The international role of the euro

SUERF webinar

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The views expressed here are those of the authors and do not necessarily represent those of the ECB or the Eurosystem.
Outline

1. Key developments in the international role of the euro in 2020

2. Special features
   A. EU and ECB policy responses to the pandemic and the euro’s global role
   B. Central bank digital currency and global currencies
   C. The euro as an invoicing currency for global trade

3. Conclusions
The role of the euro remained broadly stable at a low level in 2020

Composite index of the international role of the euro
(percentages; at current and constant Q4 2020 exchange rates; four-quarter moving averages)

Sources: BIS, IMF, CLS Bank International, Ilzetzki, Reinhart and Rogoff (2019) and ECB calculations.
Notes: Arithmetic average of the shares of the euro at constant (current) exchange rates in stocks of international bonds, loans by banks outside the euro area to borrowers outside the euro area, deposits with banks outside the euro area from creditors outside the euro area, global foreign exchange settlements, global foreign exchange reserves and global exchange rate regimes. Data at constant exchange rates are not available for global foreign exchange settlements. The estimates for the share of the euro in global exchange rate regimes from 2016 onwards were obtained by ECB staff using the same methodology as Ilzetzki, E., Reinhart, C. and Rogoff, K. “Exchange Arrangements Entering the 21st Century: which anchor will hold?”, Quarterly Journal of Economics, Vol. 134(2), 2019, pp. 599-646, complemented with ECB staff judgement. The latest observations are for the fourth quarter of 2020.
The euro remains the second most important currency globally

Snapshot of the international monetary system

(percentages)

Sources: BIS, IMF, SWIFT and ECB calculations.
Note: The latest data for foreign exchange reserves, international debt and loans are for the fourth quarter of 2020. Foreign exchange turnover data as of April 2019. SWIFT data as of December 2020.
The US dollar punches above the US global economic weight

Global currency status vs. share in global GDP (percentages)

Global currency status vs. share in global exports (percentages)

Sources: BIS, IMF, SWIFT and ECB calculations.
Note: The latest data for foreign exchange reserves, international debt and loans are for the fourth quarter of 2020. Foreign exchange turnover data as of April 2019. SWIFT data as of December 2020. The 45-degree line is indicated as a red dashed line.
The pandemic affected some indicators of the euro’s global appeal to different degrees

Evolution of selected indicators of the euro’s international role in 2020
(Q4 2020 – Q4 2019 changes, percentages, at constant Q4 2020 exchange rates)

Euro exchange rates in 2020
(end-2020 – end-2019, percentages)

Sources: ECB, BIS, IMF, national sources and ECB staff calculations.

Notes: EUR NEER-42 refers to the nominal effective exchange rate of the euro vis-à-vis the currencies of 42 major trading partners. An increase indicates an appreciation of the euro.
The “dash for cash” that accompanied the pandemic also benefited the US dollar as an international deposit currency.

Currency composition of outstanding amounts of international deposits
(percentages, at constant Q4 2020 exchange rates)

Sources: BIS and ECB calculations.
Notes: The latest observations are for the fourth quarter of 2020. International deposits are defined as deposits with banks outside the currency area from creditors outside the currency area.
Strong issuance of US dollar bonds by emerging markets led to a decline in the share of the euro in foreign currency bond issuance.
The share of the euro in global foreign exchange reserves declined slightly in 2020 and that of the US dollar stands at a two-decade low.

**Evolution of the share of selected currencies in global foreign exchange reserves**

(Percentages; at constant Q4 2020 exchange rates)

**Average interest rates for major reserve currencies in 2020**

(Percentages)

Sources: IMF and ECB calculations.

Note: The latest observations are for the fourth quarter of 2020.

Sources: Haver Analytics, Refinitiv Datastream and ECB staff calculations. Note: the 5-year government yield for the euro area is calculated as a debt-weighted average of 5-year euro area yields of sovereigns with at least an AA credit rating according to Standard and Poor’s.
The euro remained a key currency in international green bond markets.

**Currency breakdown of “global” issuance of green bonds (all issuers worldwide) (percentages)**

**Currency breakdown of “international” issuance of green bonds (only non-national issuers) (percentages)**

Sources: Dealogic and ECB calculations.
Note: Bonds issued by all issuers, irrespective of their nationality or residence. The latest observations are for 31 December 2020.

Source: Dealogic and ECB calculations.
Note: Bonds issued by non-national issuers. The latest observations are for 31 December 2020.
Summary Part 1

• Broad stability in the international role of the euro after the pandemic shock.
• This compares favourably to the developments after the GFC, reflecting a forceful joint policy response in the EU this time
• Average share of the euro across various indicators remaining historically relatively low, well below pre-Lehmann peaks
• Global trend towards reserve currency diversification continuing
• Euro has potential to strengthen its international role in green bond markets
2. Special features

A. EU and ECB policy responses to the pandemic and the euro’s global role

B. Central bank digital currency and global currencies

C. The euro as an invoicing currency for global trade
**EU bonds issuance under SURE well received by non-euro area investors**

**Geographical distribution of investors for different EU bonds issued in 2020 (percentages)**

- Germany (Bund 15Y)
- ESM (ESM bond 10Y)
- France (OAT 20Y)
- COM (SURE bond 10Y)
- COM (SURE bond 15Y)
- Italy (BTP 15Y)
- COM (SURE bond 20Y)

**SURE bonds issued in 2020**

**Investor distribution at the time of allocation**

<table>
<thead>
<tr>
<th>Maturity (years)</th>
<th>Value (€bn)</th>
<th>Central banks and official institutions</th>
<th>Insurance and pension funds</th>
<th>Other asset managers</th>
<th>Non-euro area investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>8</td>
<td>30%</td>
<td>5%</td>
<td>65%</td>
<td>60%</td>
</tr>
<tr>
<td>10</td>
<td>10</td>
<td>37%</td>
<td>6%</td>
<td>57%</td>
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<tr>
<td>15</td>
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<td>15%</td>
<td>14%</td>
<td>71%</td>
<td>45%</td>
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<tr>
<td>20</td>
<td>7</td>
<td>13%</td>
<td>13%</td>
<td>74%</td>
<td>31%</td>
</tr>
<tr>
<td>30</td>
<td>6</td>
<td>15%</td>
<td>23%</td>
<td>62%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Sources: ECB staff calculations based on data released by the European Commission (COM), the European Stability Mechanism (ESM) and national authorities. Data refers to the distribution at the time of first allocation of SURE bonds. "Other asset managers" includes the following categories: fund managers, bank treasuries, banks, hedge funds, others.
NGEU first step towards an European safe asset but unlikely to change the global status of the euro

**Amount outstanding of general government debt securities**

(USD trillions)

**Market capitalisation of Bloomberg Barclays Global Aggregate Aaa Index**

(percentage of world GDP)

Sources: BIS, Haver Analytics, Bloomberg, European Commission and ECB calculations.
Notes: The data refer to total debt securities issued by the general government. Planned issuance for NGEU.
Latest Moody’s local currency long-term sovereign debt rating. The observations are for the third quarter of 2020 for the amount outstanding of debt securities and for 2 March 2021 for credit ratings.

Sources: Bloomberg, IMF and ECB staff calculations.
Notes: The Bloomberg Barclays Global Aggregate - Aaa Index is a measure of Aaa index rated debt including treasury, government-related, corporate and securitized fixed-rate bonds.
The ECB’s monetary policy measures in response to the pandemic have been swift and forceful and helped stabilise the euro area economy.

- **Launch of the pandemic emergency purchase programme (PEPP) in March 2020:**
  - Initial envelope increased from €750 billion to €1,850 billion in December 2020.

- **Expansion of longer-term liquidity refinancing operations (TLTRO III):**
  - Volume of outstanding take-up reached €2 trillion in May 2021
  - Measures to increase attractiveness of TLTRO III
    - Lending interest rate reduced to up to -1%.
    - Increase in the borrowing allowance
    - Expansion of the range of eligible collateral
Providing euro liquidity internationally through liquidity lines contributed to forestall the pandemic’s potential adverse implications on the euro area.

**Estimated impact of ECB liquidity lines on funding cost of recipients (currency basis)**

<table>
<thead>
<tr>
<th>Announcement day</th>
<th>1 week after</th>
<th>2 weeks after</th>
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<tbody>
<tr>
<td>-25</td>
<td>-15</td>
<td>-10</td>
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<td>-20</td>
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<td>20</td>
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<tr>
<td>10</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>

**Sources**: ECB calculations.

Notes: The chart shows estimates from an event study of the effect of the liquidity lines obtained in 2020 by Bulgaria, Croatia, Denmark, Hungary and Romania on their corresponding currency basis, controlling for fixed effects, month effects and the VIX index. The estimates are obtained on daily data over the period 2010-2020.

**Eurosystem framework for providing euro liquidity to other central banks**

- **Swap lines**
  - ECB provides euro against currencies accepted by the ECB for swap line operations.
  - Swap lines network:
    - Bank of England
    - Swiss National Bank
    - Danish National Bank
    - People’s Bank of China
    - Croatian National Bank

- **Repo lines**
  - ECB provides euro against adequate euro-denominated collateral accepted by the ECB.
  - Repo lines network:
    - ECB
    - Hungarian National Bank
    - National Bank of Serbia
    - Bank of Albania
    - People’s Bank of China
    - Croatian National Bank
    - Bulgarian National Bank
    - Bank of Canada
    - Bank of Japan
    - Federal Reserve

**Sources**: ECB.

Note: Under the swap line arrangements, the ECB provides euro liquidity against currencies accepted by the ECB for swap line operations. Under the repo line arrangements, the ECB provides euro liquidity against adequate euro-denominated collateral accepted by the ECB. EUREP is the Eurosystem repo facility for central banks. The countries mentioned in the overview of the Eurosystem’s repo line arrangements are only examples to illustrate the functioning of these types of agreements. A double line in the swap lines overview indicates that the agreement is reciprocal.
2. Special features

A. EU and ECB policy responses to the pandemic and the euro’s global role

B. Central bank digital currency and global currencies

C. The euro as an invoicing currency for global trade
Central bank digital currency supports use of a currency in cross-border payments, depending on its design

- Issuing a digital euro may become important if foreign digital money (foreign CBDC or stablecoins) largely displaced existing means of payments in the euro area.
- A digital euro will mainly serve domestic payment purposes. But it could also reduce frictions and costs of euro-denominated cross-border payments and thereby support the euro’s global role.
- Features specific to digital means of payment could ease international adoption of a central bank digital currency:
  - Safety, low transaction costs, bundling effects and programmability, potential feedback loops in use as means of payment and store of value.
- Design choices matter for the global outreach of a central bank digital currency:
  - Interoperability, restrictions on non-resident holdings, remuneration.
CBDC supports global use of a currency but not necessarily a game changer

Model simulations on the impact of CBDC for international currency use

(Currency breakdown of global export payments in alternative simulations, percentages)

Source: ECB calculations.
Notes: The left panel shows simulations based on a three-country DSGE model in the spirit of Eichenbaum et al. (2020) with no capital controls, a 1% liquidation cost for debt securities, symmetric 33%-weights for all countries and the same volatility of the exogenous shocks in both simulations.
2. Special features

A. EU and ECB policy responses to the pandemic and the euro’s global role

B. Central bank digital currency and global currencies

C. The euro as an invoicing currency for global trade
The US dollar is a globally dominant invoicing currency while the euro is a regionally dominant currency in Europe and some parts of Africa.

**Trade and invoicing currency shares at the country level: US dollar vs. euro (percentages)**

Source: Boz et al. (2020).

Notes: The chart presents scatter plots of the share of countries' total exports accounted for by the United States and the share of total exports invoiced in US dollars (left panel), as well as the share of total exports accounted for by the euro area and the share of total exports invoiced in euro (right panel). The 45-degree line is shown as a black dashed line.
3. Conclusions

- Broad resilience in the international role of the euro despite the pandemic shock, in contrast to the euro area sovereign debt crisis episode.

- This may reflect, to some extent, the effectiveness of the unprecedented policy support measures and coordinated approach prevailing in the euro area.

- Stability of the role of the euro at a low level suggests that only further resolute policy measures and reform efforts would enable to realise its global potential.
• Policy implications stressed by the Eurosystem in the past still valid:

“The international role of the euro is primarily supported by a deeper and more complete EMU, including advancing the capital markets union, in the context of pursuing sound economic policies in the euro area. The Eurosystem supports these policies and emphasises the need for further efforts to complete EMU.”

• Euro area capital markets less deep and liquid than in the US
  ➢ Progress towards Capital Markets Union

• Other positive factors for the euro’s role:
  ➢ NGEU, and creating a common safe asset
  ➢ Green bonds, setting global standards and deepening the market

• Digital euro work in early stages, unlikely to be a game changer
History offers lessons for the euro

Currency composition of globally disclosed foreign exchange reserves: 1899-2020

(percentages; at current exchange rates)

Source: Updated from Eichengreen, Barry, Arnaud Mehl and Livia Chiţu (2017), How global currencies work, Princeton University Press.
Notes: Data available for only 1899 and 1913 prior to the World War I. No data available for 1914-1927 and 1937-1946 due to incomplete archival records. The latest observations are for the third quarter of 2020.