation of papers

This document was requested by the European Parliament's Committee on Economic and Monetary Affairs.

## **AUTHORS**

Joscha BECKMANN, Salomon FIEDLER, Klaus-Jürgen GERN, Josefin MEYER (Kiel Institute for the World Economy)

Corrado MACCHIARELLI (London School of Economics and National Institute of Economic and Social Research)

Marek DABROWSKI (CASE – Center for Social and Economic Research)

Daniel GROS (CEPS), Angela CAPOLONGO (CEPS and ECARES – Université Libre de Bruxelles)

## **ADMINISTRATOR RESPONSIBLE**

Drazen RAKIC

## **EDITORIAL ASSISTANT**

Janetta CUJKOVA

## **LINGUISTIC VERSIONS**

Original: EN

## **ABOUT THE EDITOR**

Policy departments provide in-house and external expertise to support EP committees and other parliamentary bodies in shaping legislation and exercising democratic scrutiny over EU internal policies.

To contact the Policy Department or to subscribe for updates, please write to:

Policy Department for Economic, Scientific and Quality of Life Policies

European Parliament

L-2929 - Luxembourg

Email: [Poldep-Economy-Science@ep.europa.eu](mailto:Poldep-Economy-Science@ep.europa.eu)

Manuscript completed: May 2020

Date of publication: May 2020

© European Union, 2020

This document is available on the internet at:

<http://www.europarl.europa.eu/supporting-analyses>

## **DISCLAIMER AND COPYRIGHT**

The opinions expressed in this document are the sole responsibility of the authors and do not necessarily represent the official position of the European Parliament.

Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the European Parliament is given prior notice and sent a copy.

For citation purposes, the study should be referenced as: European Parliament, *The international role of the euro*, Study for the Committee on Economic and Monetary Affairs, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, 2020.

## CONTENTS

### **The International Role of the Euro: State of Play and Economic Significance**

**Authors:** Joscha BECKMANN, Salomon FIEDLER, Klaus-Jürgen GERN, Josefin MEYER 5

### **The Euro and the Geopolitics of Post-COVID-19**

**Author:** Corrado MACCHIARELLI 25

### **Can the Euro Dethrone the US Dollar as the Dominant Global Currency? Not so Soon, if Ever**

**Author:** Marek DABROWSKI 47

### **Global Currencies During a Crisis: Swap Line Use Reveals the Crucial Ones**

**Authors:** Daniel GROS, Angela CAPOLONGO 78





# The International Role of the Euro: State of Play and Economic Significance

Joscha BECKMANN, Salomon FIEDLER, Klaus-Jürgen GERN, Josefin MEYER



## **Abstract**

This paper summarises recent trends in the international use of the euro and potential benefits and drawbacks of acquiring the status of an international currency, with a focus on implications for monetary policy. The benefits of international currency status are found to likely be limited and the effects on monetary policy to be ambiguous. The international role of the euro could be strengthened by policy initiatives in specific markets or as a by-product of improvements in the soundness of euro area economic and fiscal policies.

This document was provided by the Policy Department for Economic, Scientific and Quality of Life Policies at the request of the committee on Economic and Monetary Affairs.



## **CONTENTS**

<b>LIST OF ABBREVIATIONS</b>	<b>8</b>
<b>EXECUTIVE SUMMARY</b>	<b>9</b>
<b>1. INTRODUCTION</b>	<b>10</b>
<b>2. EMPIRICAL EVIDENCE – CURRENT STATUS</b>	<b>11</b>
2.1. Official reserve holdings	12
2.2. Transaction volume	13
2.3. Euro and dollar as a currency anchor	15
2.4. Bank assets by currency of denomination	17
<b>3. THEORETICAL ASSESSMENT OF BENEFITS AND COSTS OF BEING AN INTERNATIONAL CURRENCY</b>	<b>18</b>
<b>4. CONCLUDING REMARKS</b>	<b>22</b>
<b>REFERENCES</b>	<b>24</b>

## LIST OF ABBREVIATIONS

<b>BIS</b>	Bank for International Settlements
<b>CLS Bank</b>	Continuous Linked Settlement Bank
<b>COFER</b>	Currency Composition of Official Foreign Exchange Reserves
<b>COFER</b>	Currency Competition of Official Foreign Exchange Reserves
<b>EA</b>	Euro area
<b>ECB</b>	European Central Bank
<b>EU</b>	European Union
<b>EUR</b>	Euro
<b>FX</b>	Foreign Exchange
<b>GBP</b>	Great British pound
<b>GDP</b>	Gross domestic product
<b>IMF</b>	International Monetary Fund
<b>JPY</b>	Japanese yen
<b>NBER</b>	National Bureau of Economic Research
<b>OTC</b>	Over-the-counter
<b>UK</b>	United Kingdom
<b>US</b>	United States
<b>USD</b>	United States dollar

## EXECUTIVE SUMMARY

- **20 years after its introduction, the role of the euro as an international currency remains under debate.** While the euro has become and remains to be the second most important currency in the international financial system, by most measures it continues to lag the US dollar by a wide margin.
- **Following a rise in importance in the first decade since its inception, the euro experienced a setback between 2008 and 2014 in the wake of the global financial crisis and the European sovereign debt crisis.** These developments suggest that the euro's international use is highly dependent on the stability of the euro financial markets and the credibility of the euro area institutions.
- **International currency status is not necessarily a binary variable but can be a matter of degree.** A currency can be of different international importance to private and public users along different roles and functions – a currency does not have to be equally important as an international medium of exchange, unit of account, and store of value, respectively.
- **High demand for a currency as an international store of value will reduce external financing costs for the issuer.** On the flipside, there is a concern that this results in currency overvaluation reducing the international price competitiveness of domestic firms. Overall, however, domestic agents are set to benefit, although the size of the “exorbitant privilege” may be relatively small in the current low interest rate environment.
- **The effects of international currency status on the effectiveness of monetary policy are ambiguous.** On the one hand, an increased international transmission with positive spillbacks to the domestic economy and a reduced exposure of domestic prices to exchange rate shocks make it easier for a central bank to hit its target for inflation or economic activity. On the other hand, lower effects of monetary policy on import prices as well as blurred signals from monetary aggregates can also complicate matters.
- **Being the issuer of an international currency can change one's relationship with the rest of the world.** On the one hand, it can enable the issuer to achieve non-monetary side objectives because foreign agents may be forced to follow domestic financial regulations. On the other hand, international pressure on the issuer may arise to deviate from own policy preferences in order to accommodate foreign needs (e.g. provide financial support in times of economic trouble abroad).
- **Strengthening the international role of the euro can be pursued along different lines.** The euro's international attractiveness could rise as a natural outcome of improved, more consistent institutional arrangements in the euro area leading to credible and sound economic and fiscal policies. Policy could also try targeting individual markets, such as emerging economy debt markets or energy markets, with interventions in order to increase the international use of the euro.

## 1. INTRODUCTION

After its inception in 1999, the euro quickly established itself as a key international currency on global financial markets. An upward trend in the popularity of the euro as a reserve currency and emerging concerns around the soundness of US economic policy in the longer term even led to speculation by some economists that the euro might surpass the dollar as the leading international currency over the next decades (Chinn and Frankel, 2005). However, the trend towards the euro reversed with the global financial crisis which emerged in 2008 and strengthened the dollar for two reasons: The dollar still acted as a safe haven asset despite the fact that the crises originated in the US and the subsequent eurozone crisis affected trust in the sustainability of the euro area.<sup>1</sup>

The perception in the literature is that the dollar has cemented its status as the world's leading international reserve currency while the euro is not living up to its full potential (Ilzetzki et al., 2020, Maggiori et al., 2020). Another major change in the international monetary system is the ongoing internationalisation of the renminbi on the back of the relentless growth of the Chinese economy both in absolute terms and as a share of the world economy.

Against this backdrop, the aim of this paper is to summarise recent trends in the international use of the euro and inform the discussion about the desirability of an increased internationalisation of the euro. Section 2 briefly reviews the evidence on the international share of the euro with respect to its role as reserve currency, as an anchor currency for other countries, as currency for international transactions, and as denominator currency in the loans and debt markets. Section 3 discusses potential benefits and drawbacks of acquiring the status of an international currency, with a focus on implications for monetary policy. Finally section 4 concludes.

---

<sup>1</sup> The dollar appreciated sharply during the 2008 financial crisis against most currencies. Negative macroeconomic shocks during the crisis triggered a significant strengthening of the US dollar, rather than a weakening (Fratzscher, 2008).

## 2. EMPIRICAL EVIDENCE – CURRENT STATUS

An international currency is broadly defined as a currency that is used not only by domestic agents but by residents of foreign countries as well. Currencies generally can be used to fulfil three related but distinct roles – medium of exchange, store of value, and unit of account. Following Chinn and Frankel (2005), one can further distinguish between public and private use of a currency. Table 1 provides an overview of the resulting six use cases, and the different associated international roles a currency can assume.

Table 1: Roles of an international currency

	Government	Private Sector
Store of value	International reserves	Currency substitution (private dollarization)
Medium of exchange	Vehicle currency for foreign exchange intervention	Invoicing trade and financial transactions
Unit of account	Anchor for pegging local currency	Denominating trade and financial transactions

Source: Own compilation based on Chinn and Frankel (2005) and Krugman (1984).

The **store-of-value function** relates to a currency's reserve status. In general, reserve currencies are hard currencies which are easily obtainable and are traded freely in international markets. In this respect, we may measure the international role of a currency by its share in international reserve holdings (Section 2.1).

A currency is an international **medium of exchange** if it is used by non-residents to make payments, be they related to the trade of goods and services or capital flows. Private non-residents may also use the international currency as a vehicle if it is cumbersome to directly exchange two smaller currencies. To evaluate the medium of exchange function, we look at transaction volumes on international currency markets (Section 2.2). This can be further decomposed into financial transactions and trade transactions as well as into different currency instruments (spot, forwards, swaps).

In its role as a **unit of account**, an international currency will feature on invoices for imports and exports. For example, oil and other commodity contracts are mostly denominated in US dollar, making it an important unit of account. One reflection of the role as a unit of account is the use of an international currency as an anchor for a local currency peg (Section 2.3). An international currency can also be used to denominate credit claims in foreign countries (Section 2.4).

Of course, these functions are interrelated. For example, in order to be attractive as a unit of account for loans in a foreign banking system, one would expect that the currency's value should be quite stable, thus also making it a good store of value.

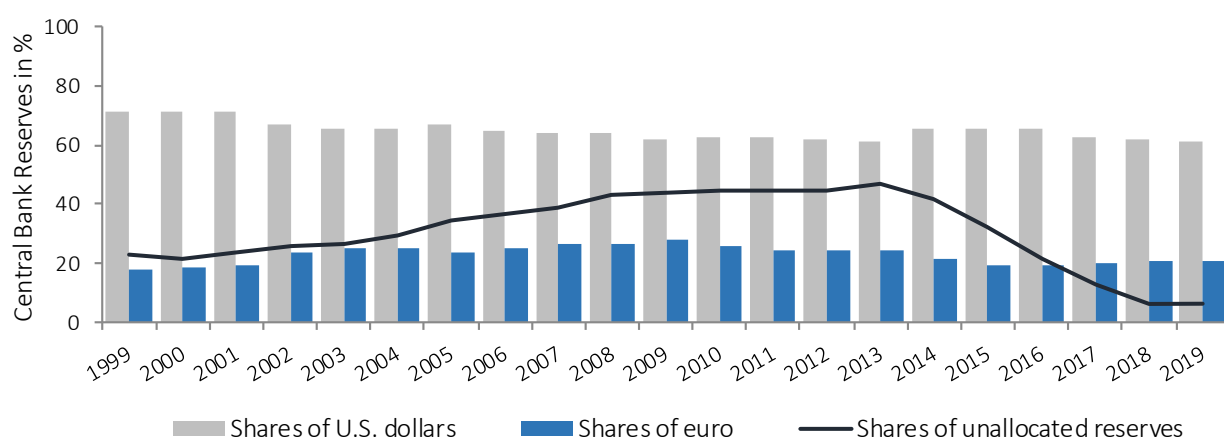
## 2.1. Official reserve holdings

International official reserve holdings are difficult to interpret for various reasons. An increased share of the US dollar relative to the euro can for example reflect both a success of the US dollar and a decline of the euro. Inspecting the total share of the euro in terms of global reserve holdings can also lead to multiple interpretations since other currencies, like the Chinese renminbi, may have increased their share. Disentangling the effects of economic developments or policy actions in Europe on the position of the euro as an international reserve currency can therefore be a rather difficult task.

Figure 1 shows the share of the euro and the US dollar of those reserve holdings for which the currency is known since 1999. The US dollar has been the main global reserve currency since it replaced the British pound after World War I<sup>2</sup>. The global financial crisis, which had its origin in the US, did actually not reduce the attractiveness of the US dollar as measured by its share in international reserves. In contrast, during the global financial crisis and the eurozone sovereign debt crisis, the euro indeed lost importance as a reserve currency between 2008 and 2014. More recently, the euro managed to recoup part of the lost ground as its share in total reserves increased from 13% to 19% from 2015 to 2019. In the end, however, the euro's share in 2019 was only slightly higher than at its inception in 1999.

The Chinese renminbi which is being reported since 2016, has more than doubled its share by 2019, but it still accounts only for a modest share of all allocated foreign reserves (in 2019: 2%) and is currently only the 8<sup>th</sup> most important international reserve currency.

Figure 1: Currency reserves since 1999



Note: The figure shows the ratio of euro and US dollar reserves to total allocated reserves. The dark blue line reports the share of unallocated reserves to total reported currencies. Data comes from the IMF's COFER-data. Countries report confidentially the currency composition of the foreign reserve currency. Allocated reserves mean those foreign currency reserves that can be allocated to various reserve currencies based on the reported information. The total is the sum of allocated and unallocated reserves. The best data coverage of allocated reserve currency is reached in 2019 when the share of unallocated reserves decreases to 6.35%.

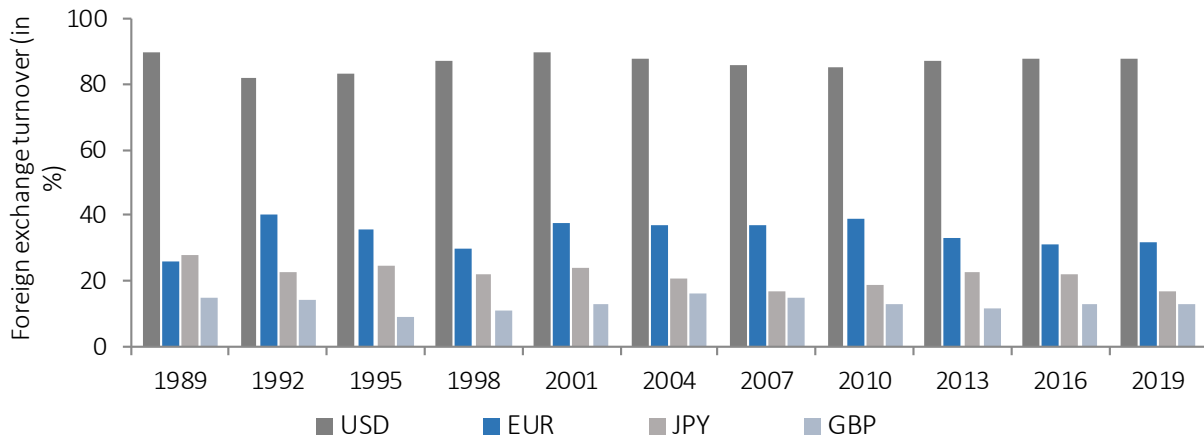
Source: International Monetary Fund's Currency Composition of Official Foreign Exchange Reserves (COFER), own calculations.

<sup>2</sup> See Eichengreen (2011).

## 2.2. Transaction volume

Data on exchange rate transactions is provided by the Continuous Linked Settlement (CLS) bank and the Bank for International Settlements (BIS). Figure 2 provides a long-run perspective based on turnover from the BIS Triennial Survey since 1989. Similar to the trend in currency reserves, we find that the euro lost ground after 2007 but stabilised since 2013. The share of 2019 compared to 2001 has slightly decreased by six percentage points.

Figure 2: Share of foreign exchange turnover of major currencies, 1989-2019



Note: This figure shows the share of foreign exchange turnover. Each currency was one side of the transaction. German marks transactions are used prior to the inception of the euro.

Source: BIS Triennial Survey of FX and OTC derivatives trading. Own computations.

We also consider high frequency data from CLS Group which constitutes the world's largest multi-currency cash settlement system. CLS acts on behalf of 60 settlement members comprising the world's largest financial institutions and over 24 000 third-party clients, including banks, funds, non-bank financial institutions and multinational corporations.<sup>3</sup> Note that all trades include two currencies, meaning that the euro transaction volume covers all trades in which the euro is involved as one trading side (and that the total amounts to 200%).

If we analyse the euro transaction volume relative to the US dollar and to the overall trading volume, we find that 32% of all transactions include the euro between 2011 and 2018. For all instruments, the average ratio relative to the US dollar is on average 33%, which illustrates the dominant role of the dollar as an international currency as the euro area economy is almost 75% of the size of the US economy. Table 2 provides figures for a disaggregated perspective giving the respective currency shares on spot, forward and swap market for three sub-periods.

<sup>3</sup> CLS processes 500 000 FX trades per day worth over USD 1.55 trillion on average getting the majority of trade confirmations within 2 minutes of execution. CLS covers more than 50% of global FX transaction volumes (spot, swap and forward) for 33 currency pairs.

Table 2: Euro transaction volume relative to all transactions

	Share of euro transaction relative to all transactions in %	Share of euro transactions relative to dollar transactions in %
2011-2015	spt: 37.5, orf:33.3, swp:28,8	spt:43.8, orf:47,8, swp:30,04,
2015-2017	spt: 33.4, orf: 33.6, swp: 27,6,	spt: 39.5, orf:42.2 swp: 30,1
2017-2018	spt:36.2, orf:33,9, swp:28.6	spt:42.8, orf:45.7, swp:30.3

Note: This table shows the share of euro foreign exchange turnover relative to all transactions and dollar transactions, respectively, for spot (spt), forward (orf) and swap (swp) markets.

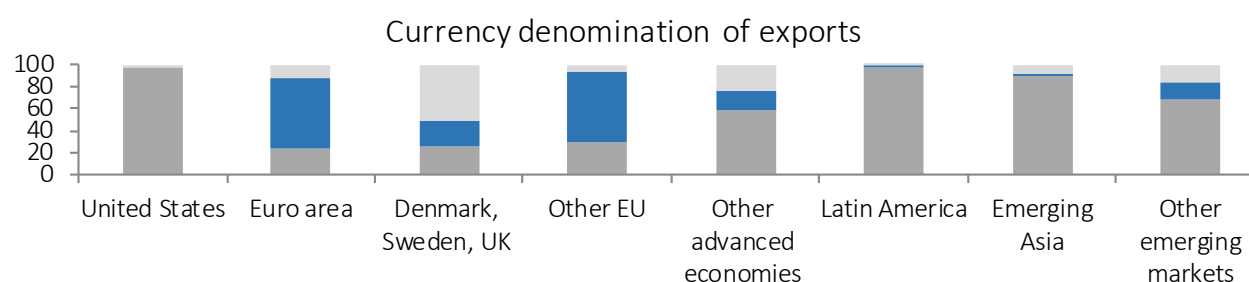
Source: CLS Bank and own calculations.

The findings show that most shares slightly decreased in 2015-2017 compared to 2011-2015 but recovered more recently in 2017-2018. It also becomes apparent that the share in spot and forward markets is substantially higher than the share in the swap market. The trades involving the euro compared to those involving the dollar clearly exceed (or are very close to) 40% in spot and forward markets. Recent evidence shows that the increase in swaps outpaced that of spot trading so the lower share of the euro on this market could also reduce the overall share. An important additional observation is that US dollar is on the other side of 95% of all renminbi transactions, implying that an increase in renminbi trading is likely to increase the share of the dollar simultaneously.

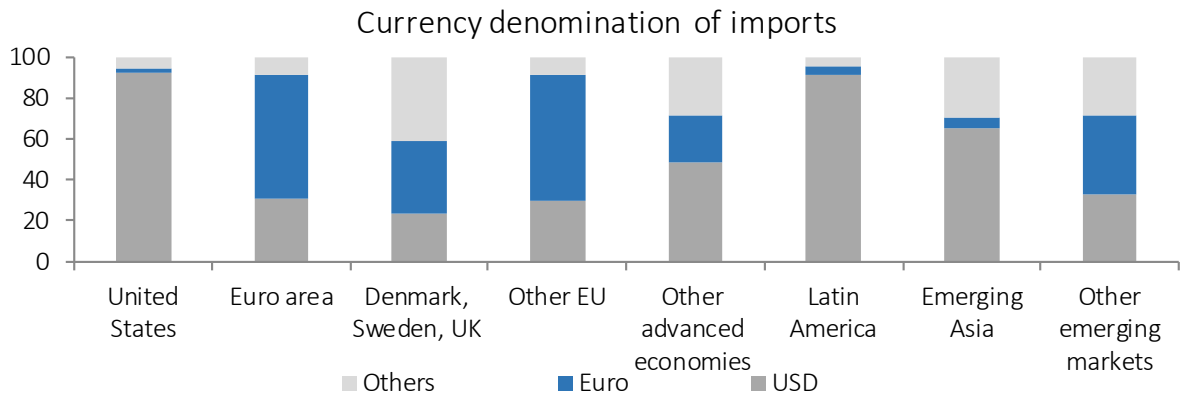
It is also central to take into account that the largest amount of exchange rate transactions is not driven by trades of goods and services across countries. Recent evidence shows that financial motives are the key drivers behind the growth in foreign exchange rate markets. We therefore also analyse the role of the euro for trade denomination separately.

Figure 3 shows the use of the US dollar and the euro in exports and imports of goods. Estimates are averaged over 1999-2015. According to Figure 3, the US dollar is the dominant invoicing currency in international trade. This is true in particular for trade outside Europe. In Asia and South America, trade is mainly invoiced in US dollar. The estimates of Figure 4 also emphasize the regional role of the euro since its share is relatively high only for the euro area, non-euro area European countries and countries close to the European Union. The share of the euro as an invoicing or settlement currency for extra-euro has been mostly stable over the last decade, fluctuating around 60% of extra-euro area exports and 50% of extra-euro area imports. The US dollar share is even quite large in Europe reflecting the dominant role of the US dollar in commodity and raw material trade. Overall, the euro and the US dollar combined account for about 66% of international payments.

Figure 3: Currency denomination of goods exports and imports (in %)







Note: This figure shows the average share of exports from the respective country group, and imports into that country group. Estimates represent averages across all years starting in 1999 until 2015. The estimates for the euro area include also intra-euro area trade.

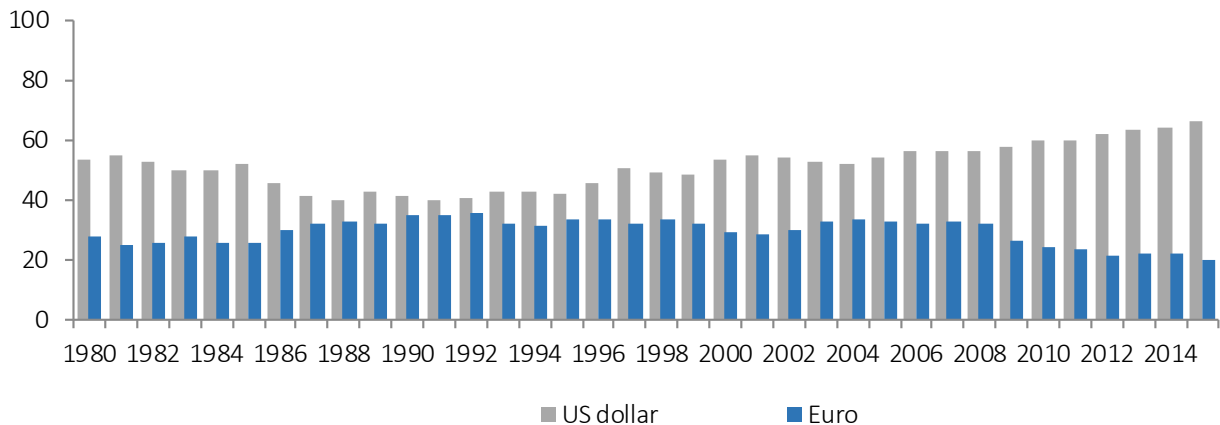
Source: Gopinath (2015), own calculations.

### 2.3. Euro and dollar as a currency anchor

Another dimension related to the role of an international function as a unit of account is the role as anchor currency. Figure 4 provides the share of countries anchored to euro and the USD. To approximate the international reach of the euro, all countries are weighted by their share in world GDP. Data on anchored currency comes from Ilzetzi et al. (2019). The anchor to each currency is based on currency composition of foreign trade invoicing, external debt denominated, and central bank foreign reserves, and the central bank’s historical practices. It should therefore be considered as a combined measure and is not solely based on the exchange rate regime.

Figure 4 shows that the share of countries which anchor their currency to the US dollar has increased substantially while the share of countries pegged to the euro has decreased markedly, resulting in a widening gap between the US dollar and the euro. The role of the euro has declined with nearly 25 percent of world GDP anchored to the euro at its inception, compared to only 15 percent in 2015 (Ilzetzi et al., 2020). However, part of this evolution reflects the strong increase in China’s GDP and the stronger growth in the US compared to Europe.

Figure 4: Share of countries weighted by their share in world GDP (in %), 1980-2015



Source: The figure shows the share of countries (weighted by their share in world GDP) anchored to the US dollar or euro. The anchor to each currency is based on currency composition of foreign trade invoicing, external debt denominated, central bank foreign reserves, and the central bank’s historical practices. It should therefore be considered as a combined

measure and is not solely based on the exchange rate regime. See Ilzetzki et al. (2020), GDP data comes from the World Bank. Own calculations.

A different question is how many countries adopt the euro as an official exchange rate anchor and this number has essentially been constant. The Table 3 summarises countries and territories with an exchange rate regime directly linked to the euro. All countries which strongly rely on the euro as a currency are geographically closely linked to Europe. This is in line with the evidence that demand for euro banknotes has mainly been exported to, and imported from, euro area neighbouring regions (ECB, 2019).

Table 3: Countries and territories with exchange rate regimes linked to the euro

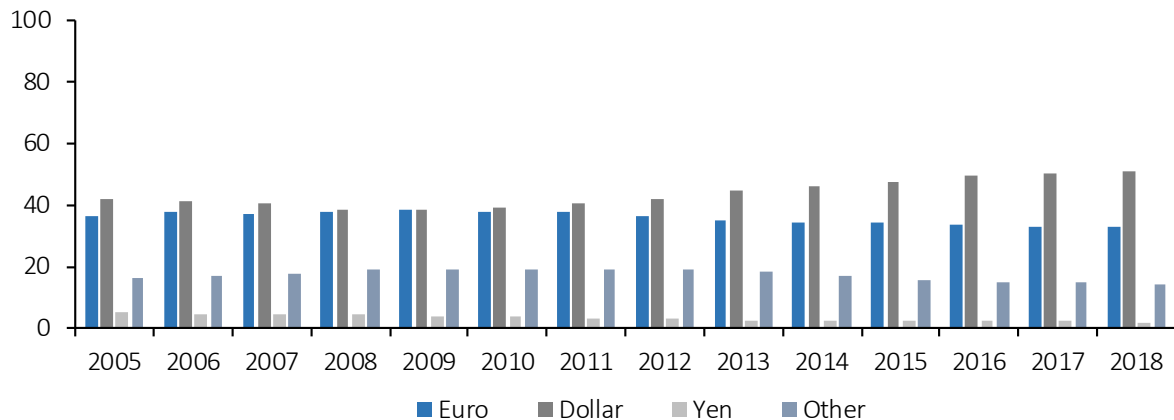
Region	Exchange rate regime	Countries	Monetary policy framework
Non-euro area EU Member States	ERM II	Denmark	Exchange rate anchor
	Euro-based currency boards	Bulgaria	Exchange rate anchor
	Tightly managed floating regimes	Croatia	Exchange rate anchor
	(Managed) floating regimes	Czech Republic, Hungary, Romania	Inflation targeting framework
	Pro memoria: free floating regimes	Poland, Sweden, United Kingdom	Inflation targeting framework
EU candidate and potential candidate countries	Unilateral euroisation (no separate legal tender)	Kosovo, Montenegro	Other
	Euro-based currency boards	Bosnia and Herzegovina	Exchange rate anchor
	Stabilised arrangements with the euro as a reference currency	Republic of North Macedonia	Exchange rate anchor
	Crawling pegs or crawl-like arrangements involving the euro	Serbia	Inflation targeting framework
	(Managed) floating regimes	Albania, Turkey	Inflation targeting framework
Other countries	Euroisation	European microstates, some French overseas collectivities	Other
	Pegs based on the euro	CFA franc zone, CFP franc zone, Comoros, Cabo Verde, São Tomé and Príncipe	Exchange rate anchor
	Stabilised arrangements with baskets involving the euro	Singapore	Exchange rate anchor
	Crawling pegs or crawl-like arrangements involving the euro	Botswana, Islamic Republic of Iran	Exchange rate anchor
		China	Monetary aggregate target
		Tunisia	Other
	Pegs and managed floats based on the SDR or other currency basket involving the euro	Algeria, Belarus	Monetary aggregate target
		Fiji, Kuwait, Libya, Morocco, Syria	Exchange rate anchor
		Samoa, Vanuatu	Other

Source: Data is of end April 2019, ECB (2019). Own compilation.

## 2.4. Bank assets by currency of denomination

We also assess the role of the euro as an international unit of account in terms of debt denomination and its share in the stock of international debt securities

Figure 5: Share of debt denominated in different currencies (in %)



Note: This figure shows percentages of outstanding debt (at constant exchange rates, end of period).

Source: ECB (2019). Own calculations.

Figure 5 shows that the share of US dollar denominated debt has increased over the last decade while the share of other currencies has decreased. The figure overall confirms the predominance of the US dollar and the euro's second place. A different picture emerges if we focus on debt flows rather than stocks. Here we observe an increase in the share of the euro and a decline in the share of the US dollar. Emerging market borrowers increasingly use the euro as a funding in order to diversify their currency exposures (ECB, 2019). In 2019, euro-denominated credit overtook for example US dollar-denominated credit as the largest stock of foreign currency credit to emerging Europe (BIS, 2020).

To sum up, the euro has acquired a prominent international role since its inception in 1999, although with some fluctuations. In particular, the euro has become and remains the second most important currency in terms of reserve holdings, transaction volumes and debt denomination.

### 3. THEORETICAL ASSESSMENT OF BENEFITS AND COSTS OF BEING AN INTERNATIONAL CURRENCY

This chapter provides an overview of the theoretical reasons why it may or may not be desirable to be the issuer of an international currency. In the literature, many different costs and benefits are attributed to possessing international currency status (cf. Cohen, 2012; ECB, 2019). Table 4 summarises the different proposed costs and benefits, which will be examined in more detail below.

Table 4: Proposed benefits and costs of an international currency

Benefits	Costs
Reduced transaction and hedging costs Increased seigniorage, lower external financing costs Higher macroeconomic flexibility, monetary policy autonomy Stronger international monetary policy transmission with positive spillbacks Reduced impact of exchange rate shocks on domestic prices Political leverage, reduced exposure to unilateral decisions of others Increased reputation	Currency overvaluation External constraints on policy, dangers from capital flow volatility Blurred signals from monetary aggregates Lower effects of monetary policy on import prices Increased international responsibilities

As noted in Chapter 2, the term “international currency” can refer to a range of different properties. Cohen (2012) distinguishes the roles of international money along two dimensions. The first dimension refers to the traditionally proposed functions of money (medium of exchange, unit of account, and store of value), while the second distinguishes private from official agents (cf. table 1 for an overview of the different possible roles). Furthermore, international currency status does not need to be defined as a binary variable, with a currency either being dominant on the international stage or not. Rather, there can be degrees of international importance. The respective degrees of international importance across the different roles determine which costs and benefits fall towards the issuer of a particular currency. For example, if a currency is used as a medium of exchange and unit of account, this may create certain microeconomic benefits (lower transaction costs), but as long as it is not used as a store of value, no seigniorage gains will materialise. Looking at the other dimension, one might, for instance, see official reserve holdings lending themselves more easily to political pressure than private use in financial markets.

The costs and benefits are also not constant across time. Most directly, they may depend on the current stage in the life cycle of an international currency. Seigniorage gains and increased policy flexibility are highest early on, but later, external constraints grow (if early seigniorage gains are produced by capital inflows, one later faces the risk that these flows reverse). Other developments, independent of the individual currency, can also lead to changes over time. For example, the current low interest environment and a shift away from banknotes towards electronic payments have reduced the potential for seigniorage, and the development of enhanced monetary analysis tools as well as financial globalisation for all currencies may make the danger of volatile “hot money flows” less relevant.

The rest of the section looks at the proposed benefits and costs one by one:

**Reduced transaction and hedging costs** include a number of possible benefits accruing mostly to domestic agents. Home banks with privileged access to the resources of the issuing central bank might be able to earn “denomination rents” (cf. Swoboda 1968). However, it is not clear to what extent such rents could persist under competitive pressure on financial markets. Furthermore, access privileges likely have eroded over time: for example, over the last decade, central banks have markedly increased the provision of foreign exchange swap lines between each other, aiming to make it easier for foreign banks to access liquidity in certain currencies. But even if these privileges exist, the political shifting of resources between different agents such rents represent may well not be an advantage to the economy as a whole. Non-financial companies could also benefit from lower exchange rate risks when they are able to use the home currency in foreign business contracts, although Genberg (2010) cautions against overestimating gains from this. It should be noted that exchange rate risks do not disappear by simply changing the currency in which a contract between two parties from different currency areas is denominated. For example, if a contract between a US and a euro area company is switched from being denominated in US dollar to euro, then the payment streams may become more stable from the point of view of the euro area company but less so from the US company’s perspective. Insofar as this shift is costly to the US company (and beneficial to the euro area company), one would, in a competitive market, expect this to be reflected in goods pricing, i.e. US companies should demand a higher euro price. Furthermore, it stands to reason that usually companies care less about the fluctuations in the value of payment streams from a single contract, and more about the balance between the inflows and outflows associated with many different contracts. In particular, it may be costly if revenue and costs face independent exchange rate shocks. For this reason, companies – in particular those that are not primarily based in the euro area – may find it attractive to conduct their international business primarily in a single currency (such as the US dollar), so that foreign revenues and costs exhibit closer co-movements. Finally, citizens travelling abroad may benefit from the convenience of being able to use their own money.

Another canonical advantage is **reduced external financing costs**, including the closely related ability to earn **international seigniorage**, a factor known as the “exorbitant privilege”. Seigniorage earnings stem from the government’s ability to have its central bank issue zero-yielding liabilities, namely banknotes, as well as pay comparatively low interest rates on commercial banks’ reserve holdings. However, in the current global monetary environment, which includes very low interest rates, this traditional seigniorage channel is less relevant. If a currency achieves a certain measure of international status, this may well mean that foreigners want to acquire more of this currency than otherwise. This increase in demand for domestic financial assets (including bonds as well as banknotes) can reduce borrowing costs substantially. For example, Gräb et al. (2019) estimate that additional demand produced by foreign official reserve holdings has reduced long-term yields of highly rated government debt by about 1.1 percentage points in the euro area and 1.6 percentage points in the US. In the euro area, the benefits are concentrated on those sovereigns with the soundest fiscal positions. Note that the benefit to the domestic economy as a whole from lower interest rates on government bonds is smaller than the headline reduction in interest rate expenses for the fiscal authorities because some government bonds are held by other domestic agents as well (such that lower interest expenses are partially offset by lower incomes for those bond holders). Other borrowers apart from the government may be able to benefit from lower financing costs as well (cf. e.g. Warnock and Warnock, 2009; Gourinchas and Rey, 2005). In essence, foreigners give up additional traded goods and services in order to acquire domestic bonds and banknotes, which is a real gain to the domestic economy. Insofar as it is easier to take on external debt, constraints on monetary and fiscal policy are also softened (**higher macroeconomic flexibility**), although it should be noted that these gains tend to erode once they are used.

But foreign demand for the domestic currency is also associated with a number of risks. First, there is an argument that international currency status would lead to detrimental **currency overvaluation**: due to increased demand for the currency, it appreciates, reducing the competitiveness of exporters and those competing with importers. However, this argument relies on the fallacy that sees exports as gains and imports as losses to the domestic economy. In fact, the ultimate aim of economic activity is the ability to consume goods (and services). Hence the possibility to import additional goods without ever giving anything in return but newly issued banknotes, this would be an advantage to the domestic economy from a welfare point of view (as explained above, this is what underlies the benefit of lower external financing costs/international seigniorage). However, it is possible that a sudden appreciation of a currency due to an unexpected gain in international status produces some turbulences in the short run by shifting relative prices (note also that this would not only produce the postulated losers but also winners, most notably domestic importers), but in the long run one would expect relative prices to adjust. There is also the argument that the value of a global currency moves with the global economic cycle, specifically that it tends to appreciate in crisis times because investors are looking for a safe haven. This is argued to be detrimental to the country issuing the global currency because its exporters would lose price competitiveness at precisely the time when economic conditions are already deteriorating. However, one should also note that such an appreciation supports the valuations of domestic assets reducing the financial strains usually associated with an economic crisis.

Second, in order to persuade foreign investors to hold on to their accumulated balances, the international status of the currency needs to be preserved, which places **external constraints on policy**. This is important since a withdrawal of foreign demand would reverse the reduction of financing costs mentioned above. Third, even if the international status is secure in the long run, there may be dangerous **capital flow volatility**, with rapid movements in and out of the currency in the short run. **Blurred signals** from less stable money demand would make it more difficult to appropriately target interest rates or money growth.

The international status of a currency may also affect the effectiveness of the monetary policy of the issuing central bank. For instance, there is the possibility of a **stronger international monetary policy transmission with positive spillbacks**. For example, an expansionary monetary policy for an international currency would not only ease domestic financing conditions, but those of trading partners as well, producing additional stimulus. Also, if a lot of trade contracts use the domestic currency, the **impact of exchange rate shocks on domestic prices** may well be reduced. While this helps the central bank insofar as it weakens one source of price instability, it also means that the **effects of monetary policy on import prices** will be lower, hampering monetary policy transmission through this channel.

A different reason for the desire to increase the international stature of a currency is to **reduce exposure to unilateral decisions of others** (or in order to be able to exert **political leverage** oneself). The issuer of a dominant currency controls access to financial resources (including infrastructure) that others find vital. To a certain degree, it can therefore dictate the behaviour of foreign entities through the use of its own financial regulations. For example, as long as foreign parties want to continue to have access to these resources, they may also have to comply with restrictions on certain trades and business practices outside the jurisdiction of the dominant currency issuer or uphold sanctions against other foreign parties.

Finally, there is the intangible benefit of an **increased reputation** which may confer a certain degree of soft power. At the same time, however, the issuer of an international currency may also find herself pressured into **increased international responsibilities** in times of economic trouble abroad. For

example, she may be expected to modify domestic monetary policy or provide subsidised loans to ease a foreign crisis.

## 4. CONCLUDING REMARKS

Overall, 20 years after the euro's introduction, the euro has become and remains the second most important currency in the international financial system after the US dollar. Even after the setback due to the global financial and European debt crises between 2008 and 2014, the euro manages to maintain this position. As Chapter 2 shows, the euro is a globally accepted medium of exchange and unit of account, playing an important role in terms of foreign exchange transaction volume, trade-invoicing, and as reserve currency.

For now, there is also no evidence that the renminbi or any other currency is threatening the status of the euro as the second most important currency. However, it should be noted that China has closed in to the US in terms of size of the economy (in fact it is already the world's largest economy in purchasing power adjusted terms), and its share in world GDP continues to grow rapidly. Historically, the size of the economy and the currency status in terms of reserve holdings has been correlated. When the British pound and US dollar gained their status of as dominant international currencies, the United Kingdom and the United States were the world's leading economies and traders. Today, capital flows are much bigger than trade flows with the foreign exchange market turnover at least 14 times larger than GDP and 8 times higher than foreign trade volumes in the US (King and Rime, 2011). This also implies that the size and the level of efficiency of euro financial markets will be a key determinant of the euro's share in foreign exchange transactions. For now, China still limits capital movements but continues a stepwise process of opening up onshore markets.

There are two viewpoints with regard to the dominant role of the dollar and the implications for the euro. One perspective is that the predominance of the dollar does not present a direct problem for the euro and is largely driven by historical and geographical reasons. An alternative argument is that the exorbitant privilege of the dollar can and should be challenged and that the dominance of the dollar over the euro predominantly reflects the highly fragmented financial markets in the euro area compared to the US (Ilzetzki et al., 2020).

Based on the arguments regarding advantages and disadvantages in Chapter 3, it is unclear whether further internationalisation of the euro would provide a significant net benefit. If demand for the euro as an international store of value increases, this will reduce external financing costs for certain debtors (although this advantage might not be very substantial in the current low interest rate environment). On the flipside, there is a concern that a highly valued currency reduces the international price competitiveness of domestic firms. Overall, however, domestic agents are set to benefit from the increased demand for the currency. The effects of international currency status on the effectiveness of monetary policy are ambiguous. On the one hand, an increased international transmission with positive spillbacks to the domestic economy and a reduced exposure of domestic prices to exchange rate shocks make it easier for a central bank to hit its target. On the other hand, lower effects of monetary policy on import prices as well as blurred signals from monetary aggregates can also make its job harder. Finally, being the issuer of an international currency can change one's relationship with the rest of the world. On the one hand, it can enable the issuer to achieve non-monetary side objectives because foreign agents may be forced to follow domestic financial regulations. On the other hand, the issuer may be exposed to international pressure to deviate from domestic policy preferences in order to accommodate foreign needs, for example to provide financial support in times of economic trouble abroad.

Irrespective of whether it is advisable to do so, there are two approaches that can be used to strengthen the international role of the euro. First, the attractiveness of the euro could be increased as a by-product of improvements in the soundness of euro area economic and fiscal policies. Second,



policy makers could target individual markets with interventions in order to increase the use of the euro.

An encouraging pattern for the euro is the increasing share of new emerging market debt that is denominated in euro compared to the US dollar. A further promotion of the euro in emerging markets, in particular emerging Europe is one potential way to increase the euro's international role. Increasing the share of euro area imports and exports denominated in euro could alleviate some exchange rate risks. The US dollar, for example, is widely used as a vehicle currency for oil trade invoicing in the European Union. As long as both partners would be able to gain from lower exchange rate risks, the initiative of the European Commission to promote the use of the euro in energy contracts may prove fruitful.

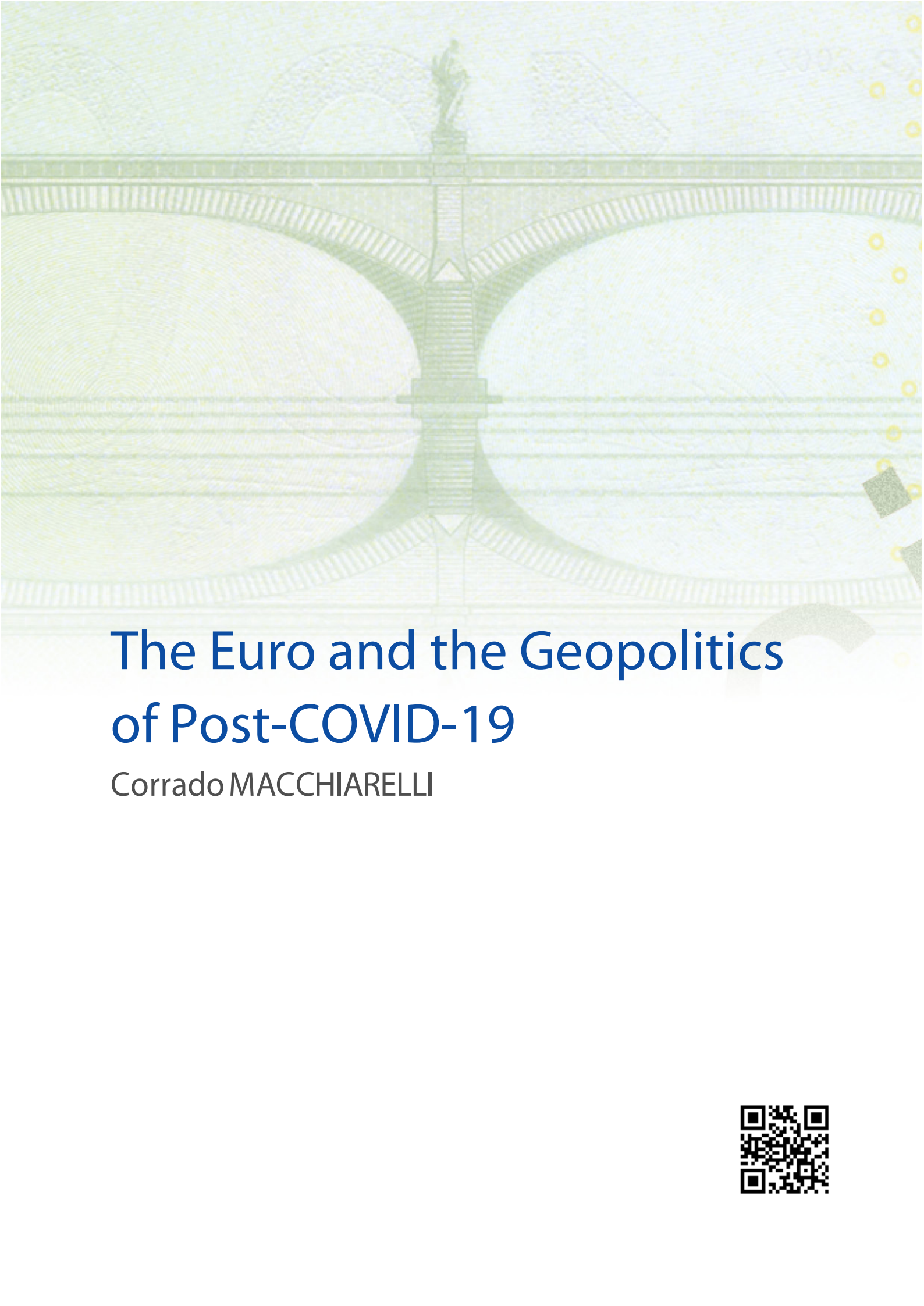
Chapter 2 shows that the international status of the euro was negatively affected by the instabilities associated with the recent financial crises. To decrease the likelihood of such instabilities, Member States ultimately need to implement sound, responsible fiscal policies. Proponents argue that common European sovereign debt instruments could provide a safe asset for investors and further financial integration (cf. ECB, 2020). However, it is far from clear that a (further) substantial mutualisation of debt would increase the supply of euro assets of highest credit quality. Credit ratings of these assets would depend fundamentally on their design, how well European rules can be enforced, and how well the design will address the issue of moral hazard.<sup>4</sup> Moral hazard here means that individual Member States will be less inclined to follow sound fiscal and economic policies if part of the costs of their debt is shifted onto others. With all the currently debated designs for such assets, moral hazard would remain a major issue. Note that depending on the amount of European debt that they will have to guarantee the creditworthiness of the few remaining AAA-rated sovereigns may be insufficient, leading to downgrades. In addition, it is unclear whether a common euro area debt instrument would be able to improve overall liquidity in the euro area government bond markets, and if any potential improvements in liquidity conditions would substantially decrease total financing costs. All in all, this illustrates the challenges a common debt instrument design faces.

---

<sup>4</sup> Controversial issues include but are not limited to the question on who will guarantee these debt instruments, whether there will be a total or partial replacement of national borrowing by common debt instruments, how the seniority of common debt instruments would be structured, and whether there is any conditionality at issuance with regard to fiscal or structural reforms.

## REFERENCES

- Chinn, Menzie. and Jeffrey A. Frankel (2005). Will the Euro Eventually Surpass the Dollar as Leading International Reserve Currency? NBER Working Paper 11510.
- Cohen, Benjamin J. (2012). The Benefits and Costs of an International Currency: Getting the Calculus Right. *Open Economic Review*, 23, 2012.
- ECB (2019). The international role of the euro. June, 2019.
- Eichengreen, Barry (2011). *The Rise and Fall of the Dollar and the Future of the International Monetary System*, Oxford University Press.
- European Commission (2018). Communication from the Commission to the European Parliament, the European Council (Euro Summit), the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions – Towards a stronger international role of the euro', COM(2018) 796/4.
- Fratzscher, Marcel. (2009). What explains global exchange rate movements during the financial crisis?" *Journal of International Money and Finance*, vol. 28(8), pages 1390-1407.
- Genberg, Hans (2010). The Calculus of International Currency Use. *Central Banking*, 20(3), 2010.
- Gourinchas, Pierre-Olivier and Helene Rey (2005). From world banker to world venture capitalist: US external adjustment and the exorbitant privilege. NBER Working Paper, No. 11563.
- Gräß, Johannes, Thomas Kostka, and Dominic Quint (2019). Special Feature B: Quantifying the "exorbitant privilege" – potential benefits from a stronger international role of the euro. In: ECB (2019): The international role of the euro. June, 2019.
- Ilzetzki, Ethan, Carmen M. Reinhart, Kenneth Rogoff (2019). "Exchange Arrangements Entering the 21st Century: Which Anchor Will Hold?" *Quarterly Journal of Economics* 134 (2): 599-646, 2019.
- King, Michar. R. and Dagfinn Rime (2011). [The \\$4 trillion question: what explains FX growth since the 2007 survey?](#), " *BIS Quarterly Review*, Bank for International Settlements, March.
- Krugman, Paul A. (1984). 'The International Role of the Dollar: Theory and Prospect', in J.F.O. Bilson and R.C. Marston (eds) *Exchange Rate Theory and Practice*, University of Chicago Press.
- Swoboda, Alexander K. (1968). The euro-dollar market: an interpretation. *Essays in International Finance*, 64, 1968.
- Warnock Francis E. and Veronica C. Warnock (2009). International capital flows and U.S. interest rates. *Journal of International Money and Finance*, 28(6), 2009.



# The Euro and the Geopolitics of Post-COVID-19

Corrado MACCHIARELLI



## **Abstract**

This note provides a critical overview on the current status and recent trends related to the euro's international standing over the last decade and reflects on the opportunities and risks for the role of the euro going forward, including the post-COVID-19 international trade and political order.

This document was provided by the Policy Department for Economic, Scientific and Quality of Life Policies at the request of the committee on Economic and Monetary Affairs.

## **CONTENTS**

<b>LIST OF ABBREVIATIONS</b>	<b>28</b>
<b>EXECUTIVE SUMMARY</b>	<b>29</b>
<b>1. INTRODUCTION</b>	<b>30</b>
<b>2. THE “POLITICS TRAP”</b>	<b>33</b>
<b>3. THE EURO AS INTERNATIONAL ANCHOR CURRENCY</b>	<b>35</b>
3.1. The euro as an international anchor	37
3.2. Implications for monetary policy	39
3.3. The fiscal policy leverage	40
<b>4. THE EURO AND THE GEOPOLITICS OF POST-COVID-19</b>	<b>42</b>
<b>QUESTIONS FOR MEPS</b>	<b>44</b>
<b>REFERENCES</b>	<b>45</b>

## LIST OF ABBREVIATIONS

<b>APP</b>	Asset Purchase Programme
<b>CDS</b>	Credit Default Swap
<b>CLS</b>	Continuous Linked Settlement
<b>ECB</b>	European Central Bank
<b>EMU</b>	Economic and Monetary Union
<b>EP</b>	European Parliament
<b>PEPP</b>	Pandemic Emergency Purchase Programme
<b>PSPP</b>	Public Sector Purchase Programme
<b>SDR</b>	Special Drawing Rights
<b>TFEU</b>	Treaty on the Function of the EU
<b>TLTRO</b>	Targeted Longer-Term Refinancing Operations
<b>USD</b>	US Dollar

## EXECUTIVE SUMMARY

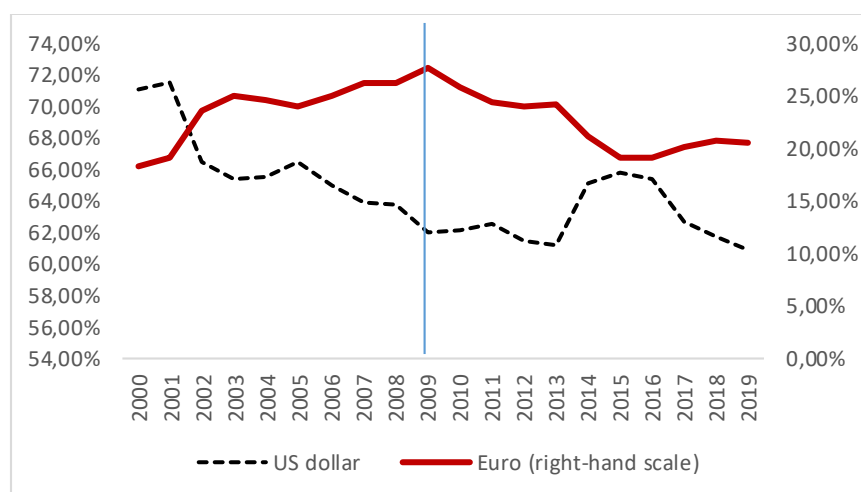
- **Propping up the international role of the euro has long been discussed in both academic and policy circles.** This is an issue now at the core of the European policy debate as voiced recently by both the European Commission and the European Central Bank (ECB). At the centre stage of an internationally relevant and stable euro must be an independent central bank superseding strong economic and financial fundamentals and strong political governance.
- **Despite having a large economy, the euro area has not deep enough and integrated financial markets, particularly in some segments.** It does have, however, differently from China, more widespread confidence in its currency.
- **The classic three functions of money in an economy, i.e. store of value, medium of exchange and unit of account, can be understood at the international level as well.** Looking at the euro's use in denominating bond and loan contracts, its use in denominating international trade, the volume in foreign exchange trading and the euro share of central banks' reserves, the evidence does support the idea that the euro has made progress along those dimensions. Still, the euro and the USD have witnessed a relative decline in their role as foreign reserve currencies since the global financial crisis.
- **There are still specific factors which are likely to hinder the growth of the euro as a global currency.** The main problems are embodied not only in the need to enhance the euro's global geopolitical outreach (foreign policy and defence), but also in strengthening internal fiscal policies and cohesion.
- **The COVID-19 shock has revealed yet again the limits of the euro area fiscal and policy response, which has been synchronised in the response to the pandemic but largely uncoordinated.** Thus, there is a risk that the relative decline of the euro as a foreign reserve currency, observed since 2009, may accelerate with or after the COVID-19 shock.
- **To convince markets above all, the euro's role as an anchor currency will have to be pursued with the longer-term goal of achieving fiscal and political breadth.** For instance, the recent German Constitutional Court's ruling against the proportionality of the public sector purchase programme (PSPP) goes in the opposite direction and echoes a still strong North-South divide.
- **If left unaddressed, the lack of a credible European long-term response to the pandemic risks vanishing not only any attempts at internationalising the euro further but even jeopardising the European project as a whole.** International investors, on the margin, might prefer to avoid a currency whose values or even whose mere existence may be often at stake.
- **The hope is now that politics at the higher echelons of EU leaders' level would support the ECB President Lagarde's announcement that it is the time for Europe's Schuman moment towards greater solidarity.** If not, other countries such as China, Russia and Turkey will seek to capitalise on the increasing fragmentation of the global order, including in the European immediate neighbourhood such as in the Western Balkans region.

## 1. INTRODUCTION

Propping up the international role of the euro has long been discussed in both academic and policy circles. An international anchor status may seem less relevant for the real economy than the exchange rate itself. However, the latter two have always been causally interrelated (Chinn and Frenkel, 2006).<sup>1</sup>

On 5 December 2018, the European Commission officially communicated an initiative to improve the euro's international standing. This proposal rested on the possibility of achieving “a deeper and more complete EMU” (ECB, 2019). Last November, Commission President von der Leyen vowed to fulfil the European Commission’s duties by pledging a more “geopolitical” approach, mainly through increasing the Commission appeal to multilateralism and international cooperation, while also preserving European sovereignty. ECB’s Cœuré last year has fired up the claim that a strong currency “would not just be a symbol of European unity on the world stage, it would also be a tool to project global influence.” At the core of the debate in Europe is indeed the potential to improve the euro's international position as a currency.

Figure 1: Official holdings of foreign exchange, end of year (in percent)



Source: Currency Composition of Official Foreign Exchange Reserves (COFER), International Financial Statistics (IFS). Data extracted from <http://data.imf.org/> on 11 May 2020.

At the centre stage of an internationally relevant and stable euro must be an independent central bank superseding strong economic and financial fundamentals and strong political governance. For instance, historically, investors’ willingness to hold US dollars above and beyond the United States current account position rested on the dollar’s role as world’s reserve currency, a title earned mainly on the back of (i) the development of the web of relations commenced with Bretton Woods and the Marshall Plan, (ii) the denomination of the USD as the main reference for the price of oil (petrodollars), as well as (iii) the constellation of countries having pegged to or adopted the USD as their currency (dollarization); see also Eichengreen (2008). Because of the role of the US, foreign investors’ purchasing power historically relied on both the US core inflation and the value of the dollar as a currency.

<sup>1</sup> The ECB has typically maintained a rather neutral stance on outright exchange rate policies. Not only the latter are not part of the supranational central bank standard policy toolkit, but also direct exchange rate policies are recognised to be difficult owing to the well-known policy trilemma that makes independent monetary policy, capital control and exchange rate targeting pairwise exclusive (i.e. a central bank cannot have it all; see Burda and Wyplosz, 2005).



The trend of a general shift in global governance observed for over more than a decade has accelerated with the financial crisis and is bound to change (and possibly speed-up more) following the COVID-19 shock. Since the global financial crisis, both the euro and the dollar have fallen short in their role as foreign reserve currencies (**Figure 1**). What is special in the trend started more than a decade ago is that these changes go far beyond advanced economies (**Table 1**). Several nations are now trying to increase their currencies' international profile. In 2016, for example, the Chinese renminbi was included in the International Monetary Fund's Special Drawing Rights (SDR) basket alongside the US dollar, the euro, the yen and the pound sterling. In a recent move to raise the renminbi's grip on global energy markets, China also launched its first oil future contract denominated in renminbi, the so-called *petroyuan* (Cœuré, 2019).

Table 1: Official holdings of foreign exchange, end of year (in percent)

	US dollar	Euro	Japanese yen	Pound sterling	Chinese renminbi	Canadian dollar	Australian dollar	Swiss franc
2000-07	66.94%	23.23%	4.42%	3.48%				0.23%
2008-13	62.21%	25.37%	3.59%	4.04%		1.63%	1.64%	0.16%
2014-19	63.60%	20.14%	4.51%	4.39%	1.54%	1.87%	1.69%	0.19%

Source: Currency Composition of Official Foreign Exchange Reserves (COFER), International Financial Statistics (IFS). Data extracted from <http://data.imf.org/> on 11 May 2020.

While in the international financial and commodity system there are certainly high obstacles to the possibility of the dollar being displaced in favour of other currencies, it is becoming increasingly obvious that the COVID-19 pandemic is due to challenge the international geopolitical order. This is evident not only in the success stories of the quick rebound in East Asia and Pacific region – China, Singapore, Taiwan, Hong Kong and South Korea but also Australia and New Zealand, all in the process of swiftly moving in the direction of “business normality” after the pandemic (worth noticing is also the case of many Central Eastern European countries which have enforced early lockdowns) – but also in the relative inward look and the shaky response of the remaining BRICS (Brazil, Russia and India), as well as – perhaps, more surprisingly – the US and the UK.

What about the EU itself?

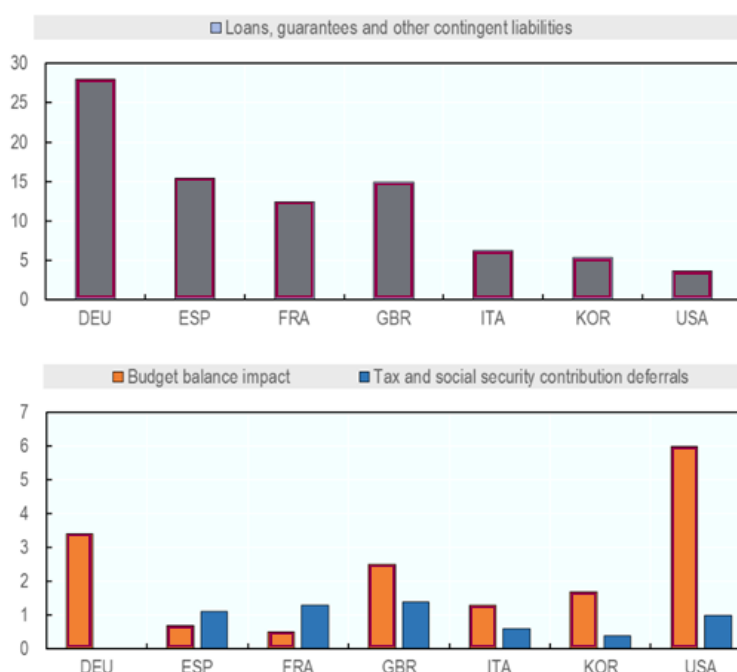
During the first stage of this crisis, the European Central Bank is the EU institution that has taken on the risks. This has been the case in many other advanced economies, where central banks have greatly relaxed monetary policy, with these effects being reinforced through central banks' forward guidance and balance-sheet policies. The ECB announced “no limits” to its Pandemic Emergency Purchase Programme (PEPP) with large acquisitions of government and corporate debt. Such actions have started to contribute to alleviating potential liquidity pressures onto the euro area banking sector.

Nonetheless, the geopolitics within the EU will likely trail the outcome of the health-crisis' management.

The approach that has emerged thus far has enshrined, yet again, Germany as Europe ‘most resilient country and most likely future growth locomotive in the recovery phase’. That approach has largely rested on the available fiscal space in each euro area country, i.e. the fiscal stimulus announced in Germany was five times as much the one in Italy (as a percentage of GDP). This has left countries which needed the demand stimulus the most to scramble for resources, ultimately forcing European leaders to opt for mutual support, agreed during the EU Summit on 23 April 2020 mainly on the back of fears

of negative market and trade spillovers within the Union. In particular, EU leaders signed off the Eurogroup agreement for a collective safety net, worth EUR 540 billion, directed to 1) governments and public finances via the European Stability Mechanism, 2) companies through the European Investment Bank, and 3) workers via the European Commission’s new instrument SURE. The ESM support for euro area Member States has already called into question the credibility of the European response, mainly through questioning the sustainability of a fiscal line which is limited *ex ante*.

Figure 2: The scale of fiscal policy in selected countries post-COVID-19



Source: OECD (2020).

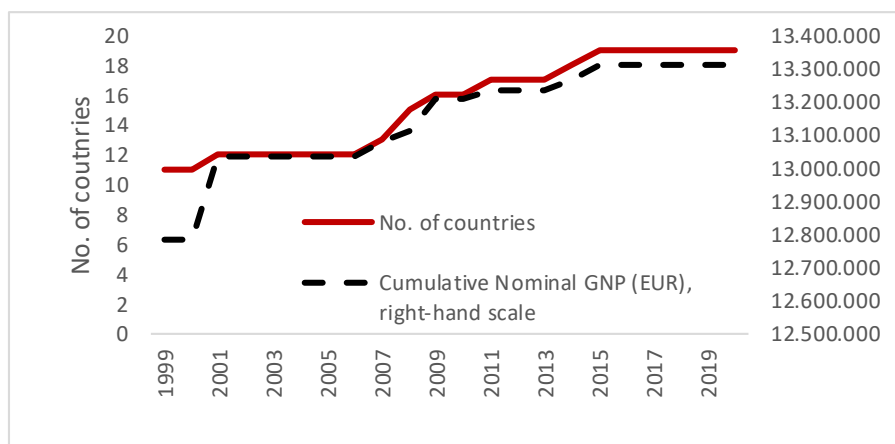
The European Commission has reiterated its call for a pan-European recovery strategy to supplement the existing national initiatives to compensate Member States’ gaps in their national fiscal firepower. “The risk otherwise is that the crisis will lead to severe distortions within the Single Market and to entrenched economic, financial and social divergences between euro area Member States that could ultimately threaten the stability of the Economic and Monetary Union” (European Commission, 2020). If left unaddressed, the lack of a credible European long-term response risks vanishing not only any attempts at internationalising the euro further but even jeopardising the European project as a whole.

## 2. THE “POLITICS TRAP”

On 5 May 2020, in a shocking judgement, the German Constitutional Court ruled that the ECB’s public sector purchase programme (PSPP) did not break the Union’s ‘no monetary financing rule’. However, it claimed that for it to be continued, the ECB should be able to show that the buying system is proportionate. Within the next three months, the Bundesbank will thus not be able to participate in the PSPP “unless the ECB Governing Council adopts a new decision that demonstrates in a comprehensible and substantiated manner that the monetary policy objectives pursued by the ECB are not disproportionate.” The Court’s ruling does not apply to the new stimulus programme of the ECB’s, the PEPP, but there is a great risk of another legislative challenge now that the ECB’s role has been called into question; albeit this is not the first time (see also Macchiarelli *et al.*, 2020).

This ruling had an immediate effect on the euro, as the latter increased with the relief that no clear decision had been made about the bond-buying programme, but sentiment quickly deteriorated with the euro gliding on the day. This tells an important story: if the euro has to survive as a currency and build its stance as an international anchor, the political frictions which are intrinsic to the very issue of ‘mutualisation’ within the euro area should be resolved. This is for the simple reason that international investors, on the margin, might prefer to avoid a currency whose values or even whose mere existence may be often at stake (see Maggiori *et al.*, 2015).

Figure 3: Enlargements of the euro area



Source: Authors’ calculations.

As it stands, the euro area lacks the political unity needed to formulate common foreign policy objectives (De Grauwe, 2019; Cœuré, 2019). Thus, endowing the euro area of bigger firepower politically is undermined by the absence of a common voice on international foreign policy affairs. One example includes the handling of the European refugee crisis. Filling this gap would be only possible in the context of a Political Union which would entail the complete transfer of sovereignty from the nation-states to a supranational government embedded in a European parliamentary system which legitimates it (De Grauwe, 2020). Several years after the introduction of the euro, however, there seem to be yet no strong evidence that the euro has exerted a positive influence on the common sense of European identity (Buscha, 2017). That would make the case for the transition to a Political Union, albeit necessary and in many ways desirable, scantily feasible (see also De Grauwe, 2020; Macchiarelli *et al.*, 2020).

In a second-best scenario, a greater weight of the euro in international political clouts could be achieved through enlargements, particularly if all the remaining EU non-euro area countries, including – at the time – the UK, adopted the euro. This was the case, according to an early paper by Frankel and Chinn (2006), which predicted that the euro could have surpassed the dollar by 2020. Not only this did not happen, but the issue of enlargements somehow lost momentum under the impact of the 2010 sovereign debt crisis and with the UK decision to withdraw from the EU in 2016 (Brexit). As a result, the post-2012 enlargements have mainly seen the addition of smaller countries (in nominal GNP terms); **Figure 3**. For larger countries, such as Poland, the issue of relinquishing monetary and exchange rate competencies was and will remain contested. Brexit will further challenge this already frail equilibrium as countries such as Poland and Sweden may fear losing grip against the increasing role of countries such as Germany and France now that the UK's claims for slower integration have been dismissed.

According to Cœuré (2019), an important element of the euro being an international reserve currency is recognising that the euro is the currency of “the world’s largest trading bloc.” While the EU is already recognised as an international trade power, the question is whether it is feasible to convince Member States and national interest groups to pursue further political integration. In the case of trade policy, there was a strong sense for creating big welfare benefits through the transfer of trade competences (De Grauwe, 2019). This might not be the case with the transfer of political sovereignty mainly since political interests are yet to fully align.<sup>2</sup> Secondly, trade was seen as a technical – limited, as well as revocable – economic matter, not interfering with the concerns of the European nation-states. One additional aspect which is recognised to be missing is the euro’s global geopolitical outreach, embodied in a common foreign or defence policy (Eichengreen, B., A. Mehl and L. Chițu., 2019; see also Bodea and Huemer, 2010, for a broader discussion).

In this sense, trade integration did not necessarily pave the way to achieving the necessary political power and prestige to acquire international anchor status.

---

<sup>2</sup> What De Grauwe (2020) calls the lack of a “deep variable”.

### 3. THE EURO AS INTERNATIONAL ANCHOR CURRENCY

At its inception in 1999, the euro was the anchor currency in 53 economies, approximately half of the dollar's total. Two countries dropped out by 2015 although four more were included, i.e. Latvia, Lithuania, Romania and Serbia. By contrast, the dollar lost 5 countries (including Latvia and Lithuania) in 2015 compared to 1999, against 19 new countries choosing to adopt the USD as their anchor in 2015 (Maggiore et al., 2015). Having said that, the euro area is for now not financially deep to constitute a global power (De Grauwe, 2019). Indeed, the fall in the global position of the euro in recent years is mainly the symptom of the well-known initial shortcomings of the Economic and Monetary Union (EMU).

To this taken, the politics which can enhance the global position of the euro as a reserve currency *and* the policies required to make the euro area more sustainable are – to a large degree – overlapping. The Capital Markets Union and Banking Union, themselves underscoring the risks of incompleteness, represent clear examples of this process (see also Macchiarelli, 2018). They do not represent the only problem, however; the recent decision of the German Constitutional Court to rule against the PSPP could potentially be far more dangerous to the euro than not creating common means for recovery and resolution.

According to Maggiore et al. (2015), there are four dimensions to summarise an international currency status, namely:

1. The use in denominating bond and loan contracts;
2. The use in denominating international trade;
3. The volume in foreign exchange trading;
4. The use as central bank reserves.

The aspects to consider are nevertheless broader and can be summarised in **Table 2**. The classic three functions of money in an economy, i.e. store of value, medium of exchange and unit of account, can be understood at the international level as well. Central bank international reserves are one example. There are, however, other possible uses of an international currency: currency substitution (e.g., the circulation of euros in some Central-Eastern EU countries), foreign goods' trade, as well as international financial flows denomination or invoicing, anchoring for smaller countries (i.e. pegs), and FOREX trading (Chinn and Frenkel, 2006).

Table 2: Roles of an international currency

Function of money	Governments	Private actors
<i>Store of value</i>	International reserves	Currency substitution (e.g., dollarization)
<i>Medium of exchange</i>	Vehicle currency for foreign exchange intervention	Invoicing trade and financial transactions
<i>Unit of account</i>	Anchor for pegging local currency	Denominating trade and financial transactions

Source: Chinn and Frenkel (2006).

Following the rubrics in Maggiore et al. (2015) and based on ECB (2019) estimates, we can document four main facts.

First, the share of the euro in the stock of international debt securities (at constant exchange rates) remained stable since 2014, following an upsurge until 2007 and a later decline during the financial and sovereign debt crises. In comparative terms, the share of the euro has decreased by some 8% since mid-2000 years, whereas the share of the U.S. dollar has risen by almost 20% (**Figure 4**). Based on data on new issuances, however, there has been a relative decline in the share of the US dollar mainly driven by borrowers in emerging markets (ECB, 2019). This can be attributed to a stronger US dollar exchange rate and an increasing interest of emerging economies to diversify their currency exposure (ECB, 2019).

Figure 4: Currency composition of outstanding international debt securities

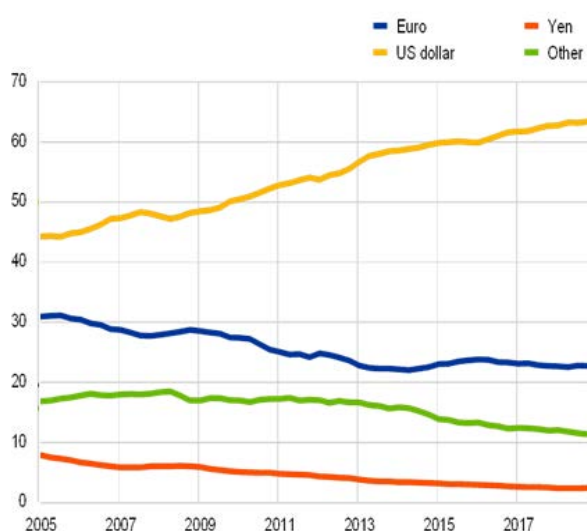


Figure 5: Currency composition of outstanding amounts of international loans

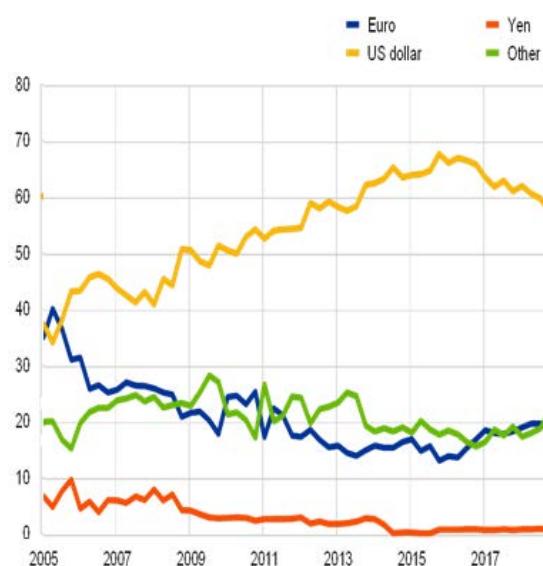
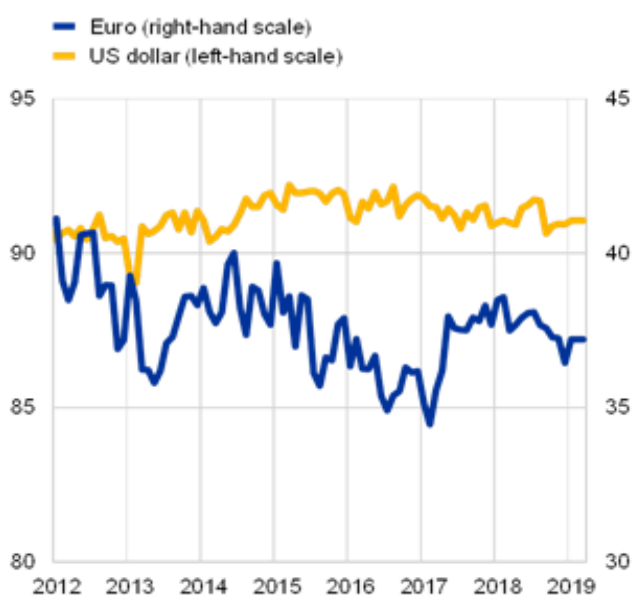


Figure 6: Share of foreign exchange transactions settled in CLS



Source: ECB (2019).

The share of the euro in international loan markets also continued to rise in recent years (**Figure 5**), following a decline over the period 2006-2014. The latter was mainly driven by deleveraging and regulatory efforts in the euro area banking sector. In recent years, this trend has stopped and partially reversed possibly as the result of the ECB's credit easing programmes (e.g., (T)LTROs) which have supported cross-border lending (ECB, 2019).

Secondly, the use of euros in invoicing/settling international trade remained broadly stable. More than 60% of exports and 50% of imports outside the euro area were invoiced in euro in 2018 (ECB, 2019). In comparison to the US dollar, however, there is limited use of the euro to invoicing international transactions between third countries that do not involve the euro area.

Third, looking at quantities/volumes in the foreign exchange market points to a slight decline in the use of the euro since 2018 (**Figure 6**).

Finally, the share of the euro in global foreign exchange reserves is increasing again (**Figure 1**), particularly as several emerging market economies have been selling foreign exchange reserves in the context of tight financial conditions and capital reversals. This has been the case either to stabilise their domestic currencies or simply to support a diversification of their reserve portfolios.<sup>3</sup>

All in all, these trends do support the idea that the euro has made progress in this respect. Thus, can the euro be regarded as international anchor currency?

### 3.1. The euro as an international anchor

From an economic viewpoint, there are a few advantages and disadvantages of having international currency status (Chinn and Frenkel, 2006): beyond *seignorage*, a global use of the euro would, for instance, reduce exchange rate risks for euro area exporters, importers, borrowers and lenders, and minimise exposure to sharp drops in other currency's liquidity (albeit the latter is admittedly less problematic since the introduction of outright USD-currency swap agreements with the Federal Reserve). In that sense, a stronger international role for the euro would result in spillovers and feedback through international trade and finance, the latter expected to affect monetary policy. On the flipside, there could be volatility stemming from an increase in the degree of capital mobility; an increase in the average demand for the currency which may disadvantage exports; and, international responsibility from the international anchor status itself. In the latter case, this would mean central banks in smaller and developing economies could turn to the Eurosystem for currency swap support, with the ECB becoming "an international lender of last resort" (Cœuré, 2019). However, any such extensions of the global network of currency swap lines may not be easy (also in the context of the already difficult political concertation within euro area Member States, and even less so if one thinks about future euro area enlargements) as they would need to be "based on sound monetary arguments" (*ibid.*).

Despite having a large economy, the euro area has not deep enough financial markets. It does have, differently from China more widespread confidence in its currency (**Table 3**). According to the last triennial report by the Bank of International Settlements, the dollar is still accounting for 88% of all foreign exchange trade, with the euro at 32% and the renminbi's share at just 4%.

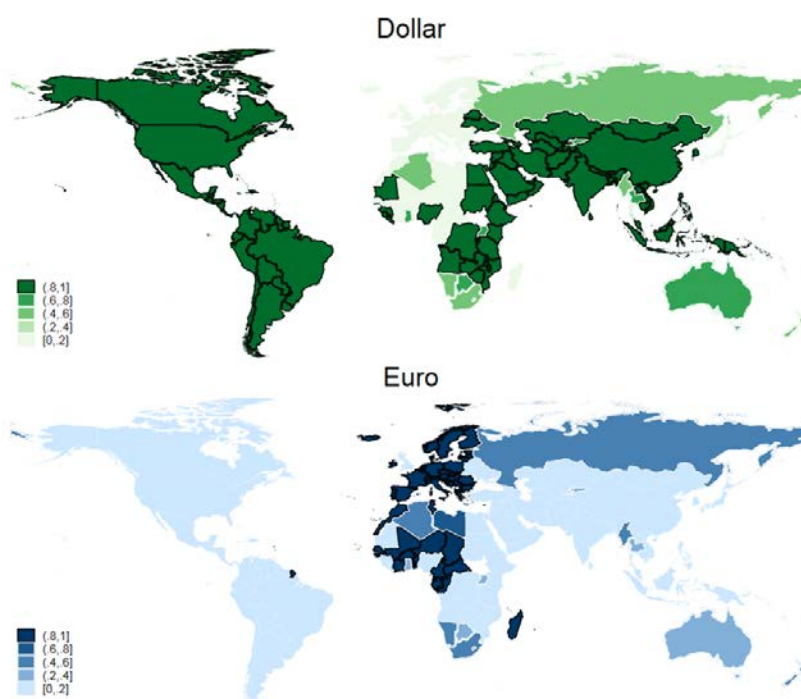
<sup>3</sup> According to the ECB's data (2019), much of these movements have been made in dollars, so promoting the euro's position in global foreign reserves.

Table 3: Percentages of daily currency trades (April 2019)

Ranking	Currency	% (bought or sold)
1	USD	88.30%
2	Euro	32.30%
3	Japanese yen	16.80%
4	Pound sterling	12.80%
5	Australian dollar	6.80%
6	Canadian dollar	5.00%
7	Swiss franc	5.00%
8	Renminbi	4.30%

Source: Bank of International Settlements.

Figure 7: Estimated co-movement of national currencies with the dollar (upper panel) and the euro (lower panel) in Dec 2018



Source: Ferrari (2019). Data refer to Dec. 2018.

A crude measure of the international role of the euro is the measurement of its spillovers on other currencies or the extent to which euro-currency shocks propagate to other currencies. While the results suggest that the role of the euro as an anchor currency remained broadly stable, there is a strong regional dimension to it, compared to the role of the dollar (Ferrari, 2019; see **Figure 7**).<sup>4</sup>

<sup>4</sup> In that sense, “efforts to improve the stability of our currency union could be expected to lead to a more even distribution of reserve demand effects within the euro area” (Cœuré, 2019).



Many countries use the dollars in international trade because a dollar-based global payment system can achieve an efficient and large financial domain. The euro, by contrast, is not used as a major medium of exchange outside the euro area mainly because there is no outer euro-denominated payment system (see Macchiarelli and Monti, 2018). This is the case for China as well. The central bank of China, however, pushed ahead to establish a Hong Kong-centred offshore renminbi debt market, with the offshore exchange rate being independent of the central bank's onshore rate.

### 3.2. Implications for monetary policy

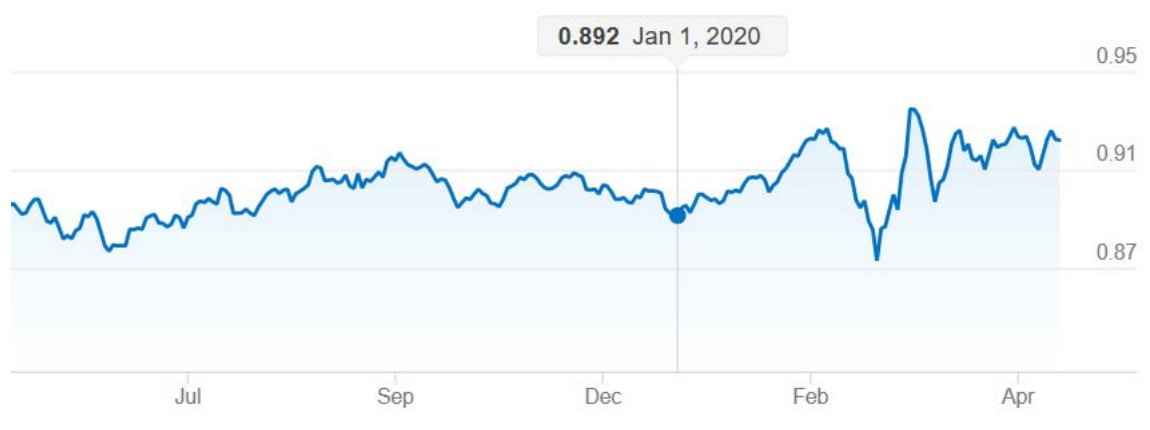
Pushing the role of the euro as an international anchor would have several implications for monetary policy.

First, there would be trade feedbacks and financial spillovers to consider (Cœuré, 2019). In case the euro would be used for trade amongst third countries, a depreciation of the euro would make all euro-denominated exports cheaper, increasing global trade overall. Secondly, looking at the US example, financial spillovers could result into higher international risk-taking, whereby, following an interest rate cut, as the dollar depreciates, the provision of dollar-denominated credit might increase simply because such depreciation would boost foreign borrowers' balance sheets.

The second way in which an international currency can influence domestic monetary policy is through interest rates. In periods of uncertainty, such as the current one, or during financial stress, investors rush into safe-heavens or specific-denominated assets for protection and liquidity (US dollar, Swedish krona, Swiss Franc etc). This can have both short-run effects, such as volatility, or longer-term ones. Cœuré (2019), for instance, highlights how during the run-up to the financial crisis, the high demand for US securities from other international central banks helped explain the decline of long-term US interest rates, something akin to *quantitative easing*, thereby partially offsetting the policy tightening by the Fed. This highlights an important channel for the US as a world reserve currency. The sustainability of the US current account deficit depends on the foreign central banks' (as well as foreign private investors') preparedness to accumulate ever-greater quantities of dollar-denominated assets. This rests on (i) the availability of foreign central banks to intervene on the FOREX market to keep their currencies on check *vis-à-vis* the dollar. Secondly, (ii) these foreign central banks would need to retain their main share in dollars rather than in any other competing currency, such as euros (Chinn and Frenkel, 2006).

These effects are not present for the euro area today both because the euro area has a current account surplus, and because the holding of euro-denominated assets is globally lower than the US-denominated ones. However, due to its rock-bottom interest rates, the euro is becoming an increasingly common currency to sell against high yields. Hence, the demand for euros and euro-denominated assets has increased intermittently more recently (since Jan 2020). While the euro has typically fallen during times of market stress, since the COVID-19 outbreak its behaviour has been quite volatile (**Figure 8**). One explanation could come from the global interest-rate outlook. Several key central banks have enacted interest-rate cuts to ease the monetary stimulus further. Investors are pricing in the fact that the ECB may not be cutting its reference rate (on the deposit facility) further into negative territory, and this shift in interest rate expectations may make the euro relatively more attractive because the gap in interest rates between the euro area and other key central banks' interest rates, such as the Fed, is narrowing; **Table 4**.

Figure 8: USD-EUR bilateral nominal exchange rate



Source: Refinitiv <https://www.refinitiv.com/en?ref=world-check.com>. Accessed on 11 May 2020.

Table 4: Recent directions in monetary policy interest rates (April 2020)

	Jan. 2020	April 2020	Change	End 2009
USA	1.75	0.25	↓	0.25
Euro Area	-0.50	-0.50	-	0.25
Japan	-0.10	-0.10	-	0.10
Canada	1.75	0.25	↓	0.25
UK	0.75	0.10	↓	0.50
China	4.15	3.85	↓	5.25
India	5.15	4.40	↓	4.75
Brazil	4.50	3.75	↓	8.75
Russia	6.25	6.00	↓	6.00
Australia	0.75	0.25	↓	3.75
Turkey	11.25	8.75	↓	6.50

Source: Naisbitt et al. (2020).

### 3.3. The fiscal policy leverage

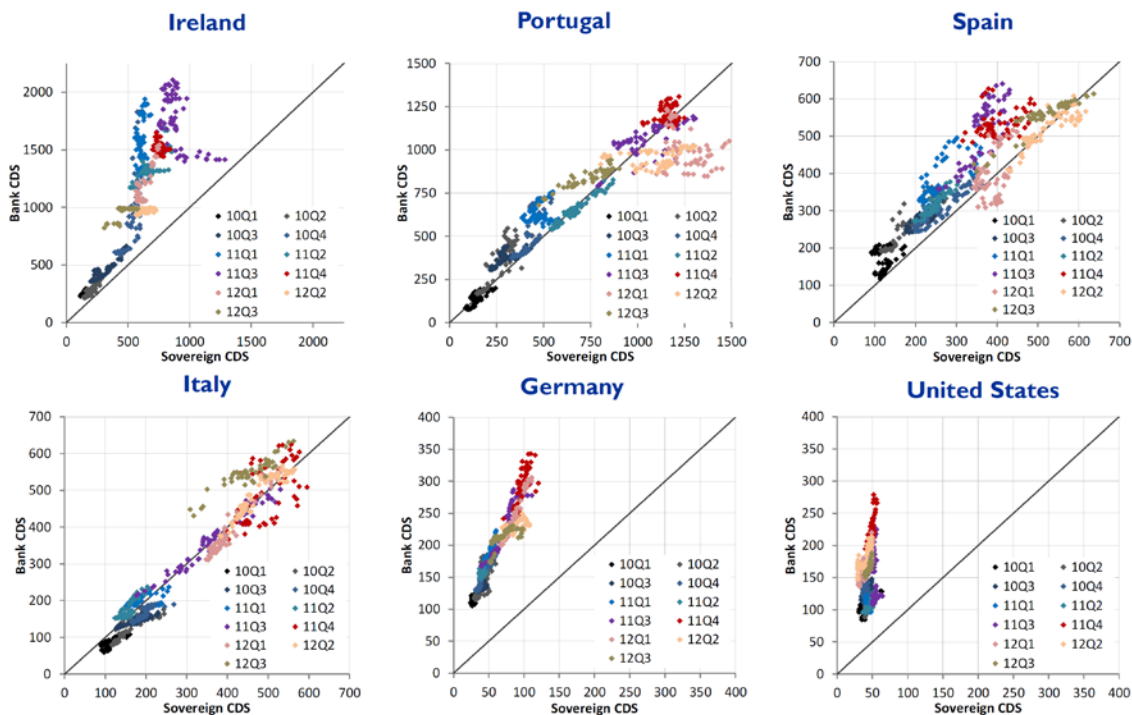
One important takeaway from the literature is that the euro area's financial markets remain still fairly small and heterogeneous compared to the US, and financial fragmentation persists particularly in some market segments, such as debt. At the intersection of financial integration and politics there are the issues of fiscal mutualisation and risk-sharing.

The original idea of the euro rested on a set of fiscal rules based on the principle that financial markets would be self-regulating and the 'no-bail out rule' (ex art. 125, TFEU) was credible. The idea was to use 'the advantage of tying one's hands' by guarding against government failure and letting markets find their equilibria (Fuest and Peichl, 2012).

The euro area sovereign debt crisis has exposed the shortcomings of such an incomplete approach. After 2010, the number of AAA-rated countries came to represent only 10% of the area GDP (*ibid.*). This now provides little space for risk-sharing or joint guarantees among Member States as any attempts of joint-debt issuance would be perceived as a free-meal attempt at the expenses of the investment-grade countries.

This could be partly circumvented with the creation of a common safe asset guaranteed from third institutions, such as e.g. the European Investment Bank (see Jones, 2017 for a summary of the literature) or the provision of contingent support to governments through the European Stability Mechanism. The problem with the latter is anyway that these initiatives are *ex-ante* limited, hence unlikely to be enough (see Diessner, Jones and Macchiarelli, 2020; De Grauwe, 2011).

Figure 9: Correlation between sovereign and bank CDS during the financial crisis



Source: ECB (2012). Note: Last observation: 12 September 2012.

If the euro is to serve as a genuine common shield in times of market stress and thus gain and sustain an international anchor status, the fiscal dimension of the euro area needs to be strengthened. This has to do with the idea of an international currency being able to deliver stability both domestically and internationally (Cœuré, 2019).

As discussed, investors are normally reluctant to rebalance away from US-dollar denominated assets, despite the US large debt. For the euro area, though, Member States face a tougher budget constraint (De Grauwe, 2020): the lack of a common budget or a system of full-fledged risk-sharing expose the the euro area Member States to higher credit-risk premia compared to standalone countries, e.g., the US. Public debt is therefore not insulated from private debt (as observed over the period 2010-2012; **Figure 9**) and that makes investors demand higher premia in their euro-denominated asset holdings. The fact that the supply of euro-denominated safe assets is not large and sufficiently elastic (it decreases precisely when investors' demand for such assets increases) is one of the main factors preventing a greater international role for the euro (Cœuré, 2019).

This indicates that there are specific factors are likely to hinder the growth of the euro as global currency: to convince markets above all, this role will have to be pursued with the longer-term goal of achieving fiscal and political breadth within the euro area.

## 4. THE EURO AND THE GEOPOLITICS OF POST-COVID-19

The COVID-19 pandemic will certainly speed up a transition away from US-centric globalisation and there will inevitably be queries about the dependence on international supply chains. This poses several questions, mainly concerning the newly emerging international governance structure.

A concrete risk remains that some politicians might leverage concerns about keeping borders open, exacerbating the observed shift away from globalisation. Under the pretext of self-sufficiency and public health concerns, they might impose protectionist trade barriers and restriction to movement. Thus, global leaders now have the responsibility to safeguard the existing web of relations that has brought economies together post-Bretton Woods. Keeping international trade open will be crucial for the maximisation of resources for a rapid recovery globally. Even more importantly, countries will need to resist the impulse of stopping trade concerning healthcare and the exchange of scientific information. If this is not achieved, the result will likely be price wars on testing and medicines which will be not only inefficient in the global response to the virus but also more costly to the global economy *ex-post*. Globally, an area of potential collaboration, including between China and the US, will be that of producing a vaccine for the virus. Finding a vaccine could also serve as a pretext to determine different international equilibria.

Central banks will continue to be crucial in preserving the stability of global financial markets and steady credit flows to the economy. Especially in developed economies, countries have proven able to reduce spreads by buying whatever volume of debt that they need in order to sustain low rates at long maturities. In these economies, central banks have greatly relaxed monetary policy, with these effects reinforced through central banks' forward guidance and balance-sheet policies: for instance, the ECB announced "no limits" to its PEPP with large acquisitions of government and corporate debt.

Business continuity has called for active fiscal policy responses as well. The negative effect of fighting the pandemic on the economies may be long-lasting, as the extraordinary debt accumulation will be hard to reverse, all which will have consequences for the international order; particularly the extent and pace this new debt – and its future reduction – will be handled across countries. There is a wide spectrum of indebtedness among advanced economies with economies such as Germany starting with low levels of debt likely to face little difficulty with future debt servicing. At the other end of the spectrum is Italy which started with a debt to GDP ratio in excess of 130% and low potential economic growth. A low inflation environment will allow countries like Italy to persist with high levels of debt in much the same way as Japan has for the past two decades. Advanced economies which sit in the middle, such as UK and France, will face the prospect of tolerating higher debt levels or embarking on another fiscal consolidation plan at a time when the electorate is already suffering "austerity fatigue" (Kara, Macchiarelli and Giacon, 2020).

What about Europe?

Coming after the sovereign debt crisis, the migrant crisis and Brexit, the coronavirus crisis risks further damaging the EU's already weak reputation. On this occasion, Member States did not act in concert when the crisis erupted, but they chose to unilaterally close the borders and suspending free movement without coordination. When the support package announced by the ECB in March (EUR 750 billion asset purchase program of private and public sector securities through the PEPP) will be exhausted – which is likely to happen in October according to some projections – countries will be left with the question of how to roll the debt load further. As ever, wanting to share risks mainly through the ECB (as opposed to e.g., Eurobonds) represents a maigre consolation particularly for highly indebted countries, e.g., Italy, where the COVID-19 shock is set to challenge fiscal sustainability and financial stability.

The latest German Constitutional Court ruling against the proportionality rules of the ECB's PSPP risks hitting the PEPP as well, making more damage than the lack of any solidarity fund. Particularly now, with the US's and UK's being distracted away from the world stage in an attempt to deal internally with the pandemic, one should hope that the euro area could stand back on its feet and lead in the process of reconstruction post-COVID-19 without leaving a political void. In other words, the hope is that politics at the higher echelons of EU leaders' level would support the ECB President Lagarde's announcement that it is the time for Europe's *Schuman moment* (Lagarde, 2020) towards greater solidarity.

If not, other countries such as China, Russia and Turkey will seek to capitalise on the increasing fragmentation of the global order, including in the European immediate neighbourhood such as in the Western Balkans region; then, it might *really* be too late for Europe.

## QUESTIONS FOR MEPS

- Many countries use the dollars in international trade because a dollar-based global payment system can achieve an efficient and large financial domain. The euro, by contrast, is not used as a major medium of exchange outside the euro area mainly because there is no external euro-denominated payment system. This also applies to the clearing of euro-denominated products which at the moment cannot occur anywhere outside of Europe. Is this something the Eurosystem will be willing to review going forward?
- There is a consensus that to fight the COVID-19 shock policymakers will have to 'break taboos'. This will be relevant not only during the pandemic but also for the recovery phase, to build resilience and mostly debt sustainability. Would the ECB be ready to revise its inflation target upwards, should the situation require, or resort to alternative strategies such as price-level targeting? Is the ECB concerned about imbalances among the Member States accumulating during this phase, including in the observed widening of TARGET2 balances (e.g., Italy and Germany)?

## REFERENCES

- Bodea C., Huemer S. (2010). "Dancing Together at Arm's Length? The Interaction of Central Banks with Governments in the G7", ECB Discussion Paper 120, October.
- Burda M., Wyplosz, C. (2005). *Macroeconomics: A European Text*, 4th edition. Oxford University Press.
- Buscha F. (2017). "Can a common currency foster a shared social identity across different nations? The case of the euro". *European Economic Review*. 100: 318–336.
- Chinn M., Frankel J. (2006). "Will the Euro Eventually Surpass The Dollar As Leading International Reserve Currency?" NBER WP 11510.
- Cœuré B. (2019). "The euro's global role in a changing world: a monetary policy perspective", Speech at the Council on Foreign Relations, New York City, 15 February.
- De Grauwe P. (2011). "The European Central Bank as a lender of last resort", VoxEU.org, 18 August.
- De Grauwe P. (2019). "The geopolitical dimension of the euro", Presentation at the Banco de Portugal Conference: "The euro 20 years on: the debut, the present and the aspirations for the future", 15 November.
- De Grauwe P. (2020). "Economics of the Monetary Union", Oxford University Press.
- Diessner S., Jones E., Macchiarelli C. (2020). "Now it is the turn of leaders to do 'whatever it takes' to save Europe" *Encompass EUROPE*, 23 April.
- Eichengreen B. (2008). "Globalizing Capital: A History of the International Monetary System". Princeton University Press.
- Eichengreen B., Mehl A., Chițu L. (2019). "Mars or Mercury Redux: The Geopolitics of Bilateral Trade Agreements," ECB Working Paper No. 2246.
- European Central Bank (2019), The international role of the euro, June [www.ecb.europa.eu/pub/ire/html/ecb.ire201906~f0da2b823e.en.html#toc1](http://www.ecb.europa.eu/pub/ire/html/ecb.ire201906~f0da2b823e.en.html#toc1).
- Ferrari M. (2019). "Global currency areas". Box 2 - European Central Bank (2019), The international role of the euro, June.
- Fuest C., Peichl A. (2012). "European Fiscal Union: What Is It? Does It work? And Are There Really 'No Alternatives'?", CESifo Forum, ifo Institute - Leibniz Institute for Economic Research at the University of Munich, vol. 13(01), pages 03-09, April.
- Jones E. (2017). "The "eurobond" proposal: A challenging path towards integration". FUNCAS Sefo, 6(5) <http://www.sefofuncas.com/pdf/033art02.pdf>.
- Kara A., Macchiarelli C., Giacomini R. (2020). "Once the dust settles, supporting emerging economies will be the challenge", LSE COVID19 Blog <https://blogs.lse.ac.uk/covid19/2020/05/11/once-the-dust-settles-supporting-emerging-economies-will-be-the-challenge/>.
- Lagarde C. (2020). "Marking 70 years since the Schuman Declaration", Speech at the European University Institute's State of the Union Conference, 8 May.
- Macchiarelli C. (2016). "European banking union", *The New Palgrave Dictionary of Economics*. Online Edition. Eds. Steven N. Durlauf and Lawrence E. Blume. Palgrave Macmillan.

- Macchiarelli C., Monti M. (2018) "The euro-area denominated payment systems and the conduct of monetary policy: Some considerations ahead of Brexit", Monetary Policy Dialogue, European Parliament, IP/A/ECON/2018-01, January.
- Macchiarelli C., Monti M., Wiesner C., Diessner S. (2020). "The ECB Between Financial Crisis and Populisms", Palgrave MacMillan, forthcoming.
- Maggiori M., Neiman B., and Schr J. (2019). "The Rise of the Dollar and Fall of the Euro as International Currencies", American Economic Review P&P, 109: 521–526.
- Naisbitt B., J. Boshoff, D. Holland, I. Hurst, A. Kara, I. Liadze, I. C. Macchiarelli, X. Mao, P. Sánchez Juanino, C. Thamotheram, K. Whyte (2020). "Prospects for the World Economy", National Institute Economic Review, 252, Cambridge University Press, May.
- OECD (2020), "Tax and fiscal policy response (COVID-19)", April 15 [https://read.oecd-ilibrary.org/view/?ref=128\\_128575-o6raktc0aa&title=Tax-and-Fiscal-Policy-in-Response-to-the-Coronavirus-Crisis](https://read.oecd-ilibrary.org/view/?ref=128_128575-o6raktc0aa&title=Tax-and-Fiscal-Policy-in-Response-to-the-Coronavirus-Crisis).
- Pisani-Ferry J., Posen A. S. (2009). "The Euro at Ten: The Next Global Currency". Peter G. Peterson Institute for International Economies.





# Can the Euro Dethrone the US Dollar as the Dominant Global Currency? Not so Soon, if Ever

Marek DABROWSKI



### **Abstract**

The euro is the second most important global currency after the US dollar. However, its international role has not increased since its inception in 1999. The private sector prefers using the US dollar rather than the euro because the financial market for US dollar-denominated assets is larger and deeper; network externalities and inertia also play a role. Increasing the attractiveness of the euro outside the euro area requires, among others, a proactive role for the European Central Bank and completing the Banking Union and Capital Market Union.

This document was provided by the Policy Department for Economic, Scientific and Quality of Life Policies at the request of the committee on Economic and Monetary Affairs.

## CONTENTS

<b>LIST OF ABBREVIATIONS</b>	<b>50</b>
<b>EXECUTIVE SUMMARY</b>	<b>52</b>
<b>1. INTRODUCTION</b>	<b>53</b>
<b>2. INTERNATIONAL ROLE OF THE EURO (DATA ANALYSIS)</b>	<b>54</b>
2.1. Composite index of the international role of the EUR	54
2.2. The EUR as an official reserve currency	55
2.3. The role of the EUR in international financial transactions	56
2.4. The use of EUR cash outside the euro area	59
2.5. The role of the EUR in trade invoicing and the international payment system	60
2.6. Summary of empirical findings: the EUR as the second most important world currency	61
<b>3. FACTORS DETERMINING DEMAND FOR INTERNATIONAL CURRENCIES</b>	<b>62</b>
3.1. Determinants of a currency's global dominance – a recurrent subject of academic debate	62
3.2. Factors that can facilitate a currency's international role	63
3.3. Private sector preferences versus government policy choices and decisions	64
3.4. Currency stability	64
3.5. Size, depth and legal infrastructure of financial markets	67
3.6. Network externalities and the power of incumbency	68
3.7. Size of the host economy and its currency area	69
<b>4. BENEFITS AND COSTS OF INCREASING THE INTERNATIONAL ROLE OF EURO</b>	<b>71</b>
4.1. Benefits coming from the international role of the EUR	71
4.2. Disadvantages related to the international role of EUR	72
<b>5. SUMMARY AND CONCLUSIONS</b>	<b>74</b>
<b>REFERENCES</b>	<b>75</b>

## LIST OF ABBREVIATIONS

<b>AUD</b>	Australian dollar
<b>BIS</b>	Bank for International Settlements
<b>CAD</b>	Canadian dollar
<b>CLS</b>	Continuous Linked Settlement
<b>CHF</b>	Swiss franc
<b>CPI</b>	Consumer Price Index
<b>EA</b>	Euro area
<b>ECB</b>	European Central Bank
<b>EIB</b>	European Investment Bank
<b>ESM</b>	European Stability Mechanism
<b>EU</b>	European Union
<b>EUR</b>	Euro
<b>Fed</b>	Federal Reserve Board (of the United States)
<b>GBP</b>	British pound (pound sterling)
<b>GDP</b>	Gross Domestic Product
<b>GFC</b>	Global financial crisis
<b>GG</b>	General government
<b>HICP</b>	Harmonised Index of Consumer Prices
<b>IMF</b>	International Monetary Fund
<b>JPY</b>	Japanese yen
<b>p.p.</b>	Percentage points
<b>PPP</b>	Purchasing power parity
<b>QE</b>	Quantitative Easing

<b>RMB</b>	Renminbi
<b>SDR</b>	Special Drawing Rights
<b>SWIFT</b>	Society for Worldwide Interbank Financial Telecommunication
<b>UK</b>	United Kingdom (of Great Britain and Northern Ireland)
<b>US</b>	United States (of America)
<b>USD</b>	United States dollar
<b>WWI</b>	First World War (1914-1918)
<b>WWII</b>	World War II (1939-1945)

## EXECUTIVE SUMMARY

- **Before the introduction of the euro (EUR) in 1999, there were expectations that it would play an important global role and become a serious competitor to the US dollar (USD).** This happened only in part. The EUR is a strong regional currency in the European Union (EU) and its neighbourhood and the second global currency, far behind the USD. Despite several economic and political shocks, the USD has managed to sustain its leadership position since WWII.
- **Historically, after initial moderate gains in the early 2000s, the global position of the EUR began to weaken in 2006, according to most available metrics.** By the end of the 2010s, the EUR had a similar international weight as at its inception.
- **The international role of the EUR is uneven across different segments of the financial market and its various functions.** It is more important in the international payment system, the deposit market and in creating the international reserves of central banks. It is less important in the debt securities market and other segments of the stock market.
- **The demand for international currencies is determined largely by private sector preferences.** The political or geopolitical preferences of governments and international institutions may correct them only marginally. In turn, private sector preferences depend on the size, depth and sophistication of the financial market for a given currency, its legal and institutional infrastructure and the perception of currency's long-term stability (economic and political). Network externalities and incumbent power also play a very important role because changing the dominant currency is a costly and lengthy process for market participants.
- **Since 2018, the European Commission has declared its desire to increase the international role of the EUR, partly as a reaction to the protectionist and unilateral measures of the Trump administration in the United States.** The European Central Bank (ECB), which was rather sceptical of promoting a broader use of the EUR outside the euro area (EA), also changed its attitude towards more proactive. However, EU governing bodies must draw lessons from the history of the international monetary system, which tells us that changes in the global monetary standard and dominant currency are rare, happen only as a result of extraordinary shocks like world wars or global economic crises and take several decades to be completed.
- **Realistically, a plan to increase the international role of the EUR cannot expect to challenge the dominant role of the USD but would only allow for a limited increase in the share of the EUR in official reserve assets and trade and financial transactions.** However, even such a moderate goal would take several years to be accomplished and would require several reforms within the EA and EU – specifically, completing the Banking Union and Capital Market Union to deepen and fully integrate the financial market in Europe.

## 1. INTRODUCTION

Just before the launch of the common currency project in Europe, there were optimistic expectations that the euro (EUR) would play an important global role and could become a serious competitor to the US dollar (USD) (see e.g. Bergsten, 1997; Mundell, 1998; Portes and Rey, 1998). However, this happened only partly. A decade later, Chinn and Frankel (2008) predicted that the EUR may overtake the USD as the leading international reserve currency in 2015, which never happened. The USD has remained the dominant international reserve currency and the dominant currency in private trade and financial transactions (ECB, 2019). Although the EUR has the status of a global currency, it occupies the second position, behind the USD, according to all available metrics.

For the first 20 years of its existence, the international role of the EUR was not a matter of concern for European Union (EU) governing bodies or the European Central Bank (ECB). The ECB's official position could be interpreted as a lack of interest or even reluctance to increasing its role (see Eichengreen et al., 2018, p. 173). The situation started to change with the 2018 State of the Union Address in which President of the European Commission Jean-Claude Juncker called for doing more '*...to allow our single currency to play its full role on the international scene.*' (Juncker, 2018). This was put in the context of strengthening Europe's sovereignty and, most likely, was a reaction to the increasing incidences of protectionism and unilateralism of the US administration under President Donald Trump (Sandbu, 2019). The importance of increasing the international role of the EUR has been confirmed by the President of the newly appointed European Commission, Ursula von der Leyen (2019).

While the political or geopolitical goal of these declarations seems to be clear, there are at least three questions to be answered. First, is accomplishing such a goal feasible, at least in the foreseeable future? Second, what should be done to achieve this goal – that is, what factors determine the actual global position of individual currencies? And third, what are the potential costs and benefits of increasing the international role of the EUR? Answering each of these questions requires an economic rather than a political analysis.

Responding to the request of the European Parliament's Committee on Economic and Monetary Affairs, this briefing paper attempts to answer the above three questions. The paper's structure reflects their logical sequence. In Section 2, we analyse the international role of the EUR according to the various available metrics. In Section 3, we discuss the factors which determine the demand for an international currency. In Section 4, we try to assess the potential costs and benefits of increasing the international role of the EUR. Section 5 contains a summary of our discussion.

Our working hypothesis is that while the various policy measures undertaken by EU governing bodies and the ECB may increase the global use of the EUR, it has no chance to overtake the dominant role of the USD in the foreseeable future.

The analytical narrative, which is supported by a simple statistical analysis, is the dominant methodological approach in our study. We use statistical data from the ECB, Eurostat and the International Monetary Fund (IMF).

When we write about the 'international' role of the EUR, we mean its role beyond the borders of its statutory jurisdiction – that is, beyond euro area (EA) countries.

## 2. INTERNATIONAL ROLE OF THE EURO (DATA ANALYSIS)

In this section, we analyse the available statistical data, primarily the data published in ECB (2019), which are based on the ECB's own statistical sources and those of the IMF and the Bank for International Settlements (BIS). The data illustrate various aspects of the international role of the EUR. Our analysis covers the period of 1999-2018 or a shorter period if the data for the full 20 years are not available. In Subsection 2.1, we discuss changes in the composite index of the international role of the EUR computed by the ECB. Subsection 2.2 deals with the EUR as the official reserve currency. In Subsection 2.3, we analyse the role of the EUR in various types of international financial transactions. In Subsection 2.4, we look at the use of EUR cash outside the EA. Subsection 2.5 is devoted to the role of the EUR in trade invoicing and the international payment system. Subsection 2.6 contains a summary of our empirical analysis.

### 2.1. Composite index of the international role of the EUR

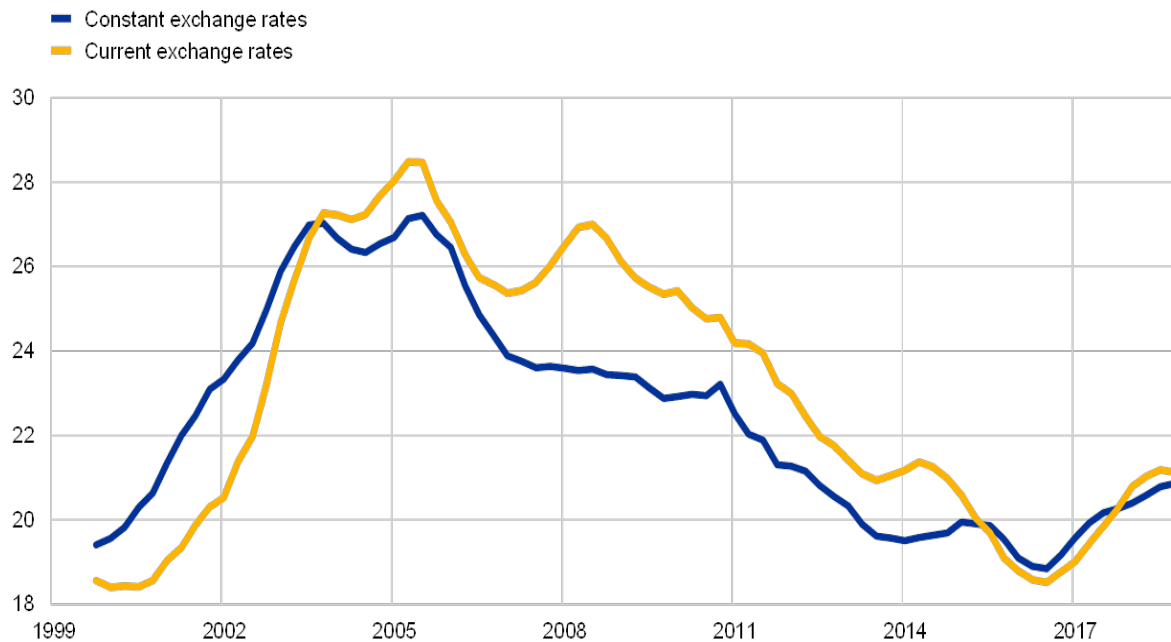
The ECB has computed the composite index of the international role of the EUR (see ECB, 2019, Chart 1, p. 5). It is an arithmetical average of several detailed indicators, part of which will be discussed in the subsequent subsections: the shares of the EUR at constant or current exchange rates (depending on availability) in stocks of international bonds, loans by banks outside the EA to borrowers outside the EA, deposits with banks outside the EA from creditors outside the EA, foreign exchange settlements, global foreign exchange reserves and the share of the EUR in exchange rate regimes globally.

Clearly, the construction of such a composite index may raise a methodological debate as it gives equal weight to various detailed metrics of various importance and also disregards the potential cointegration of some of them. For example, the share of the EUR in the official international reserves of central banks may be dependent, to some degree, on the role of the EUR as an anchor currency in exchange rate regimes. There are also other problems, such as the varying frequency in publishing detailed data and adding stocks to flows. Nevertheless, with all of these methodological reservations, the composite index can serve as a useful introduction to an analysis of detailed metrics.

Figure 1 presents the changes in the composite index since the beginning of 1999 – that is, the launch of the common currency project. During the first seven years of its existence, the index increased steadily – cumulatively by 8 percentage points (p.p.) in constant exchange rates and by 10 p.p. in current exchange rates (between 2003 and 2008, the EUR appreciated substantially against the USD – see Subsection 3.4). Extrapolation of this increasing trend led to optimistic forecasts that predicted the possibility of the EUR overtaking the USD as the dominant reserve currency (see Chinn and Frankel, 2008).



Figure 1: Composite index of the international role of the EUR, 1999-2018, % of total stocks/ flows, at current and Q4 2018 exchange rates; four quarter moving averages



Source: ECB (2019), Chart 1, p. 5.

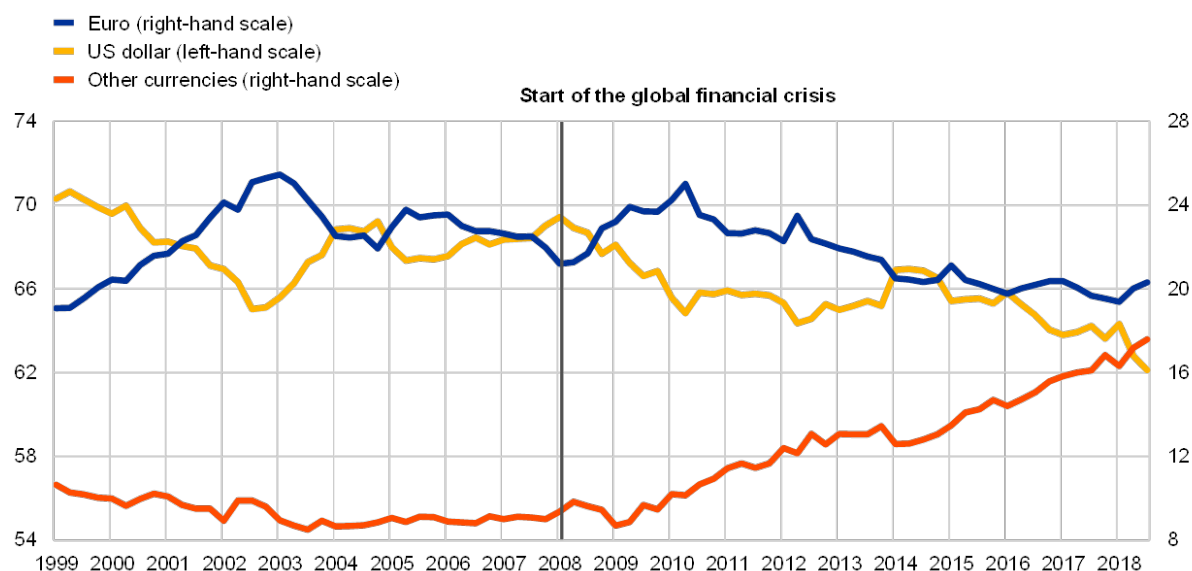
However, this did not happen. After reaching its highest share in 2006, the international role of the EUR started to diminish, and this tendency continued over the next 11 years, both in constant and current exchange rates. Broadly speaking, by 2016 it had returned to its starting share from 1999, reversing all gains made in the meantime. In 2017-2018, the composite index demonstrated some improvement.

## 2.2. The EUR as an official reserve currency

Figure 2 provides us with data on the role of the EUR as an official reserve currency – that is, the currency in which central banks hold their international reserves. The shape of the curve, which shows the share of the EUR in the total international reserves of central banks (at constant Q4 2018 exchange rates to eliminate the impact of fluctuations in exchange rates), is somewhat different than that of the composite index (see Figure 1).

The share of the EUR in global international reserves shows fewer fluctuations than the composite index – between 19 to 25% of the total and two peaks – in 2003 and 2010. Interestingly, the share of the USD decreased from 70 to 62% in the examined period of 1999-2018, with some fluctuations in the meantime. Consequently, the share of other currencies (including the Japanese yen [JPY], British pound [GBP], Chinese renminbi [RMB], Swiss franc [CHF], Australian [AUD] and Canadian [CAD] dollars) has increased by 8 p.p. since 2009. If this trend continues, it can suggest a more diversified portfolio for official reserves in the future.

Figure 2: Shares of EUR, USD and other currencies in global official reserves, 1999-2018, % of total stock, at constant Q4 2018 exchange rates.



Source: ECB (2019), Chart 3, p. 8.

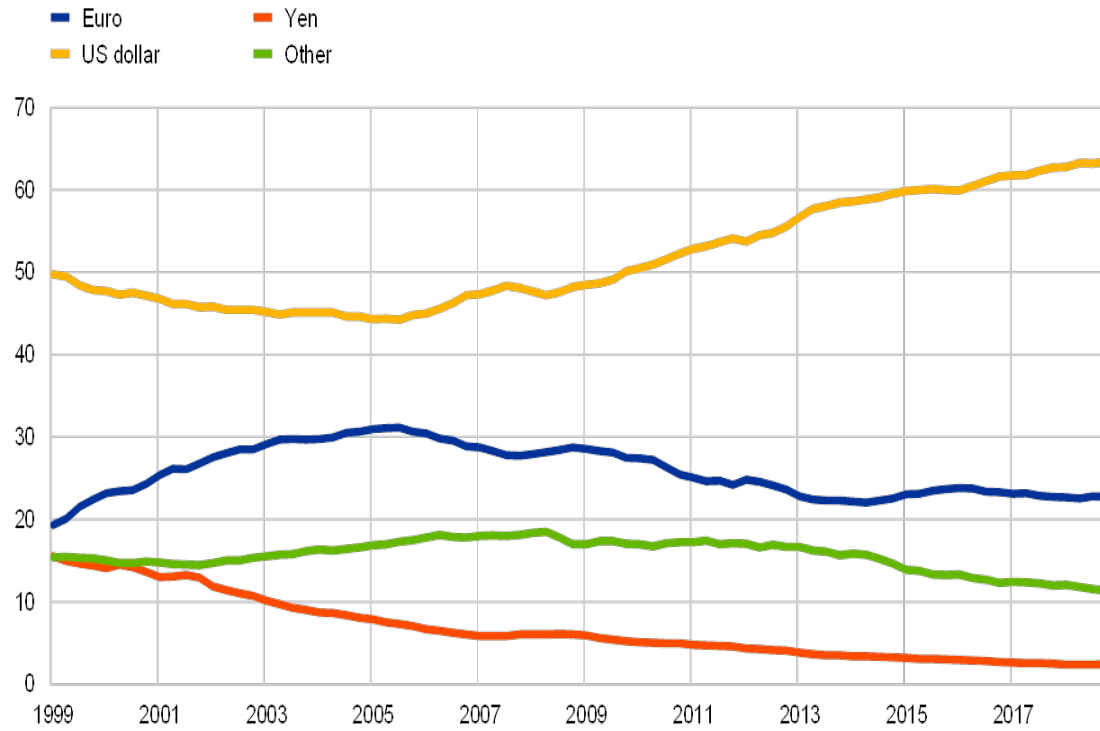
### 2.3. The role of the EUR in international financial transactions

Among the various types of international financial transactions and instruments, we will analyse those for which there are available comparable statistical data.

Figure 3 presents the shares of the major currencies in the stock of outstanding international debt securities for the period of 1999-2018 (at constant Q4 2018 exchange rates). The role of the USD is absolutely dominant here and has been steadily increasing since 2006 at the cost of the EUR, JPY and other currencies. While at the launch of the EUR, the gap was 2.5-fold in favour of the USD, it increased to more than 3-fold in 2018.

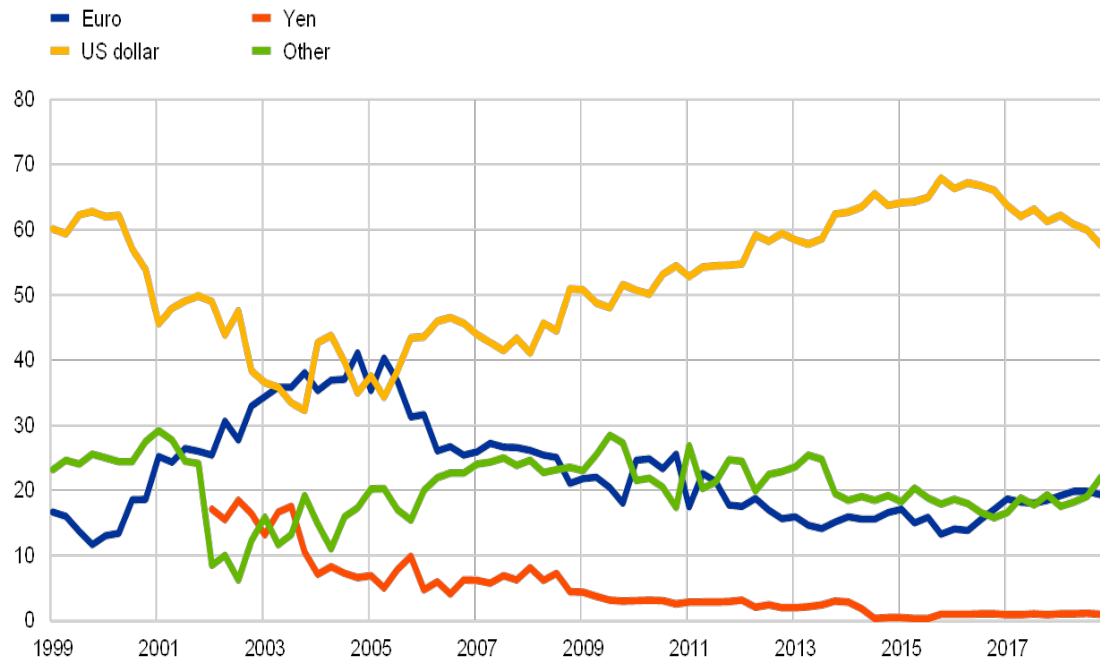
The picture looks a bit different for international loans (Figure 4) and quite different for international deposits (Figure 5). In both cases, the USD plays a dominant role, similar to debt securities (Figure 3), but the sizes of the gap and the dynamics differ. The share of international loans denominated in EUR grew rapidly from its inception until 2005, while the share of loans denominated in USD declined. As a result, shares of both equalled approximately 40% of the total around 2004-2005. However, since 2006, this trend was reversed in favour of the USD. In 2016, the share of the USD approached 70% and the share of EUR-denominated loans fell below 20%. In 2017-2018, the gap between the two major currencies started to narrow again but remained substantial (in favour of the USD). In the meantime, the share of JPY-denominated loans declined to almost zero, while the share of other currencies has fluctuated around 20% since 2006.

Figure 3: Currency composition of outstanding international debt securities, 1999-2018, % of total, at Q4 2018 exchange rates



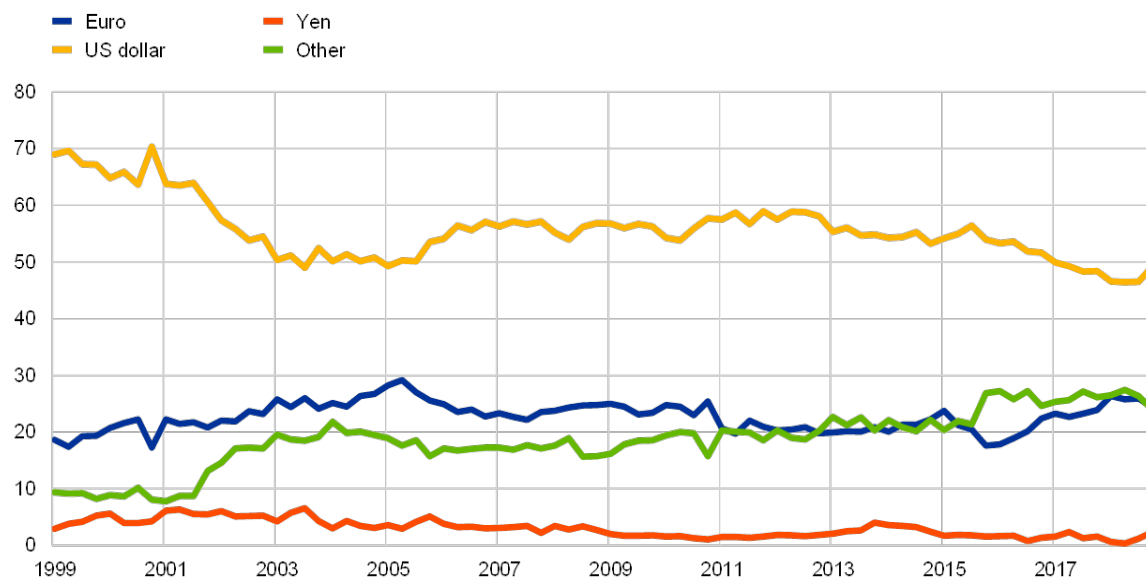
Source: ECB (2019), Chart 10, p. 20.

Figure 4: Currency composition of outstanding amounts of international loans, 1999-2018, % of total, at Q4 2018 exchange rates



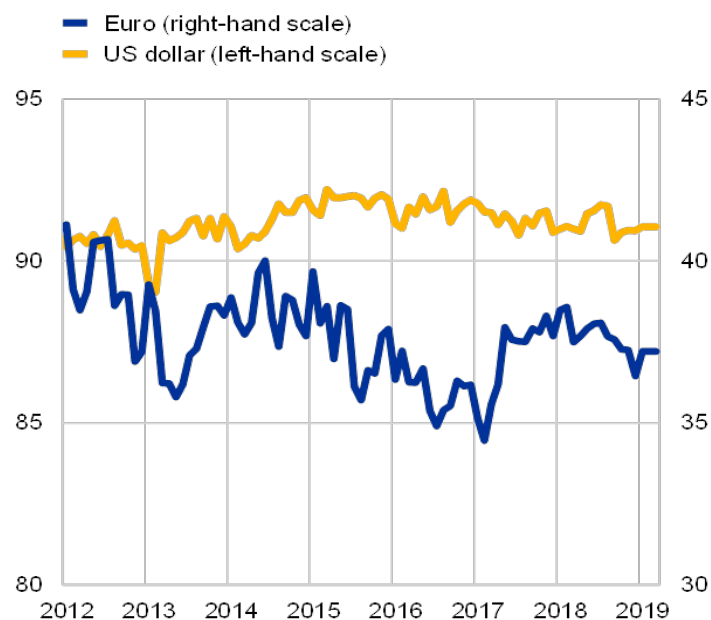
Source: ECB (2019), Chart 16, p. 26.

Figure 5: Currency composition of outstanding amounts of international deposits, 1999-2018, % of total, at Q4 2018 exchange rates



Source: ECB (2019), Chart 17, p. 27.

Figure 6: Share of foreign exchange transactions settled in CLS, % of total



Note: The shares add to 200% because forex transactions involve two currencies

Source: ECB (2019), Chart 9, p. 8.

Finally, the share of EUR foreign-exchange transactions settled by CLS (Continuous Linked Settlement)<sup>1</sup> is less than half of that for USD, and the gap between both currencies increased during the examined period of 2011-2019.

<sup>1</sup> The CLS is a global inter-banking system for settlement of foreign exchange.

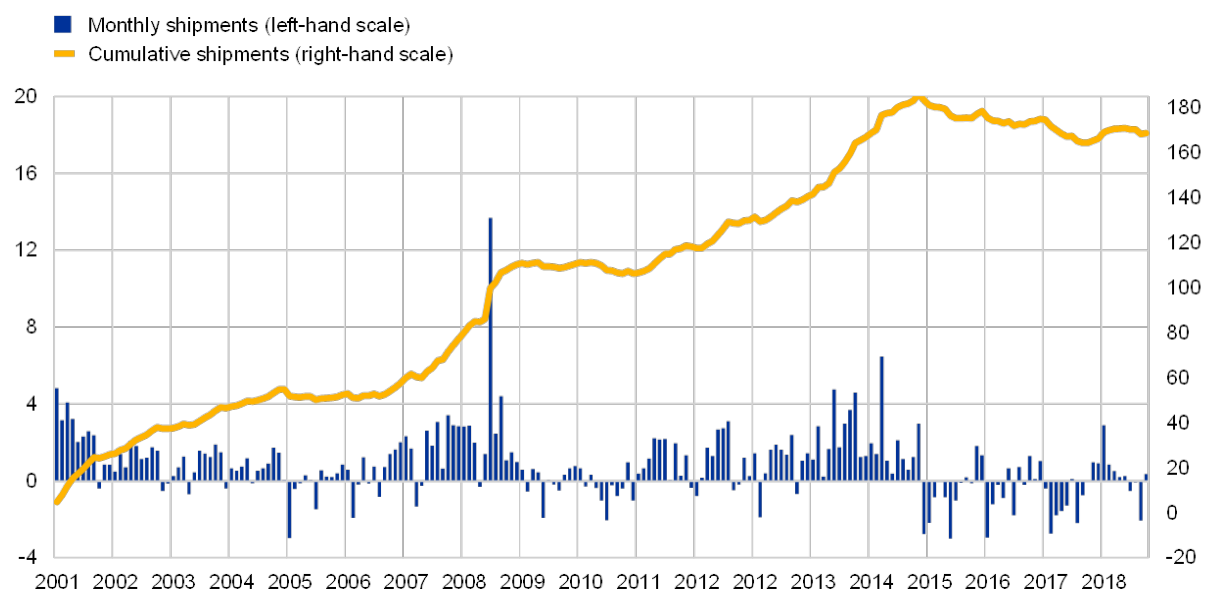
Regarding deposits (Figure 5), the share of the USD has been declining steadily (by approximately 20 p.p. between 1999 and 2018) and the same concerns the JPY; the share of the latter is now close to zero. The share of the EUR fluctuated between 20-30%, while the cumulative share of other currencies increased and is now at the same level as the EUR.

## 2.4. The use of EUR cash outside the euro area

EUR banknotes and coins are used outside the EA for both transaction purposes and as a store of value. First, two European countries – Kosovo and Montenegro – use EUR as their own domestic currency (unilateral official euroisation). The same concerns four European microstates (Andorra, Holy See, Monaco and San Marino) and the overseas territories of France and the Netherlands. Second, using EUR cash is a practical solution for tourism and travel as well as for conducting some other cross-border transactions. Third, using EUR is often a form of currency substitution which results from limited trust in domestic currencies (spontaneous euroisation).

For obvious reasons, both the flows and stock of EUR cash outside the EA cannot be measured precisely. Rough estimates can be conducted only in an indirect way, for example, using the statistics on net shipments of EUR banknotes to destinations outside the EA (Figure 7). According to ECB (2019) estimates, the highest stock of EUR banknotes outside the EA – amounting to approximately EUR 180 billion – was reached in 2015. Geographically, it is predominantly concentrated in the closest EU neighbourhood (ECB, 2019, Chart 21, p. 25).

Figure 7: Net monthly shipments of EUR banknotes to destinations outside the EA (EUR billions; adjusted for seasonal effects), 2001-2018



Source: ECB (2019), Chart 20, p. 34.

A comparison with other currencies – for example, the USD – is even more difficult. According to Goldberg (2010), the estimated stock of USD cash outside US boundaries amounted to 580 billion in March 2009. Comparing this to the total USD cash in circulation, which amounted to 853.2 billion at the end of 2008<sup>2</sup>, it was 68%. If the same relationship held at the end of 2018, it would mean that the stock

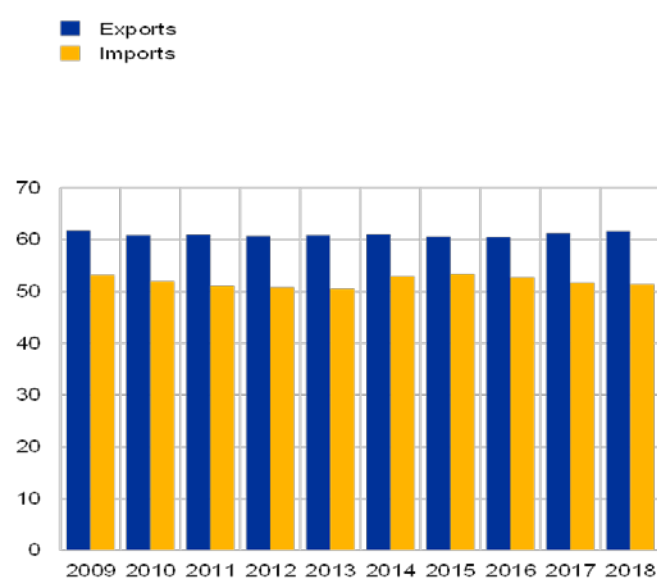
<sup>2</sup> Source: [https://www.federalreserve.gov/paymentsystems/coin\\_currircvalue.htm](https://www.federalreserve.gov/paymentsystems/coin_currircvalue.htm).

of USD cash outside the United States amounted to 1,137 billion (the total stock of USD cash in circulation amounted to 1,671.9 billion). In other words, the stock of USD cash outside the United States was approximately six times larger than the stock of EUR cash outside the EA.

## 2.5. The role of the EUR in trade invoicing and the international payment system

Although the share of EA global trade is approximately 2.5 times higher than that of the United States<sup>3</sup>, the USD is used more frequently as an invoicing currency than the EUR, especially in the trade of basic commodities such as oil. The ECB (2019, Chart 18, p. 28) provides statistics on the share of the EUR as an invoicing currency in extra-EA exports and imports of goods (Figure 8).

Figure 8: Share of EUR in invoicing of extra-EA trade in goods, % of total, 2009-2018



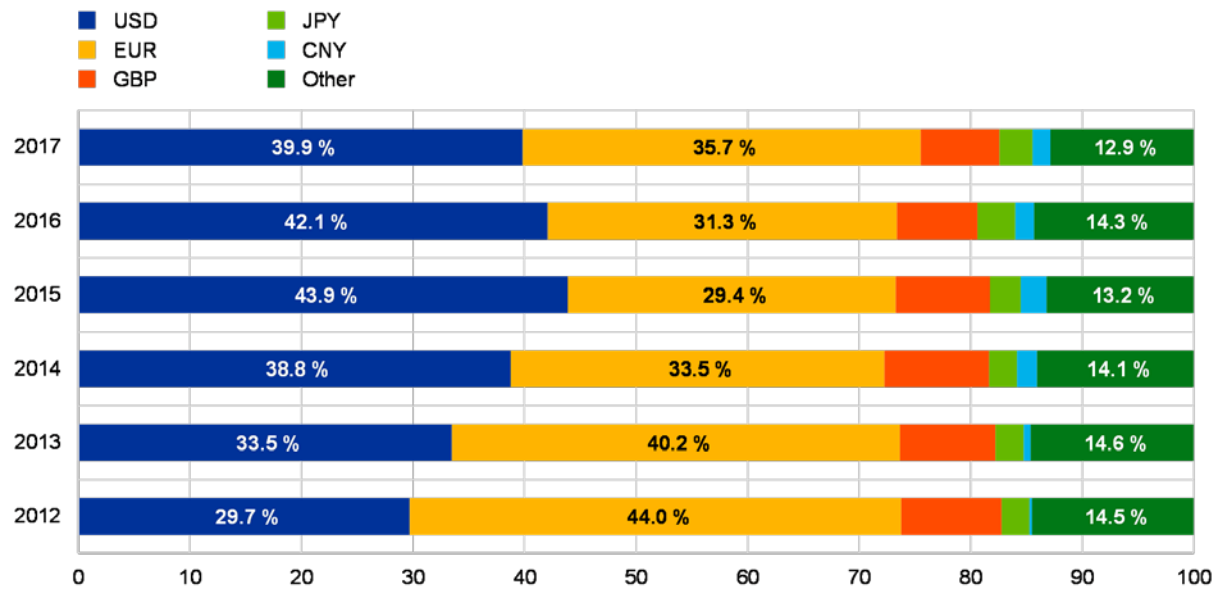
Source: ECB (2019), Chart 18, p. 28.

It appears fairly stable since 2009, when data begin, with approximately 60% of extra-EA exports and slightly over 50% of imports being invoiced in EUR. That is to say, not all EA external trade is invoiced in EUR. This relates, for example, to EA trade with the United States or with emerging market and developing economies where the USD dominates as the invoicing currency. In the case of trade between third countries, the EUR is rarely used as an invoicing currency. Overall, Gopinath (2015) estimated the share of EUR invoicing in the global trade in goods at around 30% while the share of USD invoicing stayed at around 40%.

The share of EUR in global payments registered by the Society for Worldwide Interbank Financial Telecommunication (SWIFT) is higher than that estimated in respect to trade invoicing but less stable over time (Figure 9). Nevertheless, the importance of the EUR is here comparable with the USD. It is worth noting, however, that payments registered by SWIFT concern more than just trade transactions and settlements.

<sup>3</sup> The EA accounted for 26.2% of global exports of goods and services in 2019 while the United States accounted for only 10.2% (WEO, 2020, Table A in the Statistical Appendix).

Figure 9: Currency composition of global payments, % of total, 2012-2017



Source: ECB (2018), Chart 7, p. 11.

## 2.6. Summary of empirical findings: the EUR as the second most important world currency

The empirical analysis conducted in Subsections 2.1-2.5 leaves no doubt that the EUR enjoys the status of the world's second most important currency after the USD. However, the leading position of the USD seems to remain unchallenged despite expectations that the launch of the EUR project may undermine USD dominance (see Section 1 and Subsection 3.1). Furthermore, while the international importance of the common European currency gradually increased in the early years of its operation (and, therefore, fuelled hopes for its potential global dominance in the future), this trend was largely reversed after 2005. Taking into consideration this unfavourable trend, Ilzetzki et al. (2020) discuss the underperformance of the EUR in its international role and how it appears to be '*punching below its weight*'. In Section 3, we will analyse the factors which allow the USD to continue its leading position and prevent the EUR from overtaking the USD's role.

The detailed analysis conducted in Subsections 2.2-2.5 demonstrates that the international importance of the EUR is uneven across different segments of the financial market and its various roles. The EUR is more important in the international payment system, the deposit market and in creating international reserves in central banks. It is less important in the debt securities market and in other segments of the stock market.

### 3. FACTORS DETERMINING DEMAND FOR INTERNATIONAL CURRENCIES

In this section, we will discuss the factors that may determine the demand for international currencies both from a historical and a contemporary perspective. Subsection 3.1 contains a review of an academic debate on the factors that may underpin a currency's global dominance. In Subsection 3.2, we determine the list of factors for the purpose of the subsequent detailed analysis. In Subsection 3.3, we discuss the role of private sector preferences versus government policies and regulations. Subsection 3.4 addresses the question of confidence in currency stability. In Subsection 3.5, we analyse the size, depth and legal infrastructure of financial markets as a determinant of a global currency choice. Subsection 3.6 deals with the question of network externalities and incumbent inertia. In Subsection 3.7, we look at the size of a host economy, its trade potential and the size of the existing currency area.

#### 3.1. Determinants of a currency's global dominance – a recurrent subject of academic debate

The academic debate on the factors which may help a currency obtain or lose the status of a dominant one has been conducted several times and in various contexts: historical, contemporary, and *ex ante* (predicting what can happen in the future).

One of the most popular topics, especially in economic history literature, concerned the circumstances that led to the replacement of the GBP with the USD as the dominant global currency – why and how it happened, and how much time this process took (see e.g. Eichengreen, 2005).

The introduction of the EUR in 1999 and the initial years of its functioning provided another impulse to discuss this issue, in an *ex ante* perspective (see Lim [2006] for an overview of this debate). As mentioned in Section 1, there was a group of 'optimists' who predicted that the EUR may overtake the USD – see e.g. Bergsten (1997), Mundell (1998), Portes and Rey (1998), and Chinn and Frankel (2008). However, there were also 'pessimists' who claimed that although the EUR would be an important regional currency, it would not challenge the dominant global role of the USD (Cooper, 1997; McKinnon, 1998; Truman, 2005).

Another round of debate – more policy-oriented and of a normative character – took place in the aftermath of the global financial crisis (GFC) of 2007-2009 and was triggered by the substantial depreciation of the USD between 2003 and 2008 and the rapid increase of the US current account deficit. Large emerging market economies – in particular, China and Russia – were both concerned with the loss of value of their international reserves, which were held mainly in USD, and driven by geopolitical ambitions. As a result, the idea to gradually replace the USD with the IMF's Special Drawing Rights (SDR) as the global reserve currency was presented by the Governor of the People's Bank of China and backed by the governments of Russia and Brazil in Spring 2009. It was also the subject of the work of the so-called Stiglitz Commission (Stiglitz, 2010). Regardless of its merit, the proposal to replace the USD with SDR did not take into consideration the preferences of the private sector (Subsection 3.3), network externalities and incumbent inertia (Subsection 3.6), and other market-related factors (Carbaugh and Hendrick, 2009; Dabrowski, 2010).

Since 2018, the increasing protectionist and unilateralist tendencies in US foreign and economic policy together with the EU's political desire to increase the international role of the EUR (Section 1) have triggered a new round of both academic and policy debate on the threats to the dominant role of the USD (see e.g. The International Economy, 2020). The twentieth anniversary of the introduction of the EUR has served as an additional impulse to this debate (see Ilzetzki et al., 2020).



### 3.2. Factors that can facilitate a currency's international role

Among the many specifications concerning the factors that may facilitate the international role of a currency, we would like to concentrate on two of them: Lim (2006) and Efstathiou and Papadia (2018).

Lim (2006) identifies five major facilitating factors:

- Size of the host economy;
- A well-developed financial sector;
- Confidence in the currency's value;
- Political stability; and
- Network externalities.

Efstathiou and Papadia (2018) offer a list of factors that is longer but not very different:

- Size of the country (in terms of either GDP or volume of international trade) as a proxy for network externalities and supply of 'safe' assets;
- Development of the financial market;
- Financial stability of the issuing country;
- A policy of the issuing country to promote the international use of its currency;
- Freedom of capital movements; and
- Political and military power of the issuing country.

However, as the main focus of our analysis is the relative international position of the EUR versus the USD, in the following subsections we will concentrate on only the few factors that may play, in our opinion, a crucial role in determining the demand for these currencies. We will also group them differently than the above-quoted authors.

Some of the above-mentioned facilitating factors are obvious, such as freedom of capital movement, and all currencies that play an international role meet this precondition<sup>4</sup>. On the other hand, we do not believe that the geopolitical and military power of the issuing country can play a meaningful role in global currency competition. If it played such a role, it would mean that the Russian and Chinese currencies would have a chance for global status (which is very far from reality). On the contrary, the CHF, which has played an international (although not dominant) role and enjoyed the status of a 'safe' currency for a long time is backed neither by the large size of the Swiss economy nor by its geopolitical ambitions and military potential<sup>5</sup>.

As result, we will discuss below the role of the following groups of factors:

- Private sector preferences versus government policy choices and regulations;
- Confidence in the currency's stability;
- Size, depth and legal infrastructure of financial markets;
- Network externalities and incumbent power; and
- Size of the issuing economy and currency area.

<sup>4</sup> Capital controls are one of the reasons why the RMB cannot even pretend to be the dominant world currency in the foreseeable future, despite the rapidly growing potential of the Chinese economy and the increasing share of this currency in the international reserves of central banks, international loans and deposits and trade invoicing, among others (see Section 2).

<sup>5</sup> Switzerland joined the IMF in 1992 and the UN system only in 2002.

### 3.3. Private sector preferences versus government policy choices and decisions

In economies that are predominantly privately owned and market driven, the preferences of private agents in respect to the transaction and investment currency play a crucial role<sup>6</sup>. Governments, via their regulations and policies, may influence and encourage the choices of private agents (banks, enterprises and individuals), but only to some degree. By definition, they have a limited impact on the choices taken by private agents beyond their jurisdiction. In respect to domestic agents, if government regulations go too far, they risk restricting the capital account – or even current account – convertibility of their currencies, and this diminishes the chances of their currencies to play an international role (the case of many emerging market economies, for example, China and India).

There are, of course, policies that can increase the international attractiveness of a given currency, for example, the readiness of a host central bank to offer currency swaps to other central banks to support their international liquidity in times of market stress or by encouraging the use of a currency as an anchor or reserve currency by other central banks (see Subsection 3.7).

Governments may also choose the currency in which they lend and borrow, but they may be constrained in their choice by (i) the preferences of their borrowing and lending counterparts and (ii) the costs of such transactions, especially in the case of borrowing.

Private sector preferences determine, to a large degree, the composition of official reserve assets – that is, the international reserves of central banks. As their major role is backing smooth import purchases and other international payments, their composition should reflect, at least partly, the structure of the currency denomination of trade and financial transactions. If a central bank has larger international reserves, there is more room for composition choice and the ‘excess’ reserves can be invested according to either economic consideration (maximising the rate of return from the invested assets) or political/geopolitical preferences<sup>7</sup>.

Some governments, for example, of oil and other commodity exporters, establish sovereign wealth funds which serve as reserve funds for rainy days and finance investment and lending projects outside the country. As in the case of the international reserves of central banks, their currency composition is driven by a mix of liquidity considerations, the desire to maximise the rate of return on the invested assets and transaction needs (in the case of active lending and investment programmes).

### 3.4. Currency stability

Confidence in the stability of a currency plays a crucial role in private sector choices. It is also an important criterion for central banks and governments in determining the composition of their international reserves. Stability can be interpreted in various ways, for example, as (i) price stability (low inflation); (ii) a stable exchange rate; (iii) central bank independence, its professional competence and monetary policy rules which guarantee the primacy of price stability; (iv) fiscal stability (fiscal balance or low deficit, sustainability of public debt) and the fiscal rules which guarantee this stability; and (v) institutional and political stability, which are preconditions of monetary and fiscal stability. Because all major currency areas have floating exchange rate regimes, exchange rate stability must be interpreted in a more flexible way, as a relative stability – that is, the absence of sharp and substantial fluctuations.

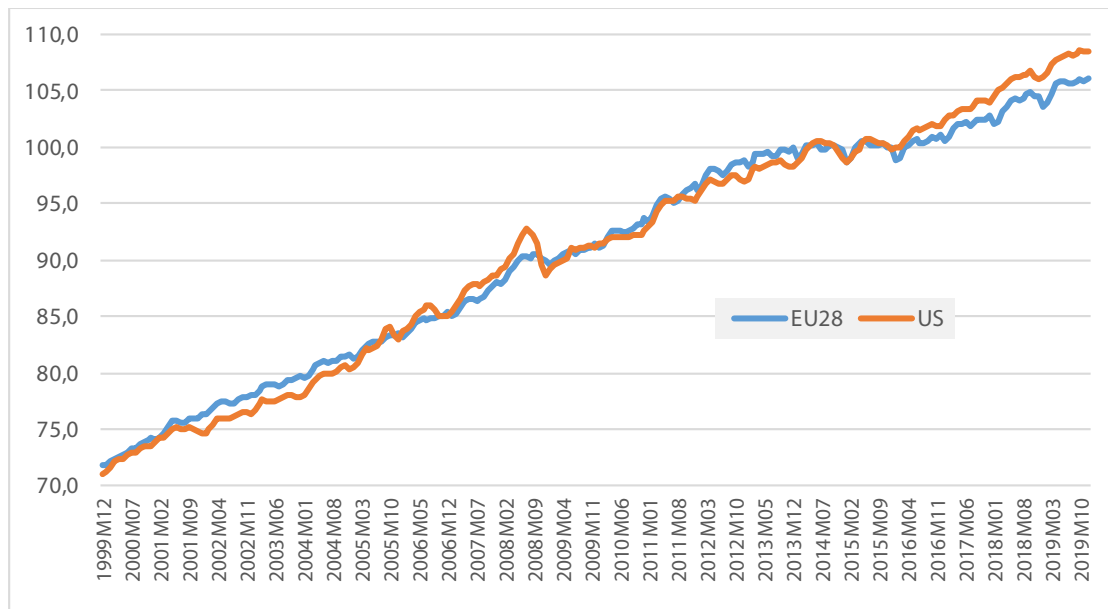
---

<sup>6</sup> This has been acknowledged by the European Commission (2018, p. 6) in its Communication on a stronger international role of the EUR, where it says ‘...The decision to use a currency is ultimately made by market participants’.

<sup>7</sup> Eichengreen et al. (2017) find that geopolitical alliances and sympathies have an impact on the composition of official reserve assets.

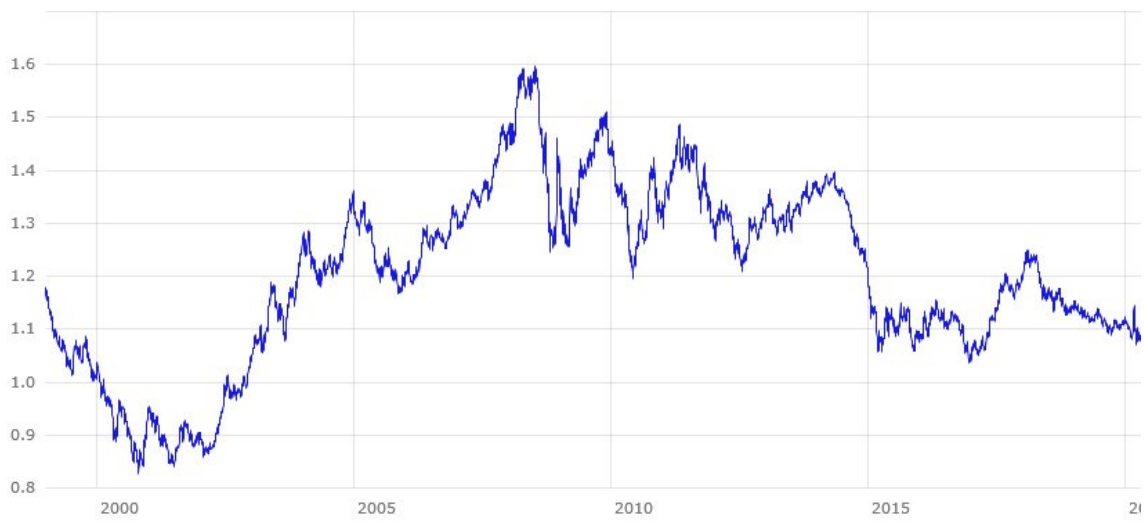
Figure 10 compares inflation performance in the United States and the EU since the end of 1999. The cumulative inflation figures do not differ much, with a slightly slower consumer price increase in the EU, especially since 2015. The degree of the legal and actual independence of the ECB is higher, and its statutory mandate is more concentrated on price stability than that of the US Federal Reserve Board (Fed). However, both central banks operate an inflation targeting framework.

Figure 10: Index of cumulative inflation, EU-28 (HICP) and United States (CPI), Dec. 1999 – Dec. 2019 (2015=100)



Source: Eurostat - G20 CPI all-items - Group of Twenty - Consumer price index (prc\_ipc\_g20).

Figure 11: Exchange rate USD/1 EUR, Jan. 1999 – Apr. 2020



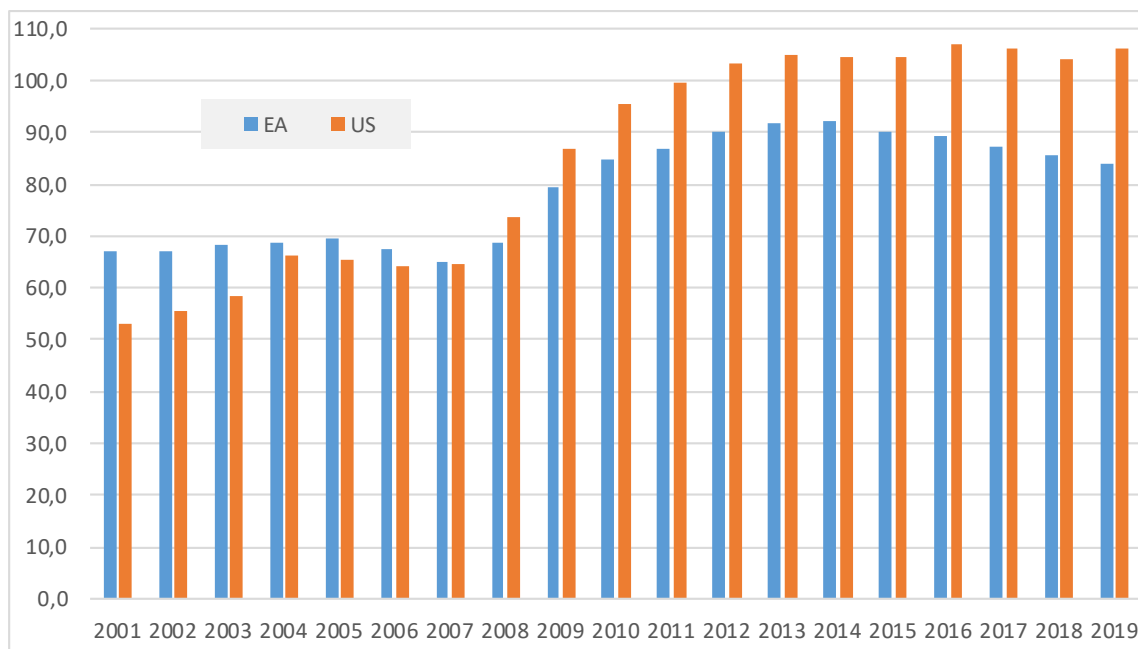
Source: [https://www.ecb.europa.eu/stats/policy\\_and\\_exchange\\_rates/euro\\_reference\\_exchange\\_rates/html/index.en.html](https://www.ecb.europa.eu/stats/policy_and_exchange_rates/euro_reference_exchange_rates/html/index.en.html).

Figure 11 shows the changes in the EUR exchange rate against the USD. Despite fluctuating within a broad range of between 0.8 and 1.6 USD for 1 EUR over the 21-year period, the amplitude of changes

has diminished since 2015 to a narrower band of between 1.05 and 1.25 USD for 1 EUR. Based on the statistics presented in Figure 11, it would be difficult to claim that the EUR experienced any episodes of instability understood as a sudden collapse of its exchange rate. To some degree, the observed fluctuations resulted from asymmetric monetary policy cycles in both currency areas.

Figure 12 presents the gross general government (GG) debt data in the EA and the United States. Although the public debt burden increased substantially in both cases since the GFC, the situation in the EA looked better (before the COVID-19-related shock) as compared to the United States.

Figure 12: GG gross debt in the EA and US, % of GDP, 2001-2019



Source: IMF World Economic Outlook database, October 2019.

However, the EA has a problem with the uneven debt level across Member States. Several of them (Greece, Ireland, Portugal, Spain and Cyprus) were hit by public debt and financial crises in the first half of the 2010s and required external assistance (from the IMF, the European Stability Mechanism [ESM] and the ECB). In 2019, according to IMF World Economic Outlook estimates<sup>8</sup>, the public debt-to-GDP ratio exceeded 100% in four EA countries (Greece – 177%, Italy – 133%, Portugal – 118% and Belgium – 101%) and was close to 100% in a further three countries (France – 99%, Cyprus – 96% and Spain – 96%). The credit ratings of several EA countries were downgraded in the first half of the 2010s (Coere, 2019). Formal fiscal rules both at the EU and national levels are tighter in the EA than in the United States, but are often either breached or circumvented (Dabrowski, 2017).

All these problems in the fiscal policy sphere have led to recurrent speculations on a potential sovereign default in the most indebted EA countries, a perspective which many market participants consider<sup>9</sup> as equal to an exit from the EA. Thus, the potential risk of the EA breakup (which may also be

<sup>8</sup> Source: [https://www.imf.org/external/pubs/ft/weo/2019/02/weodata/weorept.aspx?pr.x=35&pr.y=4&sy=2019&ey=2019&scsm=1&ssd=1&sort=country&ds=.&br=1&c=122%2C941%2C124%2C946%2C423%2C137%2C939%2C181%2C172%2C138%2C132%2C182%2C134%2C936%2C174%2C961%2C178%2C184%2C136&s=GGXWDG\\_NGDP&grp=0&a=](https://www.imf.org/external/pubs/ft/weo/2019/02/weodata/weorept.aspx?pr.x=35&pr.y=4&sy=2019&ey=2019&scsm=1&ssd=1&sort=country&ds=.&br=1&c=122%2C941%2C124%2C946%2C423%2C137%2C939%2C181%2C172%2C138%2C132%2C182%2C134%2C936%2C174%2C961%2C178%2C184%2C136&s=GGXWDG_NGDP&grp=0&a=).

<sup>9</sup> Such a view is wrong because an exit from the EA (i.e. the reintroduction of the national currency) is not economically, legally and operationally easy (Dabrowski, 2015). This is confirmed by the experience of Greece, where in 2015 the left-wing government flirted with

called ‘denomination’ risk) may have a negative impact on the attractiveness of the EUR as an international currency, at least from the time of the GFC.

To be fair, it is worth noticing that US fiscal policy is also not free from political and institutional fragility. The continuous inability of the US Congress to reach a political consensus on fiscal stabilisation has led to rapidly growing public debt since the early 2000s (see Figure 12). The repeated government closures as a result of the lack of agreement between the Administration and Congress to increase the public debt limit has undermined the credibility of US government commitments. In addition, the attack of US President Donald Trump against Fed Chairman Jerome Powell on 23 August 2019 (Hotten, 2019) put under question the readiness of the executive branch of the government to respect the Fed’s independence.

### 3.5. Size, depth and legal infrastructure of financial markets

The size and depth of financial markets, their liquidity, and the variety of the available financial instruments together with their institutional and legal infrastructure play a big role in the choice of an international currency. This is a matter of economies of scale and lower transaction costs (see e.g. McKinnon, 1998; Truman, 2005; Carbaugh and Hendrick, 2009).

In this respect, the EUR is, and always has been, in a disadvantaged position *vis-à-vis* the USD. The EA financial market is less developed, shallower and still very much fragmented along national borders (Coeure, 2019). The world’s largest financial centres, such as Wall Street, the City of London or emerging centres in Asia, are outside the EA and trade largely USD-denominated instruments. The City of London, which has provided a broad spectrum of financial services for the EA and was heavily involved in trading EUR-denominated financial instruments, may cease or limit these activities soon as result of Brexit (unless the post-Brexit trade and economic agreement between the EU and the UK will include the free flow of financial services). This will be an additional blow to the international role of the EUR.

The financial centres in New York, London, Singapore and Hong Kong also benefit from the Anglo-Saxon legal system, which is more business-friendly, especially for financial transactions, than the continental European systems. Some of them also take advantage of lower and simpler taxation and a more flexible labour market than in many EA countries. Legal, regulatory and tax factors, as well as the existence of large financial centres, may also explain the continuous international attractiveness of such non-dominant international currencies as the GBP and CHF.

If EU governing bodies and the ECB want to make progress on improving the international role of the EUR, their primary task should be to complete the Banking Union and Capital Market Union as quickly as possible (see Sapir et al., 2018). This could allow for better integration of the European banking sector and stock market and help expand EUR-denominated financial instruments. And indeed, this is one of the key actions suggested by the European Commission (2018) Communication.

Some authors (Efstathiou and Papadia, 2018; Ilzetzki et al., 2020) also emphasise the role of a sufficient supply of ‘safe’ assets, which is particularly important for a reserve currency role (most central banks stick to restrictive rules on the quality of purchased international assets). Concerning ‘safe’ sovereign assets, the United States has a paradoxical advantage over the EA resulting from its expansionary fiscal policy in the last two decades. The rapidly expanding public debt of the US federal government (see Subsection 3.4) means, in practical financial market terms, a large supply of US Treasury bonds which are still highly rated. In the EA, the supply of ‘safe’ sovereign assets is smaller for four reasons:

---

the idea of reintroducing its national currency but abandoned it in a last-minute decision to return to the negotiating table with the Eurogroup.

- The debt instruments of heavily indebted EA countries were downgraded in the first half of the 2010s (Coere, 2019);
- The countries that continue to enjoy the highest ratings issue relatively fewer debt instruments;
- The possibility to issue 'federal' debt instruments (on an EU level) is limited to specialised institutions such as the ESM or the European Investment Bank (EIB) and incidentally to the European Commission (against the EU budget, which does not exceed 1% of EU GNI); and
- A large part of 'safe' sovereign assets is purchased by the ECB in the framework of quantitative easing (QE) operations.

However, if the United States does not stop the rapid growth of public debt in the near future (which will not be an easy task during and after the COVID-19 pandemic), it will risk a downgrade of its sovereign rating.

### 3.6. Network externalities and the power of incumbency

The concept of *network externalities* is known from microeconomic and management theories. One of its definitions says that it is '*...the increasing utility that a user derives from consumption of a product as the number of other users who consume the same product increases*' (McGee and Sammut-Bonnici, 2015). It applies, among others, to network industries such as telephony and digital services as well as to financial services.

Examples of network externalities may concern either commonly used goods and services that are necessary to create network effects or common technical standards such as, for example, electricity voltage, track gauge or computer software, among others. Accepting the existence of network externalities is not only a precondition of the functioning of many network activities, but it also helps to reduce transaction and operation costs. Common standards can either be set by the regulation of public authorities or created spontaneously by the market – or both.

As already mentioned, the concept of network externalities also applies to the financial market as well as to international economic and financial relations, including international currencies and international financial standards. International currencies help to facilitate trade, payments and other financial transactions, decrease their transaction costs, and minimise operational and investment risk, among others. Historically, the choice of international currency and monetary standards resulted from international agreements (the example of the gold-dollar standard in the Bretton Woods system), but more frequently – from the choices of private agents (Subsection 3.3). Once a sufficiently large number of market players accept a given currency or monetary standard, others would join this choice because, otherwise, they would risk higher transaction and operational costs (e.g. I trade or save in a given currency because my trade and financial partners are doing the same). This mechanism can explain, for example, why the USD is continuously used as an invoicing currency in the highly integrated global commodity markets (where the entire trading and financial infrastructure is USD-based).

The existence of network externalities also causes a far-reaching inertia of the existing monetary system/dominant international currency because changing it would cause too much uncertainty and cost too much. There is also a collective action problem to find a sufficient number of partners who are ready to do the same. Such a systemic inertia is characterised by Carbaugh and Hendrick (2009) as 'the power of incumbency'.

The history of global monetary systems demonstrates several examples of systemic inertia or the power of incumbency. It took two decades between WWI and WWII, including the Great Depression of 1929-1933 and two and a half decades of the Bretton Woods system after WWII to abandon completely the

gold standard (Cesarano, 2009). The dethroning of the GBP (pound sterling) as the dominant currency of the international financial system by the USD also happened gradually as a result of two world wars, the Great Depression and the demise of the British empire (Eichengreen, 2005).

Since the collapse of the Bretton Woods system in 1971 (which, in fact, was a sort of crisis of the US currency), there has been continuous speculation (some of which has already been mentioned in this paper) about the imminent fall of the USD as the dominant currency. However, this has not happened yet despite the many shocks to the existing system (the most powerful shock was generated by the GFC in 2007-2009) and the mixed fortunes of the US economy. This seems to be the best evidence of the strength of network externalities and incumbent power.

### 3.7. Size of the host economy and its currency area

The size of the host economy is often considered as the obvious criterion of the international potential of a given currency and is included in the specifications of factors that determine its global position (Subsection 3.2).

Let us look at the host economies of two major currencies. In 2019, the United States accounted for 15.1% of GDP in purchasing power parity (PPP) terms and the EA for 11.2% (WEO, 2020, Statistical Appendix, Table A). At first glance, it looks like the relative size of both economies confirms the significance of this criterion. It would look even better if we used current exchange rates instead of PPP<sup>10</sup>. However, a more detailed analysis raises a number of questions. First, the share of the US and EA economies in world GDP has diminished since the 1980s in favour of the emerging market economies in Asia. However, neither China (the largest world economy in PPP terms in 2019) nor India (the fifth largest economy) have the chance to upgrade their currencies to a truly international/global status in the foreseeable future (see Subsection 3.3). Second, there are smaller (the UK) or much smaller (Switzerland) economies that have managed to sustain or even advance the international (but not dominant) status of their currencies. Third, at the end of the 19<sup>th</sup>/early 20<sup>th</sup> century, the UK – then the host economy of a global currency (the GBP) – was a smaller economy in relative terms (always below 10% of global GDP) than the contemporary United States or EA. The same concerned the post-WWII West Germany, which was the host of the second most important world currency – the German Mark. Fourth, the small difference in the size of the US and EA economies does not explain the much larger difference in the international roles of the USD and EUR presented in Section 2.

To fully understand the ‘size’ factor, it seems necessary to go beyond the formal borders of the host economy and include into our analysis the broader concept of currency area, which also includes the economies whose currencies were/still are pegged (formally or informally) to one of the major currencies, those which have strong trade, investment and financial links to this currency, or those in which a given currency in a cash form is used by economic agents (spontaneous dollarisation or euroisation).

After WWII, most of the world (apart from former communist and some other closed economies) was part of the Bretton Woods system in which the USD played an official anchor role. It continued after the collapse of the Bretton Woods system in 1971, for example, in most of Asia (see McKinnon, 2005) and Latin America. The departure of national currencies from the dollar peg happened only gradually, in the first instance in Western Europe in the 1970s (with the German Mark becoming an anchor currency) and then in Japan (in the 1980s) and other advanced economies. In the first two decades of the 21<sup>st</sup> century, the process of delinking national currencies from the USD accelerated with the introduction of inflation targeting and floating exchange rates. Nevertheless, the financial and trade systems of

<sup>10</sup> In addition, the EA has a large share in global trade – see Subsection 2.5

many countries continue to be linked to the international markets of USD-denominated financial products and goods and services invoiced in this currency. It illustrates the strength of network externalities and incumbent power (see Subsection 3.6).

The ECB (2019) and Ilzetzi et al. (2020) present the results of research that attempt to identify contemporary USD and EUR currency areas. The ECB (2019) examines the strength of the co-movement of national currencies with the USD and EUR. The defined USD currency area includes both Americas, most of Asia (including China, India and Indonesia), the Middle East and North Africa, Turkey, East Africa and most of the former Soviet Union except for Russia, whose currency has links to both the USD and EUR. The EUR is an anchor currency for non-EA EU countries (except the UK), countries of the European Economic Area, the Western Balkans, the Western African Economic and Monetary Union, the Central African Economic and Monetary Community and a few other African countries. Ilzetzi et al. (2020) obtained the same results.

Both analyses confirm that in terms of economic potential, the USD currency area is much bigger than that of the EUR.



## 4. BENEFITS AND COSTS OF INCREASING THE INTERNATIONAL ROLE OF EURO

Increasing the international role of the EUR can bring both economic benefits for the EA and its member countries (Subsection 4.1) and costs, mainly in the form of additional constraints in monetary policy making and additional responsibilities for the ECB (Subsection 4.2).

### 4.1. Benefits coming from the international role of the EUR

Increasing the international role of the EUR can bring five kinds of economic benefits (European Commission, 2018): (i) higher seigniorage; (ii) lower market interest rates; (iii) lower transaction costs and a partial elimination of exchange rate risk; (iv) a deeper market in EUR-denominated financial instruments; and (v) reduced exposure to external financial institutions and the regulatory actions taken by other jurisdictions, including extraterritorial sanctions. Due to the limited scope of this paper, we will not discuss non-economic benefits, for example, increasing the geopolitical weight of the EU.

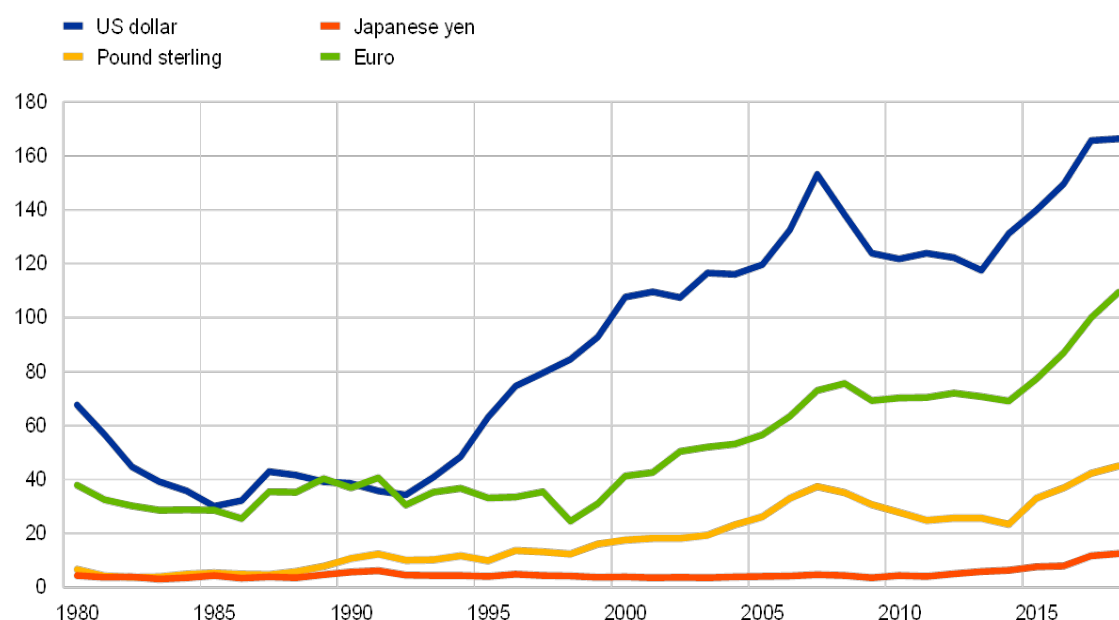
Seigniorage is central bank revenue related to issuing cash and accepting the non-remunerated reserves of commercial banks (or using a negative interest rate, as is the current ECB policy). Seigniorage, after deducting the costs of cash production and supply and other operational costs, contributes to central bank profit, a large part of which is usually transferred to a government (to Member State governments in the case of the ECB). A larger external use of the EUR will lead to increasing ECB seigniorage and profit.

Countries whose currencies are accepted as international reserve assets have the opportunity to benefit from the demand of other central banks and sovereign wealth funds for their sovereign bonds (if they are sufficiently highly rated), which leads to a decrease in their yields, other things being equal. The same benefit accrues to other high-rated private bonds and other financial instruments denominated in reserve currencies that are demanded by commercial financial institutions worldwide. The difference in yields originating from a currency status is called 'exorbitant privilege'<sup>11</sup> in the literature (see e.g. Eichengreen, 2011). Figure 13 shows that the 'exorbitant privilege' is already substantial and is increasing over time due to the increasing international reserves of central banks and sovereign wealth funds in emerging market economies. The further international expansion of the EUR could further increase this premium. However, it is concentrated largely in those EA Member States whose sovereign bonds enjoy the highest rating.

---

<sup>11</sup> This term was coined in the 1960s by then French Minister of Finance Valéry Giscard d'Estaing in respect to USD dominance.

Figure 13: Estimation of the exorbitant privilege, 1980-2018, in basis points



Source: ECB (2019, Chart 25, p. 60).

On a microeconomic level, the broader use of the EUR in international trade and financial transactions means more opportunities for EA-based economic agents to invoice in EUR, to make payments, borrow and lend, and purchase and sell financial instruments in this currency – that is, to eliminate currency conversion costs and exchange rate risk. The broader international use of the EUR may also help to deepen and diversify the market for EUR-denominated financial instruments, which would lead to decreasing financing costs. In turn, this would further increase the attractiveness of the EUR outside the EA (see Subsection 3.5), an obvious ‘virtuous circle’ effect. Finally, the broader use of the EUR would facilitate the development of EA/EU-based financial institutions and reduce the necessity to rely on the central role of US-based financial institutions in a time when US financial regulations are often used as a geopolitical rather than an economic tool.

## 4.2. Disadvantages related to the international role of EUR

Increasing the international role of the EUR also has ‘costs’, which are related to more complicated conditions for conducting monetary policy and broader international responsibilities for the ECB, other EU governing bodies and national governments in the EA.

The broader use of the EUR outside the EA means bigger monetary openness. That is, money supply in the EA will depend, to a larger degree than now, on external demand for EUR. This means a larger dependence on external monetary and macroeconomic shocks. And this was probably the main reason why the ECB in its early years and its main predecessor (the German Federal Bank) were rather reluctant to increase the external use of its currency (ECB, 2019, pp. 38-42). At that time, monetary targeting was part of monetary policy strategy and this made monetary policy making more vulnerable to external shocks. With the increasing role of inflation targeting and interest rate policy, this constraint has been partly relaxed.

A potentially more global role of the EUR in the future will confront the ECB with the same dilemma that the US Fed has experienced for several decades – that is, to what extent the international economic and financial situation and potential external policy spillovers should be taken into consideration in

monetary policy decisions (see Eichengreen, 2013). In times of global or regional financial stress, like those related to the GFC or the 2020 crisis caused by the COVID-19 pandemic, the ECB should be ready to act as the international lender of last resort by offering currency swaps to other central banks, especially in countries that are substantially euroised. Also, other EU governing bodies and national governments should remember the international role of the EUR and be ready to provide more financial assistance to third countries in times of turmoil. National governments should also remember the potential international de/stabilising spillovers of their fiscal policies.

## 5. SUMMARY AND CONCLUSIONS

When the EUR was introduced in 1999, there were expectations that the new currency would become a successful competitor to the USD in its role of dominant world currency. However, this did not happen, and the USD has sustained its leadership position despite large current account and fiscal imbalances in the US economy, the GFC (which originated in the US financial sector), and protectionist policies and unilateralism under the Trump administration. After initial moderate gains in the early 2000s, the global position of the EUR began to weaken in 2006. And by the end of the 2010s, the EUR had a similar international weight as at its inception: it was a strong regional currency in the EU and in its neighbourhood and it was the second global currency, but far behind the leader (USD). That is to say, the international position of the EUR did not differ from the cumulative positions of its predecessors, in particular, the German mark and French franc (Ilzetzki et al., 2020).

Apart from the USD and the EUR, there is a group of four other currencies – the JPY, GBP, CHF and RMB – which play an international role, but their share in the total international reserves of central banks and other various types of trade and financial transactions remains limited.

Unfulfilled expectations concerning a bigger international role for the EUR and the continuous dominance of USD are in line with the history of changes in the international monetary system. Both the departure from the gold standard and the dethroning of the pound sterling as the dominant currency took several decades and occurred only as result of dramatic events, such as the two world wars and the Great Depression, among others.

The demand for international currencies is determined largely by private sector preferences. The political or geopolitical preferences of national governments and international institutions may only marginally correct them. In turn, private sector preferences depend on the size, depth and sophistication of the financial market for a given currency, its legal and institutional infrastructure and the perception of a currency's long-term stability. Network externalities and incumbent power also play a very important role because changing the dominant currency is a costly and lengthy process for market participants.

The above historical lessons should be taken into serious consideration by EU governing bodies in their plan to increase the international role of the EUR. This plan must be realistic in the sense that the EUR does not have a chance to overtake the dominant role of the USD in the foreseeable future (if one excludes catastrophic scenarios, such as a global military conflict or a substantial reversal of globalisation). What can be achieved is a limited increase in the international role of the EUR, perhaps to the level of the composite index in 2005 (see Subsection 2.1). However, even such a moderate goal would take several years to be accomplished and would require conducting several reforms within the EA and the EU – first and foremost, completing the Banking Union and Capital Market Union to deepen and fully integrate the financial market in Europe. Other important measures should include the rational design of the post-Brexit economic and trade relationship between the EU and the UK (to allow the City of London to continue play an important role in conducting EUR-denominated financial transactions) and a more supportive attitude of the ECB to the use of the EUR outside the EA and to adoption of the EUR by non-EA EU Member States. Some of these measures have been mentioned in the European Commission (2018) Communication, but their implementation will not be easy.

## REFERENCES

- Bergsten, C. Fred (1997). "The Dollar and the Euro," *Foreign Affairs*, Vol. 76 (July/August), pp. 83-95
- Carbaugh, Robert J., and David W. Hendrick (2009). "Will the Dollar be Dethroned as the Main Reserve Currency?" *Global Economy Journal*, Vol. 9, Issue 3, pp. 1-16, September. Available at <https://www.degruyter.com/view/j/gej.2009.9.3/gej.2009.9.3.1541/gej.2009.9.3.1541.xml?format=INT>
- Cesarano, Filippo (2009). *Monetary Theory and Bretton Woods: The Construction of an International Monetary Order*. Cambridge University Press: New York, NY
- Chinn, Menzie D., and Jeffrey A. Frankel (2008). "The Euro May Over the Next 15 Years Surpass the Dollar as Leading International Currency", *NBER Working Paper*, No. 13909, April. Available at <https://www.nber.org/papers/w13909.pdf>
- Coeure, Benoit (2019). "The euro's global role in a changing world: a monetary policy perspective." Speech at the Council on Foreign Relations, New York City, 15 February. Available at: <https://www.ecb.europa.eu/press/key/date/2019/html/ecb.sp190215~15c89d887b.en.html>
- Cooper, Richard N. (1997). "Key Currencies After the Euro." November. Available at [https://scholar.harvard.edu/files/cooper/files/geneva\\_full-1.pdf](https://scholar.harvard.edu/files/cooper/files/geneva_full-1.pdf)
- Dabrowski, Marek (2010). "Will the U.S. Dollar Remain the Global Reserve Currency?" *CASE Network E-Briefs*, No. 12/2010, October. Available at [http://www.case-research.eu/sites/default/files/publications/31140679\\_Ebrief\\_US\\_Dollar\\_Dabrowski\\_12\\_2010\\_0.pdf](http://www.case-research.eu/sites/default/files/publications/31140679_Ebrief_US_Dollar_Dabrowski_12_2010_0.pdf)
- Dabrowski, Marek (2015). "Greece: from default to Grexit?" *Bruegel blog*, 28 June. Available at <https://www.bruegel.org/2015/06/greece-from-default-to-grexit/>
- Dabrowski, Marek (2017). *Fiscal Sustainability Challenges*. LAP Lambert Academic Publishing
- ECB (2018). *The international role of the euro*, European Central Bank, June. Available at <https://www.ecb.europa.eu/pub/pdf/ire/ecb.ire201806.en.pdf>
- ECB (2019). *The international role of the euro*, European Central Bank, June. Available at <https://www.ecb.europa.eu/pub/pdf/ire/ecb.ire201906~f0da2b823e.en.pdf>
- Eichengreen, Barry (2005). "Sterling's Past, Dollar's Future: Historical Perspectives on Reserve Currency Competition", *NBER Working Paper*, No. 11336, May. Available at <https://www.nber.org/papers/w11336.pdf>
- Eichengreen, Barry (2011). *Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System*. Oxford University Press: Oxford & New York
- Eichengreen, Barry (2013). "Does the Federal Reserve Care About the Rest of the World?" *NBER Working Paper*, No. 19405, September. Available at <https://www.nber.org/papers/w19405.pdf>
- Eichengreen, Barry, Arnaud Mehl, and Livia Chitu (2017). "Mars or Mercury? The Geopolitics of International Currency Choice", *NBER Working Paper*, No. 24145, December. Available at <https://www.nber.org/papers/w24145.pdf>
- Eichengreen, Barry, Arnaud Mehl, and Livia Chitu (2018). *How Global Currencies Work. Past, Present, and Future*, Princeton and Oxford: Princeton University Press.

- Efstathiou, Konstantinos, and Francesco Papadia (2018). "The euro as international currency", *Bruegel Policy Contribution*, No. 2018/25, 18 December. Available at [https://www.bruegel.org/wp-content/uploads/2018/12/PC-25\\_2018.pdf](https://www.bruegel.org/wp-content/uploads/2018/12/PC-25_2018.pdf)
- European Commission (2018). "Towards a stronger international role of the euro", Communication from the Commission to the European Parliament, the European Council (Euro Summit), the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions, COM(2018) 796/4, European Commission
- Goldberg, Linda S. (2010). "Is the International Role of the Dollar Changing?", *Current Issues in Economics and Finance*, Vol. 16, No. 1, January. Available at [https://www.newyorkfed.org/medialibrary/media/research/current\\_issues/ci16-1.pdf](https://www.newyorkfed.org/medialibrary/media/research/current_issues/ci16-1.pdf)
- Gopinath, Gita (2015). "The International Price System", *NBER Working Paper*, No 21646, November. Available at <https://www.nber.org/papers/w21646.pdf>
- Hotten, Russell (2019). "Trump responds with fury over Fed chief's speech". *BBC News*, New York, 23 August. Available at <https://www.bbc.com/news/business-49452366>
- Ilzetzi, Ethan, Carmen M. Reinhart, and Kenneth S. Rogoff (2020). "Why Is the Euro Punching Below Its Weight?", *NBER Working Paper*, No. 26760, February. Available at <https://www.nber.org/papers/w26760.pdf>
- Juncker, Jean-Claude (2018). "State of the Union 2018. The Hour of European Sovereignty", European Commission, 12 September. Available at [https://ec.europa.eu/commission/sites/beta-political/files/soteu2018-speech\\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/soteu2018-speech_en.pdf)
- Lim, Ewe-Ghee (2006). "The Euro's Challenge to the Dollar: Different Views from Economists and Evidence from COFER (Currency Composition of Foreign Exchange Reserves) and Other Data", *IMF Working Paper*, WP/06/153, June. Available at <https://www.imf.org/~media/Websites/IMF/imported-full-text-pdf/external/pubs/ft/wp/2006/wp06153.ashx>
- McGee, John, and Tanya Sammut-Bonnici (2015). "Network Externalities". In: Cooper, Cary L. (ed.) *Wiley Encyclopedia of Management*, Vol. 12 *Strategic Management*, John Wiley & Sons, Ltd. Available at DOI: 10.1002/9781118785317.weom120053
- McKinnon, Ronald (1998). "The Euro Threat is Exaggerated," *The International Economy*, Vol. XII, No. 2, Spring, pp. 32–33, 60.
- McKinnon, Ronald (2005). *Exchange Rates under the East Asian Dollar Standard*. The MIT Press: Cambridge, Ma & London
- Mundell, Robert A. (1998). "What the Euro Means for the Dollar and the International Monetary System," *Atlantic Economic Journal*, Vol. 26, No. 3 (September), pp. 227-37
- Portes, Richard, and Helene Rey (1998). "The Emergence of the Euro as an International Currency", *NBER Working Paper*, No. 6424, February. Available at <https://www.nber.org/papers/w6424.pdf>
- Sandbu, Martin (2019). "Europe First: taking on the dominance of the US dollar", *Financial Times*, 5 December. Available at <https://www.ft.com/content/3165c19c-0ba0-11ea-bb52-34c8d9dc6d84>
- Sapir, Andre, Nicholas Veron and Guntram B. Wolff (2018). "Making a reality of Europe's Capital Markets Union." *Bruegel Policy Contribution*, No. 2018/07, 27 April. Available at <https://www.bruegel.org/wp-content/uploads/2018/04/pc-07-2018.pdf>

- Stiglitz, Joseph E. (ed.) (2010). *The Stiglitz Report: Reforming the International Monetary and Financial Systems in the Wake of the Global Crisis*. New York and London: The New Press
- The International Economy (2020). "Is the World's Reserve Currency in Trouble? A Symposium of Views", *The International Economy*, Vol. XXXIV, No. 1, Winter 2020. Available at [http://www.international-economy.com/TIE\\_W20\\_DollarRoleSymp.pdf](http://www.international-economy.com/TIE_W20_DollarRoleSymp.pdf)
- Truman, Edwin M. (2005). "The Euro and the Prospects for Policy Coordination", In: Adam S. Posen (ed.): *The Euro at Five: Ready for a Global Role?*, Peterson Institute for International Economics, Special Report, No. 18, April. Available at [https://piie.com/publications/chapters\\_preview/3748/04jie3748.pdf](https://piie.com/publications/chapters_preview/3748/04jie3748.pdf)
- Von der Leyen, Ursula (2019). "A Union that strives for more. My agenda for Europe: political guidelines for the next European Commission 2019-2024", European Commission – Directorate General for Communication, 09 October. Available at <https://op.europa.eu/en/publication-detail/-/publication/43a17056-ebf1-11e9-9c4e-01aa75ed71a1/language-en/format-PDF>
- WEO (2020). *World Economic Outlook April 2020: The Great Lockdown*, Washington, DC: The International Monetary Fund. Available at <https://www.imf.org/~media/Files/Publications/WEO/2020/April/English/text.ashx?la=en>



# Global Currencies During a Crisis: Swap Line Use Reveals the Crucial Ones

Daniel GROS, Angela CAPOLONGO





## **Abstract**

The current crisis has confirmed the importance of the currency swap lines offered by the Federal Reserve. They enhance the role of the USD as the dominant global currency. However, one should not expect much impact on the international role of the euro when the ECB offers similar currency swap lines. Currency competition is not won by competing on the generosity of currency swap lines.

This document was provided by the Policy Department for Economic, Scientific and Quality of Life Policies at the request of the committee on Economic and Monetary Affairs.

## **CONTENTS**

<b>LIST OF ABBREVIATIONS</b>	<b>81</b>
<b>EXECUTIVE SUMMARY</b>	<b>82</b>
<b>1. INTRODUCTION</b>	<b>83</b>
<b>2. THE (LIMITED) GLOBAL ROLE OF THE EURO</b>	<b>84</b>
2.1. Is there a large upside to the global role of the euro?	84
2.2. The economics of a global currency: rethinking the benefits?	87
<b>3. CURRENCY SWAPS AND GLOBAL CURRENCIES</b>	<b>89</b>
3.1. What are currency swaps?	89
3.2. Currency swaps as a tool of financial diplomacy	90
3.3. Currency swaps in reality	91
3.4. Do they matter?	93
<b>4. CONCLUSIONS</b>	<b>95</b>
<b>REFERENCES</b>	<b>96</b>

## LIST OF ABBREVIATIONS

<b>BOJ</b>	Bank of Japan
<b>DM</b>	Deutsche Mark
<b>ECB</b>	European Central Bank
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>OIS</b>	Overnight Index Swap
<b>PBOC</b>	People's Bank of China
<b>UK</b>	United Kingdom
<b>US</b>	United States
<b>USD</b>	United States dollar

## EXECUTIVE SUMMARY

- **Before the present crisis broke out earlier this year, the EU institutions, and in particular the Commission pushed the idea that the euro should have a stronger global role.**
- **This was based on political and economic grounds.** We discuss here only one specific aspect, namely currency swap lines.
- **One element which attracted attention was the observation that during the financial crisis of 2008-2009 the US Federal Reserve granted swap lines to a number of other central banks.** The purpose was to enable these partners to furnish their respective banking systems with dollar liquidity. These lines were heavily used (albeit only for a short time) and probably greatly attenuated the short-term dollar shortage, which had developed outside the US in 2008-2009 when US money markets temporarily ceased to function normally.
- **This episode seemed to show that providing other central banks with liquidity is one attribute of a global reserve currency.** We therefore consider the idea that the international use of the euro could be enhanced if the ECB establishes more swap lines by itself.
- **The ECB is part of a restricted network of major central banks which have unlimited swap lines among themselves** and it has over the last years also agreed to provide some other smaller central banks with swap lines in euro.
- **During the present crisis, the swap lines of the Federal Reserve have again been used extensively.** However, this has apparently not been the case for the (modest) swap lines the ECB has agreed to with some other national central banks in Europe (e.g. Denmark, Switzerland and the UK). There are also no reports of significant shortages of euro liquidity in other parts of the global financial system.
- **The basic conclusion is that the ECB establishing swap lines with as many other central banks as possible is not enough to foster the international role of the euro.** These lines will only be used if there is a real need. The current crisis has shown once again that the dollar remains the dominant reserve currency.
- **The same observation applies to another potential competitor to the USD, namely the renminbi.** The PBOC has also established an extensive network of currency swaps, but it seems that these have not been needed.
- **The broad conclusion is simple: establishing swap lines is in the self-interest of the home country of a currency that is already widely used internationally.** However, on their own, they should not be expected to contribute significantly to fostering the international use of the euro.

## 1. INTRODUCTION

The idea that a European currency could constitute a competitor to the USD, as the dominant global currency, has been around for a long time. It already played a role in the initial plans for the Economic and Monetary Union (EMU). More recently, the Commission published a communication with the programmatic title "Towards a Stronger International Role of the Euro"<sup>1</sup>. Prominent members of the ECB have been somewhat less outspoken (e.g. Coeuré, 2019), but the general attitude seems also that a stronger international role for the euro would be welcome.

The underlying assumption of these pronouncements is that a stronger global role brings tangible economic benefits, or at least that the benefits outweigh the costs. Whether this is the case cannot be fully discussed in this short contribution.

Given the widespread crisis conditions that financial markets currently find themselves in, it might be more useful to concentrate on one specific aspect of the international use of currencies, namely the potential for cross-border liquidity shortages and how central banks deal with them: currency swaps.

A good starting point for the analysis is this passage from the communication of the Commission:

*"In the aftermath of the financial crisis, the European Central Bank engaged with its counterparts to preserve financial stability and avoid disruptions in the world economy, for instance, with the establishment of a number of currency swap lines as a foreign liquidity backstop in case of market impairments, in line with its mandate. This practice has been beneficial for the global trading of European companies."* (European Commission, 2018).

The implicit message in this passage seems to be that establishing swap lines constitutes a useful step, with positive implications for European companies. As swap lines are intensively used once again, the present contribution will concentrate on this specific aspect of the international role of the euro.

Employing this limited scope, this contribution is organised as follows.

The next section briefly considers the present, limited, global role of the euro and the extent to which this role could expand given the size of the euro area economy (relative to that of the US). It also argues that the US might benefit less from the dominance of the dollar as a reserve currency than it is often assumed. Section 3 then turns to currency swaps among central banks to manage cross-border liquidity shortages in times of crises. It explains the nature of these swaps and shows that they have *de facto* been needed only for the USD. Section 4 concludes.

---

<sup>1</sup> European Commission (2018).

## 2. THE (LIMITED) GLOBAL ROLE OF THE EURO

This section takes a quick look at the limited global role of the euro. Moreover, it reviews very briefly why some of the arguments that an expanded international role of one country's currency yields benefits are less valid today.

### 2.1. Is there a large upside to the global role of the euro?

The annual reviews of the international role of the euro prepared by the ECB provide an exhaustive survey of the many different aspects of this issue.

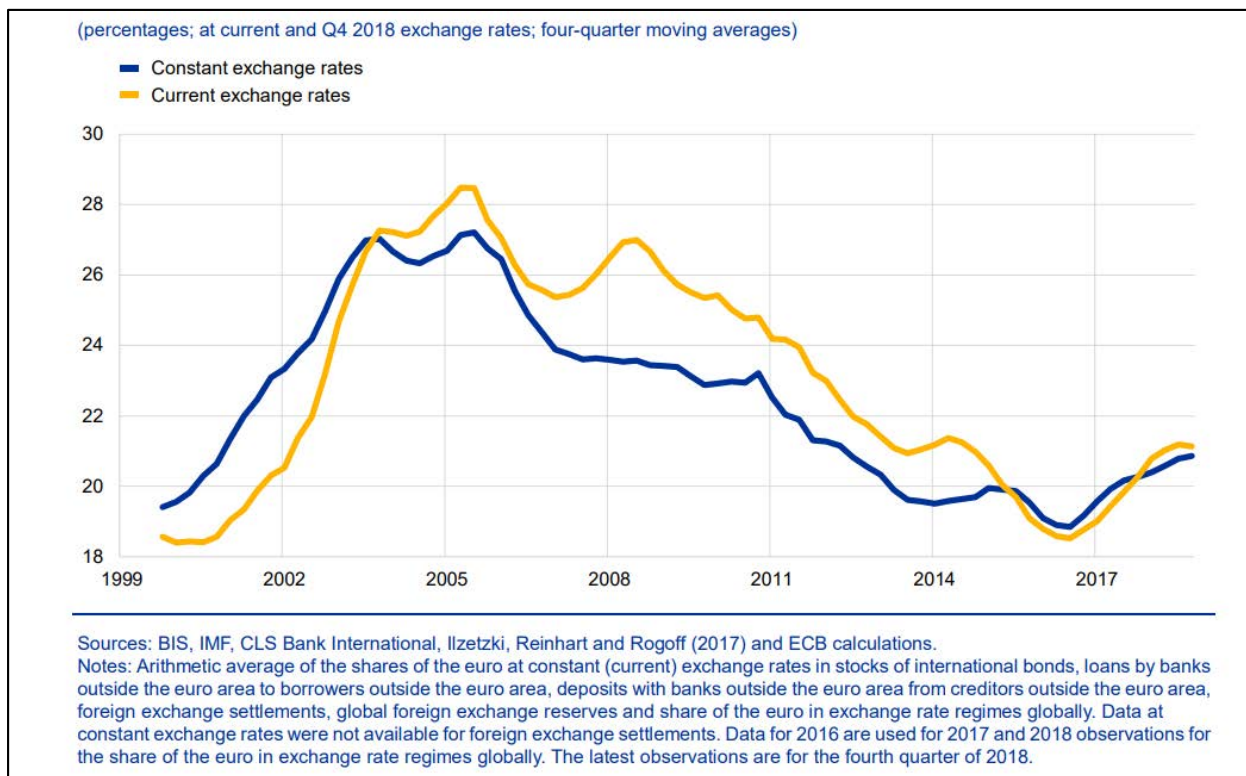
It is widely accepted that a number of factors contribute to the emergence of a global currency. Economic size is one factor, but developed financial and capital markets, confidence in the currency and a number of political factors (beyond the scope of this paper) also play a role. Space constraints do not allow us to take all these considerations into account. We concentrate here on one factor, namely economic size, which does not represent an absolute limit, but is one important element which should be taken into account.

Figures 1 and 2 provide two essential elements of the overall picture.

Figure 1 shows the evolution over time of a composite index of the international role of the euro. It is apparent that the euro started at about 20% at its creation. Its international role grew rapidly to almost 28% by 2005. This value marked a peak. It is interesting to note that the decline which set in after 2005 came several years before the great financial crisis and before the euro sovereign debt crisis of 2011-2012. More recently, there has been an uptick in the international role of the euro. It remains to be seen whether the COVID-19 crisis, with its renewed intra-euro area tensions, will lead to another decline, or whether the crisis leads to further integration which might foster the global role of the euro.

Exchange rate fluctuations influence this overall picture at times, but the broad trend is the same, regardless of whether one adjusts for this factor.

Figure 1: Composite index of the international role of the euro



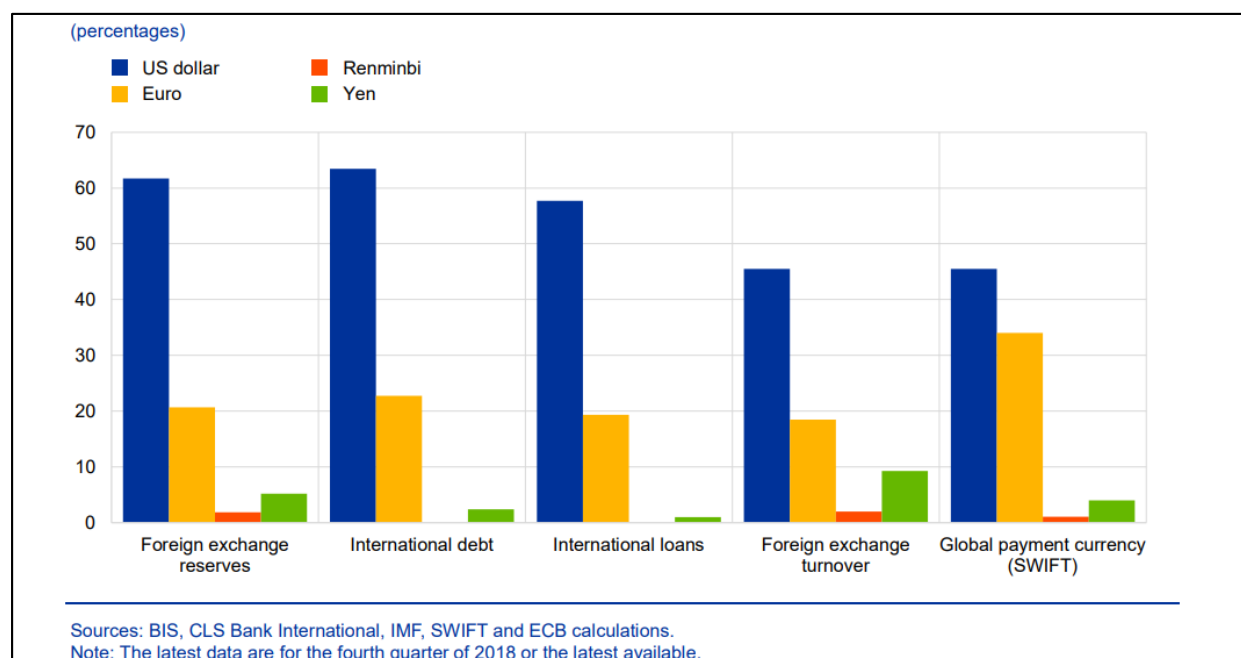
Source: ECB, 18th annual review of the international role of the euro, June 2019.

Figure 2 (also drawn from the ECB annual review) provides greater detail of the elements that make up the composite indicator, namely three stock variables and two flow variables. The stock variables are the share in foreign exchange reserves, in international loans and in international (marketable) debt instruments. The flow, or activity, variables refer to foreign exchange turnover and cross-border payments.

For the three stock variables, the share of the euro is about a third of that the US dollar. This would suggest a very large imbalance. However, one has to keep in mind that, at current exchange rates, the GDP of the euro area is only about 60% of that of the US. This implies that about one half of the relative difference could be explained by the difference in economic size.

In terms of the transactions variables, e.g. foreign exchange turnover and global payments, the difference between the share of the USD and that of the euro is much smaller, as one would expect, given that total trade turnover of the euro area (exports plus imports) is about the same as that of the US.

Figure 2: Currency use within the international monetary system



Source: ECB, 18th annual review of the international role of the euro, June 2019.

This extremely cursory examination of the raw data suggests that there probably is indeed some room for increasing the international role of the euro. However, the extent to which the euro could expand its international status relative to the US dollar may be more limited than implied by the facile view that the euro and the USD should be considered competitors of equal size.

We leave aside the obvious consideration that the continued dominance of the USD is of course not guaranteed forever. For example, the renminbi might become more attractive, relative to both the USD and the euro as a reserve currency. Over time, the size of the Chinese economy is likely to increase (at current exchange rates, it is already larger than that of the euro area), becoming much larger than that of the US. Investing reserves in renminbi might become more attractive if China’s domestic capital market also evolves in terms of openness, reliability and liquidity. Moreover, the US is accumulating huge public and foreign debt given its long-standing pattern of substantial current account deficits. In the long-term, a switch out of the USD is thus a distinct possibility.

Recent research (Eichengreen et al. 2019, foreshadowed in Eichengreen 2005) has discredited the idea that there can be only one dominant reserve currency. The emergence of a credible alternative to the USD should thus, *per se*, not be viewed as a source of instability. However, the experience of Great Britain after the war shows that a combination of a loss of reserve currency status and domestic weakness can lead to considerable difficulties. The US has already a public debt to GDP ratio of close to 100% and has been running a current account deficit for more than two decades. The public sector deficit currently projected is 15% of GDP. Moreover, if the external current account deficit were to stay at its present level of 3% of GDP (and if the growth rate of nominal GDP were to remain about 5%), the US would over time accumulate a foreign debt of about 60% of its GDP. This is slightly more than the upper thresholds which Eichengreen et al. (2017) consider acceptable for a solid reserve currency.

Instability of the US external and fiscal position, possibly associated with inflation risk premia, would likely affect the dominance of the USD also in other domains than simply foreign exchange reserves.



Investors would probably prefer more stable currencies and international banks would also reduce their holdings of USD in this case.

These brief considerations show that the dominance of the USD dollar is not ensured. But this also applies to the rather limited role of the euro today. There is certainly some upside for the international use of the euro from completing the Banking Union and the Capital Markets Union or creating a European 'safe asset' to provide international investors with a deeper menu of assets.

However, it would appear prudent not to expect too much from such measures. The euro would have to become much more attractive than the USD in other domains to overcome the size 'handicap' – at least if the aim is for the euro to become as important as the dollar.

## 2.2. The economics of a global currency: rethinking the benefits?

The data already suggest that the room to expand the international role of the euro is limited by the size of the euro area economy. The next question is whether one should expect large gains from any increase in the international role of the euro.

Based on Gros (2019), we provide only some limited considerations here.

One benefit, which used to be important, is supposed to derive from the widespread use of one's bank notes abroad. On this account, the euro has been a big success since currency in circulation has more than doubled (even as percentage of GDP) over the last 20 years, and it is widely estimated that a large fraction of euro cash is used abroad (ECB, 2017).

Issuing banknotes used to be a profitable business for central banks as they could invest the proceeds from their cash issuance in government bonds with a decent yield. The total value of euro bank notes in circulation now exceeds EUR 1 trillion. With interest rates at 5%, this would have meant a revenue stream of about EUR 50 billion per annum; small fry if compared to the overall euro area economy with a GDP of more than EUR 10 trillion, but equivalent to about one third of the EU's annual budget.

However, issuing currency is no longer a profitable business for central banks when interest rates turn negative, as explained by Gros (2016). The ECB has estimated (ECB, 2017) that about EUR 500 billion are held abroad. At a negative rate of 0.5%, this would imply a cost for the euro area of EUR 2.5 billion per annum. The amount is of course relatively negligible, but the key point is that it is a cost, not a benefit. In these conditions, any increase in the international use of euro cash only leads to higher costs.

The more lasting argument is what the French President Valéry Giscard d'Estaing used to call the 'exorbitant privilege' of the US. It is supposedly cheaper to issue debt in one's own currency because in this case the home country authorities might decide at any time to devalue the real value of the debt. However, the fact that the real value of the debt is under the control of the home country authorities is a double-edged sword: On the one hand, it protects against any liquidity problems because the national central bank could in a crisis just issue enough liquidity to ensure that all debt can be repaid in nominal value. On the other hand, this potential for a rescue in a debt crisis through money creation and inflation will be factored in by investors, who might then demand a risk premium.

The US might thus have enjoyed an 'exorbitant privilege' in the past, when its fiscal and external positions were strong. But 'this time is different'. The external position of the US remains weak and the debt to GDP level of the federal government might soon reach Italian proportions, making it more and more likely that investors will demand a substantial risk premium on USD-denominated debt.

Moreover, issuing debt to foreigners in its own currency is not a big advantage for the euro area, which sits on a growing net creditor position. In fact, interest rates (real and nominal) tend to be higher in US dollar terms. For example, over the last 20 years the long-term interest in USD (10-year Treasury) was

about 1 percentage point higher than that on riskless euro (i.e. German) debt. Even the average long-term government interest rate for the euro, which takes into account risk premia in the periphery and liquidity premia on other core currencies, has been lower than that of riskless US debt. Given that the exchange rate is now at almost the same level as 20 years ago, this implies that dollar debt has been more expensive even after one adjusts for exchange rate changes. The ideal for the euro area would thus be issuing its own debt in euros and investing in dollars.

Finally, one needs to consider the potential cost of having one's own currency become an anchor currency of other countries. The number of countries which peg to the euro (over 60 according to the Commission) is rather large. But most of them are small, of negligible economic weight. The key issue here is again the weights of costs and benefits. A pegged exchange rate has the advantage of reducing (bilateral) currency volatility, but it also means that it becomes more difficult to adjust to shocks to relative competitive positions. The second consideration becomes paramount if one considers the euro area relative to China. It would not necessarily be an advantage for Europe if China were to peg its currency to the euro, instead of the USD. In that case, the exchange rate of the euro to its biggest trading partner (and competitor) would be determined by the Chinese authorities. Being an anchor currency can actually mean a loss of control.

The euro area is a very open economy, much more so than the US. This implies that a loss of control over the exchange rate is much more important for the euro area than for the US. A high degree of openness also explains the revealed preference of other potential reserve currency 'candidates' in the past. For example, the German authorities were never keen to enhance the status of the DM as a (minor) reserve currency, fearing that this would lead to more volatility and potential upward pressure on the exchange rate. The euro area has today a similar degree of openness as Germany in the 1970s and 1980s and its weight in the global economy is shrinking; tending towards 10%, which is the level Japan had not so long ago. The euro area is gradually becoming a 'small open economy' for which the disadvantages of reserve currency status are increasing while the benefits remain uncertain.

### 3. CURRENCY SWAPS AND GLOBAL CURRENCIES

The US dollar is used extensively in other countries, not only as a reserve currency, but also for invoicing and payment of a large fraction of global trade (Gopinath and Stein 2018, Gopinath 2019). In practical terms, this means that, in many countries, exporting firms receive dollar payments and therefore start to arrange for financing in dollar terms as well.

There exists thus in many countries, within the domestic financial system, a part which is based on dollars in which banks accept deposits from exporting enterprises, extend credit to them etc. During normal market conditions these 'off shore' USD markets work well with export receipts providing the underlying stream of dollars needed to service local USD debt. However, local banks always have need for short-term dollar liquidity (or surplus). This liquidity need is usually covered by borrowing on the US market, tapping, for example, money market funds. However, when US financial markets freeze in a crisis, the foreign banks have a liquidity problem. Unlike US banks, they cannot access the various liquidity windows of the Federal Reserve.

This is where currency swap lines become important. The Federal Reserve provides USD liquidity to foreign central banks, which, in turn, can then lend dollars to their domestic banks. From the point of view of the Federal Reserve, the purpose of swap lines is thus to help preserve financial stability abroad, which then prevents market distress from having an impact on the real economy abroad and ultimately on the US economy as well.

#### 3.1. What are currency swaps?

Currency swap lines came into prominent use among major central banks during the global financial crisis of 2008-2009. They became necessary again during the euro area sovereign crisis.

In November 2011, the Bank of Canada, the Bank of England, the Bank of Japan, the ECB, the Federal Reserve and the Swiss National Bank formed a network of unlimited and temporary bilateral currency swap lines. In 2013, these central banks announced that their bilateral swap lines had become permanent standing facilities (di Mauro and Zettlemeyer, 2017 and ECB, 2003).

In principle, this was a symmetric agreement. In reality, the key participant was the Federal Reserve.

The only exception to this *de facto* asymmetry came in March 2019, when the Bank of England activated a currency swap line arrangement with the ECB, to reduce possible sources of market stress due to Brexit uncertainty.

In the past months, since March 2020, at the onset of the COVID-19 crisis, currency swap arrangements between central banks have again been used. They have been playing an important role in limiting the fallout from US financial market instability (Reis, 2020).

An important recent innovation is that the Fed extended the US dollar swap lines with the other 5 central banks part of the permanent facility network to longer maturity, charging also a lower interest rate. Moreover, it also gave other 9 central banks access to swaps, but only for limited amounts (whereas the lines with the inner group are in principle for unlimited amounts). The participants in this 'outer group' are: the Reserve Bank of Australia, the Banco Central do Brasil, Danmarks Nationalbank, the Bank of Korea, the Banco de Mexico, the Reserve Bank of New Zealand, the Norges Bank, the Monetary Authority of Singapore, and the Sveriges Riksbank (Federal Reserve, 2020).

The ECB (re)-activated existing swap lines with the central bank of Denmark and established temporary precautionary swap lines with the Croatian and Bulgarian central banks of a maximum of EUR 2 billion each (ECB, 2020b; ECB, 2020c; ECB, 2020d).

Through this instrument, foreign central banks are able to provide foreign currency liquidity to domestic banks, especially when the funding market is deteriorated. By helping to stabilise foreign markets, avoiding bank failures or fire sales, swap lines provide support to the foreign economy and, by reducing risk of financial distress abroad, also to the domestic one.

Box 1: What are currency swaps (and swap lines)?

Currency swaps are contracts among central banks to exchange their respective currencies for temporary use.

A currency swap line is an agreement between two central banks to allow each partner to initiate a currency swap within certain, pre-defined parameters.

For example, within an existing swap line, the ECB can borrow a certain amount of dollars from the Federal Reserve while handing over the equivalent market value of euros as collateral or security. The interest the ECB has to pay to the Federal Reserve is set in the swap line agreement. It is equal to the overnight index swap (OIS) USD rate plus a small spread (today it is 25 basis points).

The Federal Reserve keeps the euros as collateral during the duration of the loan, usually one week, now also up to three months. When the transaction is closed, the ECB pays back the amount of dollars due (given by the loan plus interest) to the Fed and will get back the euros it had handed over as collateral. These two amounts had been determined at the time when the contract was signed. Therefore, the swap lines carry no exchange rate risk unless the borrower (in this example the ECB) defaults.

There remains a (in reality negligible) risk for the lender: Currency swaps usually use the spot exchange rate existent at the time of the conclusion of the contract, but this rate could move over the contract period. If the euro were to depreciate considerably during the contract period, the security which the Federal Reserve holds would lose in value. In the hypothetical case that the ECB were to default on its obligation to deliver USD at the expiration of the swap contract the Federal Reserve would only have the euro collateral in its hands and might make a loss if it had to sell these euros in the market.

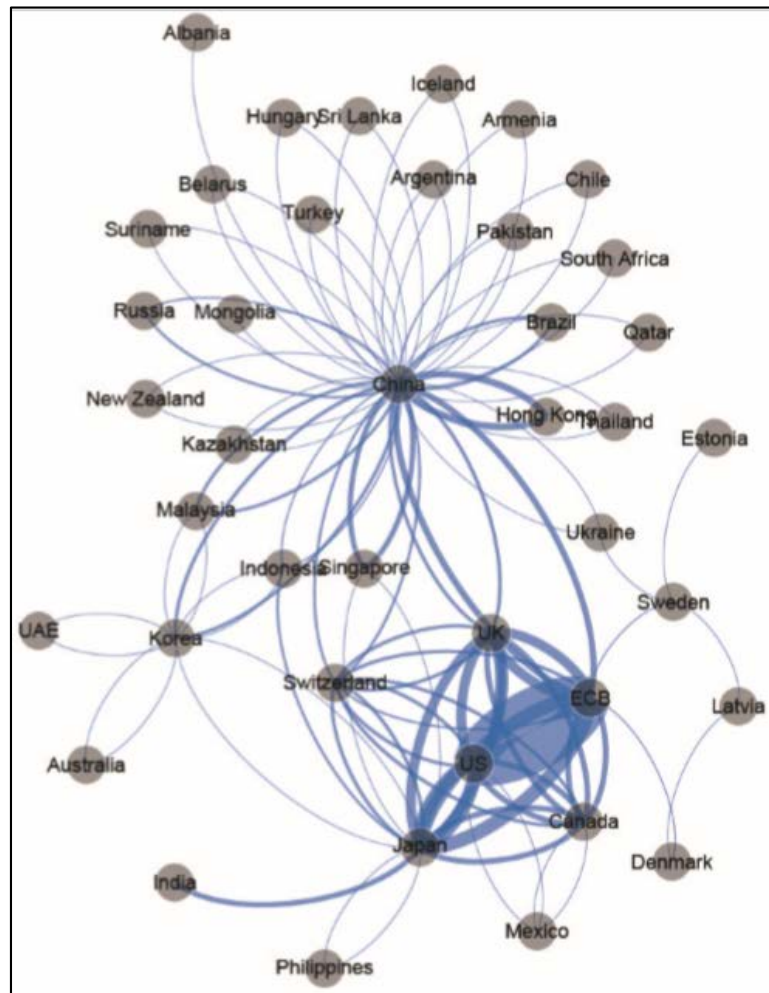
In the case of the ECB, a default is not really something which can be seriously considered. For the Federal Reserve there is thus *de facto* no risk in granting the ECB a swap line, i.e. the facility for the ECB to initiate swap agreements whenever it perceives the need. However, a default is a distinct risk in the case of the central banks of some emerging market economies. This is why the Fed has granted a group of countries with a high credit standing potentially unlimited swap lines whereas the conditions are much more restrictive for other countries.

In practice, the ECB lends the amount of dollars received by the Fed to European banks in need and with eligible collateral, charging the same rate that the Fed is charging. Therefore, *de facto* the Fed is providing USD liquidity to European banks, using the ECB as an intermediary. This indirect way eliminates credit risk for the Fed, by transferring it to the ECB. The latter is in charge of doing the selection of banks according to the eligibility criteria, and the monitoring (Bahaj and Reis, 2020).

### 3.2. Currency swaps as a tool of financial diplomacy

The importance of the currency swap arrangements of the Federal Reserve during the financial crisis led to the impression that they were a mark of having a global currency (European Commission, 2018). The result was a global race to establish as many currency swap lines as possible leading to the very large network of bilateral swap lines documented in Denbee et al. (2016).

Figure 3: Network of bilateral swap lines, as from October 2015



Source: Denbee et al. (2016).

This figure shows that the PBOC has the largest number of swap arrangements. However, it seems that many of them were just signed to increase the number of entries on a list. For example, the swap arrangements between the PBOC and Iceland or Albania are unlikely ever to be of any practical significance. In the most recent crises, the swap arrangements of the PBOC were only on paper as there is no renminbi financial market outside China.

The only ones that really matter are those within the immediate proximity of the Federal Reserve in the figure above (the ECB, the Bank of Canada, the Bank of Japan, the Bank of England and the Swiss National Bank).

There is little theoretical literature on why the existence of swaps lines should foster the wider international use of a currency. The brief surveys in boxes 7 and 8 in ECB (2019) come to the result that *“The direction of causality between currency swap lines and international currency usage is unclear.”*

### 3.3. Currency swaps in reality

The reality of currency swaps is that they become relevant only in a crisis and that they are USD-centred.

The first point derives from the nature of currency swaps: they constitute an emergency arrangement when private sector liquidity flows are impaired. The US market is normally very liquid thus providing

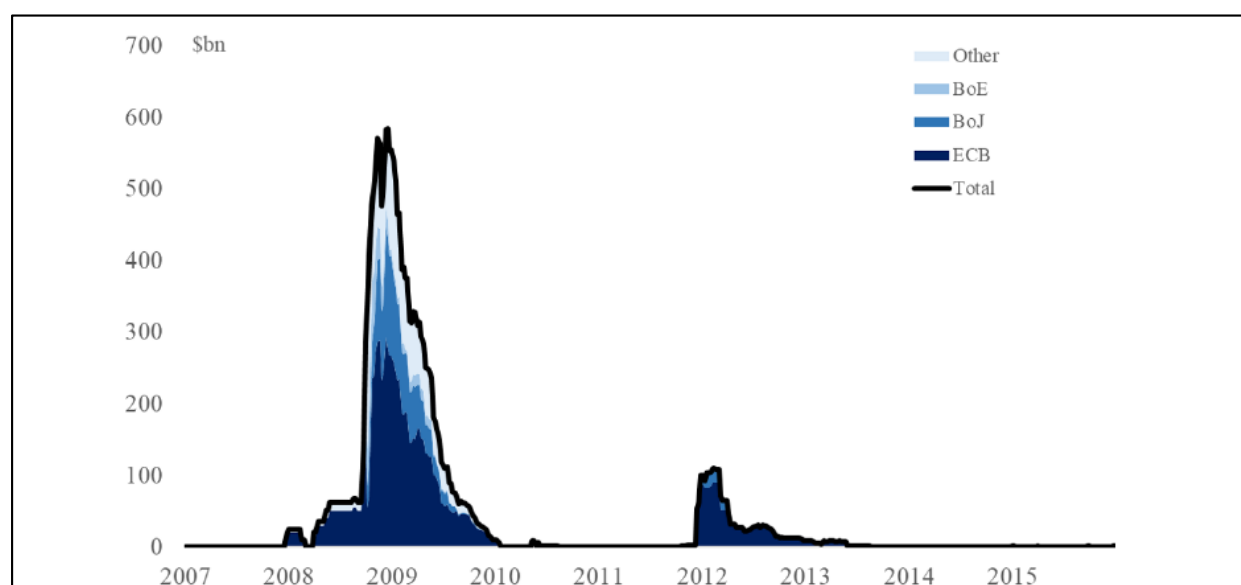
enough liquidity for the small USD based financial (mainly banking) markets in countries with a large exporting sector.

The euro area and Japan are among the largest exporters to the US and they have the most developed financial markets in USD terms outside the US. This is why these two countries accounted for the largest part (over 80%) of the total currency swaps of the Federal Reserve during the last financial crisis, as shown in Figure 3 below.

The figure also shows that the total amount reached USD 600 billion in a very short period of time, but the need of USD liquidity abroad was also very temporary, disappearing within one year.

The second episode during which the Federal Reserve swap lines became necessary was during the euro sovereign debt crisis of 2011-2012. In this case, the problem was not a malfunctioning of US money markets, but rather a generalised distrust of US investors towards all euro area-based entities.

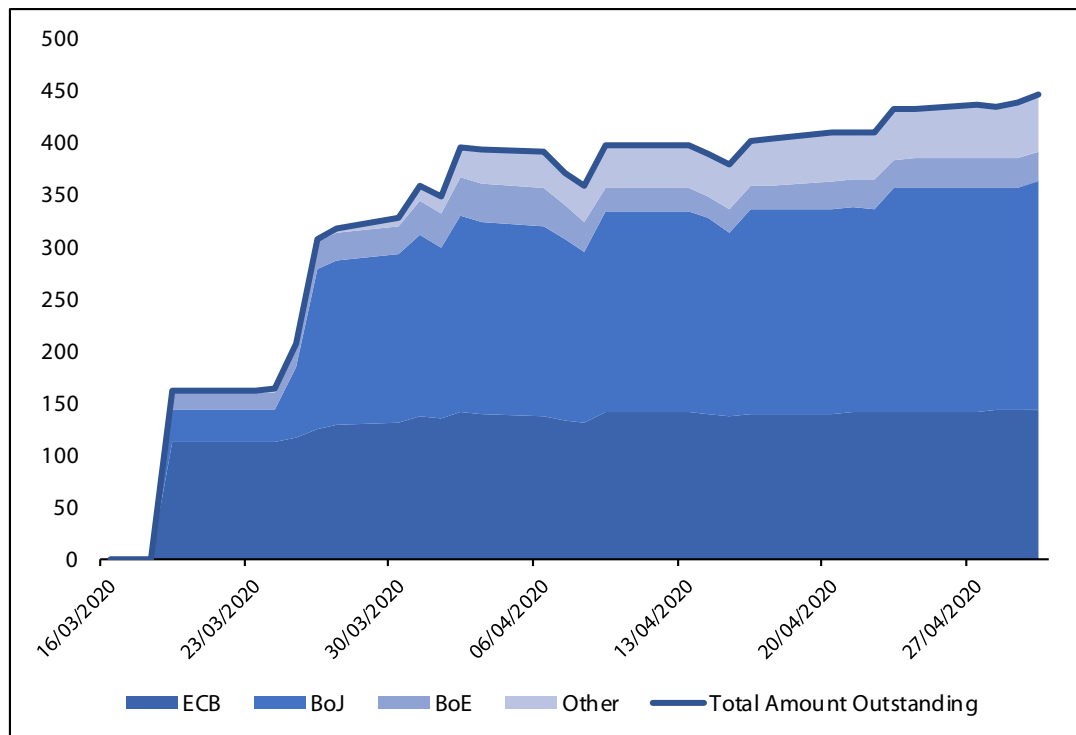
Figure 4: Federal Reserve swap lines use, 2007-2016 (EUR billion)



Source: Bahaj and Reis, 2020.

During the present crisis, the currency swaps accorded by the Federal Reserve have again increased, so far to over USD 400 billion. The ECB and the Bank of Japan constitute again the most important counterparts.

Figure 5: Federal Reserve swap lines, amounts outstanding, March-April 2020 (settled positions in USD billion)



Source: Federal Reserve Bank of New York and Authors' calculations.

The ECB and the Bank of Japan account for the largest share of the swap lines actually granted by the Federal Reserve over the last months. Both Japan and the euro area run sizeable current account surpluses. These economies thus do not have a structural deficit in US dollars, on the contrary, residents in both countries have large claims on the US, both in gross and net terms. But, despite this structural, long-term surplus in dollars, the financial system of these two countries can at times have a large need for short-term USD financing.

### 3.4. Do they matter?

It is difficult to judge the importance of currency swap arrangements in a comprehensive manner. Bahaj and Reis (2020) show that they tend to limit the deviations from covered interest parity (under which the interest rate differential is equal to the forward rate differential). How important is it to avoid these financial market distortions?

For large developed economies, this emergency provision of USD liquidity is probably of second order of importance. Euro area banks which need short-term USD liquidity, but can no longer obtain it through their usual channels, can always obtain euros from the ECB and convert them into US dollars through the use of foreign exchange market. The cost of the disruptions created by a sudden lack of access to short-term USD liquidity should thus be limited for countries with solid domestic financial systems and a functioning foreign exchange market. This applies in particular to the euro area, the UK, Japan and the other OECD countries which are part of the inner group of 5 central banks mentioned above.

However, access to USD currency swaps will be more important for weaker economies which often experience a foreign exchange crisis at the same time as USD liquidity dries up. As shown above, the amounts going to these economies are limited, but they might have a large beneficial impact for the

countries concerned, because the USD-denominated part of their local banking systems might collapse without this support, with large spillovers to the rest of the economy.



---

## 4. CONCLUSIONS

This short contribution cannot provide conclusive arguments on what could be done to foster a greater international role of the euro. Instead, it has focused on one particular aspect of a global currency. When a currency, such as the USD, is widely used for short-term transactions outside the home country, there always exists the risk of a sudden shortage of dollar liquidity, which ultimately only the Federal Reserve can satisfy. This is why the Federal Reserve has agreed to provide a selected group of foreign central banks with swap lines under which it provides these central banks with USD when the normal supply of short-term liquidity, through the US money market or US-based banks, no longer works. These arrangements were first used during the financial crisis of 2008-2009.

During the present crisis, the USD swap lines were again extensively used. Their existence has undoubtedly enhanced the standing of the US as the dominant global currency, as users of the USD abroad now know that in a crisis they can rely on the indirect support of the Federal Reserve. However, the present crisis has also shown that creating swap lines along the US Federal Reserve model is *per se* not enough to create a global currency. The (much more modest) swap lines offered by the ECB to neighbouring countries in Europe have apparently<sup>2</sup> not been used.

The existence of these swap lines are thus a necessary condition for a dollar-based global financial system to work smoothly even during a liquidity crisis. There are of course many further dimensions and paths to achieve a more prominent international currency status for the euro. Swap lines are merely a necessity in a crisis and a partial consequence of that status.

---

<sup>2</sup> At the moment, the ECB does not publish data on these operations.

## REFERENCES

- Adler, Gustavo, Luis Cubeddu, and Gita Gopinath (2019). "Taming the Currency Hype". IMF blog post available at <https://blogs.imf.org/2019/08/21/taming-the-currency-hype/>.
- Bahaj, Saleem, and Ricardo Reis (2020). "Central Bank Swap Lines during the COVID-19 Pandemic". Covid Economics, 2, available at <http://personal.lse.ac.uk/reisr/papers/20-covicbswaps.pdf>.
- Bahaj, Saleem, and Ricardo Reis (2020). "Central Bank Swap Lines: Evidence on the Effects of the Lender of Last Resort". Mimeo, available at <http://personal.lse.ac.uk/reisr/papers/99-cbswaps.pdf>.
- Brunnermeier, Markus, Rush Doshi, and Harold James (2018). "Beijing's Bismarckian ghosts: how great powers compete economically". The Washington Quarterly, 41(3), 161-176.
- Cœuré, Benoît (2019). "The euro's global role in a changing world: a monetary policy perspective". Speech at the Council on Foreign Relations, New York City, 15 February 2019, available at <https://www.ecb.europa.eu/press/key/date/2019/html/ecb.sp190215~15c89d887b.en.html>.
- Denbee, Edd, Carsten Jung and Francesco Paternò (2016). "Stitching together the global financial safety net". Bank of England Financial Stability Paper No. 36 – February 2016.
- di Mauro, B. Weder, and Jeromin Zettelmeyer (2017). "The New Global Financial Safety Net: Struggling for Coherent Governance in a Multipolar System." CIGI Essays in International Finance, 4.
- ECB (2014). "Experience with Foreign currency liquidity-providing Central Bank Swaps". Monthly Bulletin August 2014, available at <https://www.ecb.europa.eu/pub/pdf/mobu/mb201408en.pdf>.
- ECB (2017). "Estimation of euro currency in circulation outside the euro area". Note of external statistics division, available at [https://www.ecb.europa.eu/pub/pdf/other/estimating\\_eur\\_in\\_circulation\\_outside\\_the\\_euro\\_area-201704.en.pdf](https://www.ecb.europa.eu/pub/pdf/other/estimating_eur_in_circulation_outside_the_euro_area-201704.en.pdf).
- ECB (2019). "The international role of the euro: June 2019. 18<sup>th</sup> annual review, available at <https://www.ecb.europa.eu/pub/pdf/ire/ecb.ire201906~f0da2b823e.en.pdf>.
- ECB (2020a). "Coordinated central bank action to enhance the provision of global US dollar liquidity". Press release 15 March 2020 available at <https://www.ecb.europa.eu/press/pr/date/2020/html/ecb.pr200315~1fab6a9f1f.en.html>.
- ECB (2020b). "ECB and Danmarks Nationalbank reactivate swap line to provide euro liquidity". Press release 20 March 2020 available at <https://www.ecb.europa.eu/press/pr/date/2020/html/ecb.pr200320~165793c952.en.html>.
- ECB (2020c). "ECB and Hrvatska narodna banka set up swap line to provide euro liquidity". Press release 15 April 2020 available at [https://www.ecb.europa.eu/press/pr/date/2020/html/ecb.pr200415\\_1~92fe0267b1.en.html](https://www.ecb.europa.eu/press/pr/date/2020/html/ecb.pr200415_1~92fe0267b1.en.html).
- ECB (2020d). "ECB and Bulgarian National Bank set up swap line to provide euro liquidity". Press release 22 April 2020 available at <https://www.ecb.europa.eu/press/pr/date/2020/html/ecb.pr200422~962a743486.en.html>.
- ECB (2020e). "What are currency swap lines?". Explainer available at [https://www.ecb.europa.eu/explainers/tell-me-more/html/currency\\_swap\\_lines.en.html](https://www.ecb.europa.eu/explainers/tell-me-more/html/currency_swap_lines.en.html).
- Eichengreen, Barry (2005). "Sterling's Past, Dollar's Future: Historical Perspectives on Reserve Currency Competition". National Bureau of Economic Research Working Paper No. w11336.
- Eichengreen, Barry, Arnaud Mehl, and Livia Chitu (2019). "How global currencies work: past, present, and future". Princeton University Press.

- European Commission (2018). "Towards a stronger international role of the euro". Commission contribution to the European Council and Euro Summit, Communication 5 December, available at [https://ec.europa.eu/commission/sites/beta-political/files/communication\\_-\\_towards\\_a\\_stronger\\_international\\_role\\_of\\_the\\_euro.pdf](https://ec.europa.eu/commission/sites/beta-political/files/communication_-_towards_a_stronger_international_role_of_the_euro.pdf).
- Federal Reserve (2020). "Federal Reserve announces the establishment of temporary U.S. dollar liquidity arrangements with other central banks". Press release, 19 March 2020, available at <https://www.federalreserve.gov/newsevents/pressreleases/swap-lines-faqs.htm>.
- Gopinath, Gita and Jeremy C. Stein (2018). "Banking, Trade, and the Making of a Dominant Currency". National Bureau of Economic Research Working Paper No. w24485.
- Gros, Daniel (2016). "Negative Rates and Seigniorage: Turning the central bank business model upside down? The special case of the ECB.". CEPS Policy Briefs No. 344, available at <https://www.ceps.eu/ceps-publications/negative-rates-and-seigniorage-turning-central-bank-business-model-upside-down-special/>.
- Gros, Daniel (2019). "The mirage of a global euro", CEPS, Commentary, available at <https://www.ceps.eu/the-mirage-of-a-global-euro/>.
- Steil, Benn (2019). "Central Bank Currency Swaps Tracker". Council on Foreign Relations article available at <https://www.cfr.org/article/central-bank-currency-swaps-tracker>.

---

PE 652.705  
IP/A/ECON/2020-29

Print ISBN 978-92-846-6724-6 | doi:10.2861/77775 | QA-04-20-274-EN-C  
PDF ISBN 978-92-846-6723-9 | doi:10.2861/787 | QA-04-20-274-EN-N