



EUROPEAN CENTRAL BANK

EUROSYSTEM

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IL RUOLO INTERNAZIONALE DELL'EURO

Il Rapporto della BCE

LAM – Laboratorio di Analisi Monetaria

ASSBB – Associazione per lo Sviluppo degli Studi di Banca e Borsa

Webinar

7 Luglio 2021

Massimo Ferrari
European Central Bank

Outline

1. Sviluppi nel ruolo internazionale dell'euro nel 2020

2. Special features

- Risposte di UE & ECB alla pandemia e ruolo dell'euro nei mercati internazionali
- L'euro come valuta di denominazione nel commercio internazionale
- CBDCs e valute internazionali

3. Conclusioni

Non in questa presentazione

- ✓ La denominazione delle riserve ufficiali di valuta internazionale
- ✓ Il mercato dei “green bond” nell’area euro
- ✓ Stime sulla domanda internazionale di banconote denominate in euro
- ✓ Domanda di liquidità in euro da parte dei paesi dell’area CESE
- ✓ Statistical Annex

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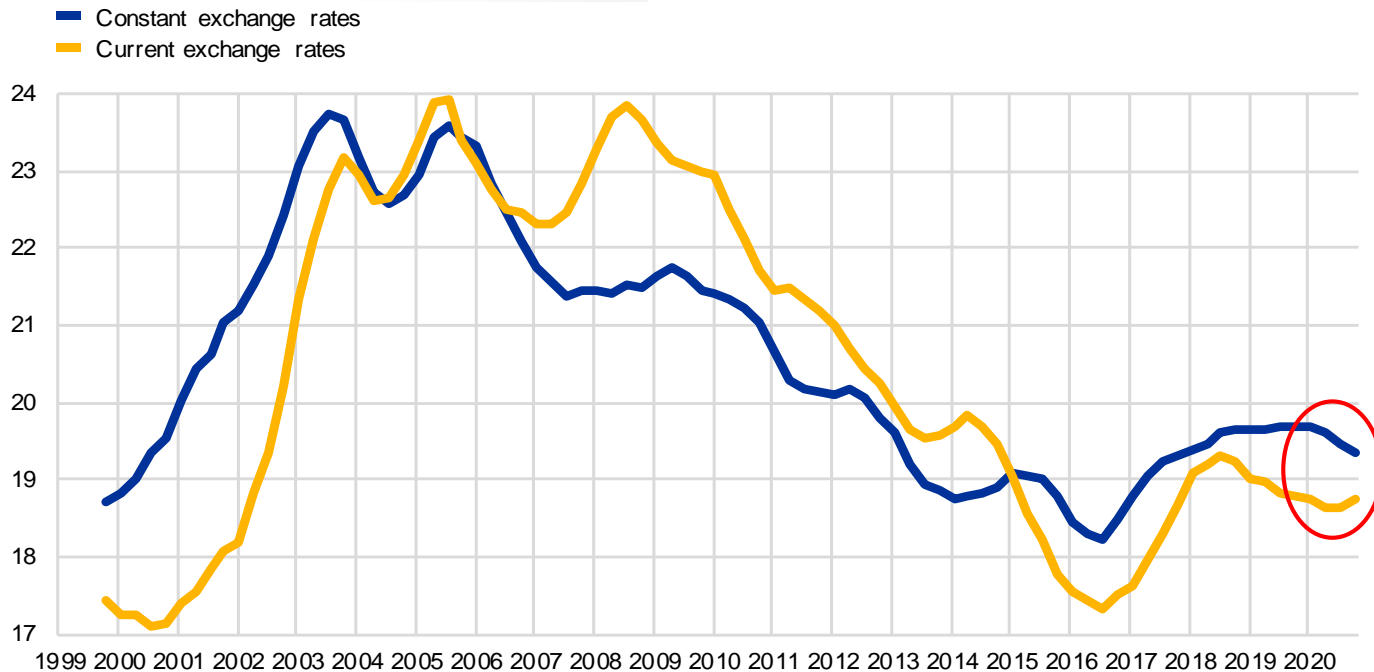
- Risposte di UE & ECB alla pandemia e ruolo dell'euro nei mercati internazionali
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Il ruolo internazionale dell'euro è rimasto stabile nel 2020

Indice del ruolo internazionale dell'euro

(percentuali; a tassi di cambio attuali e costanti al Q4 2020; media mobile trimestrale)

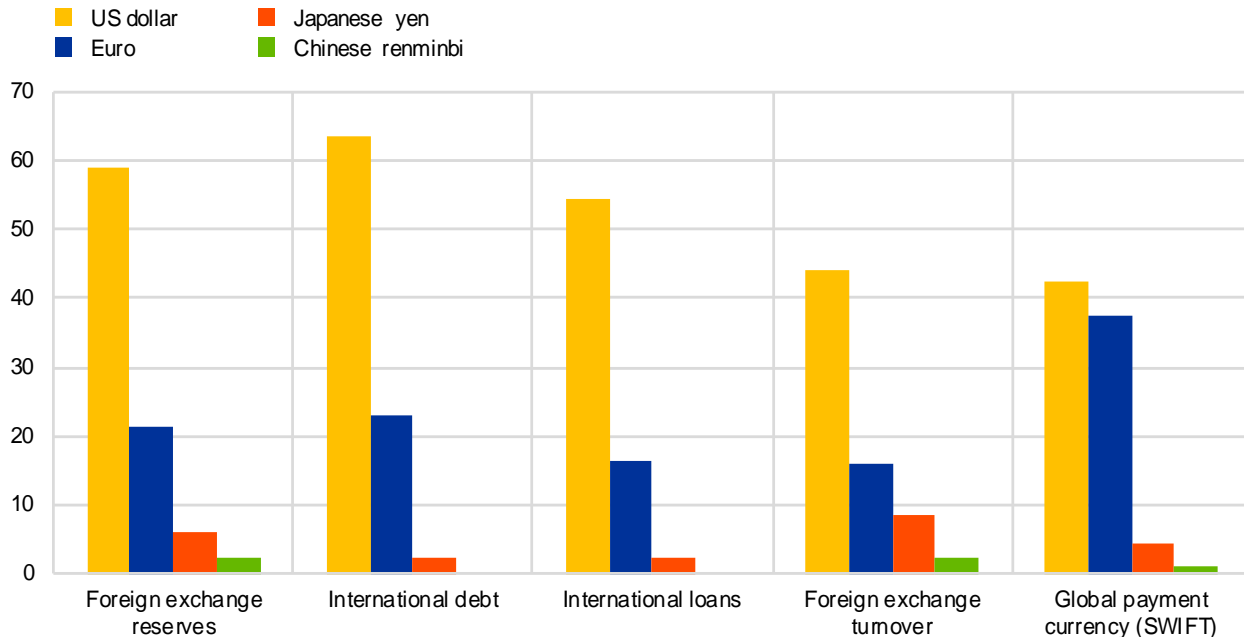


Sources: BIS, IMF, CLS Bank International, Ilzetzi, Reinhart and Rogoff (2019) and ECB calculations.

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 Ilzetzi, 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.

L'euro rimane la seconda valuta più importante a livello globale

Una fotografia del sistema monetario internazionale (percentuali)



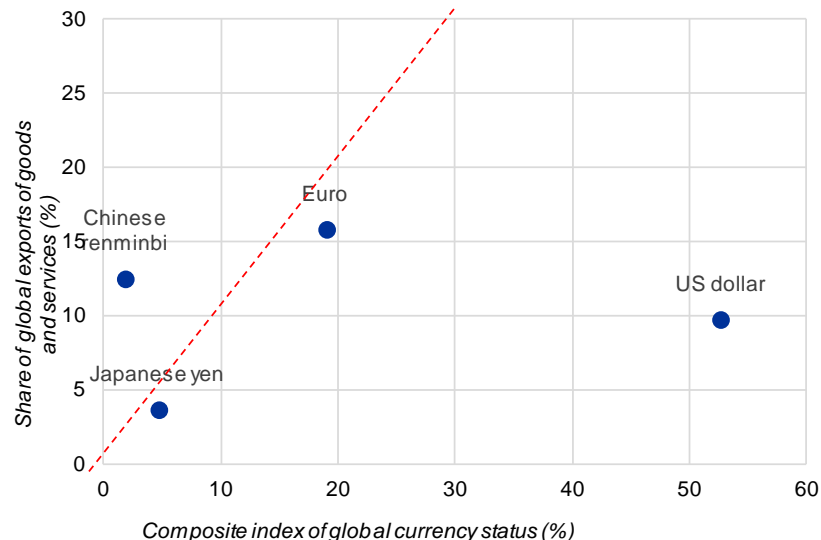
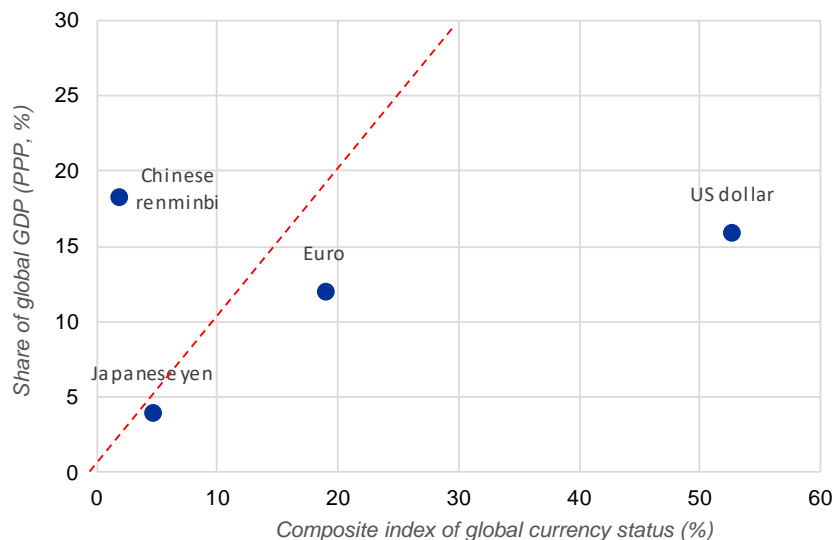
Sources: BIS, IMF, SWIFT and ECB calculations.

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.

Il dollaro ha un ruolo maggiore rispetto al peso economico degli Stati Uniti

Indice di ruolo internazionale vs. percentuale del PIL globale (percentuale)

Indice di ruolo internazionale vs. percentuale di export globale (percentuale)



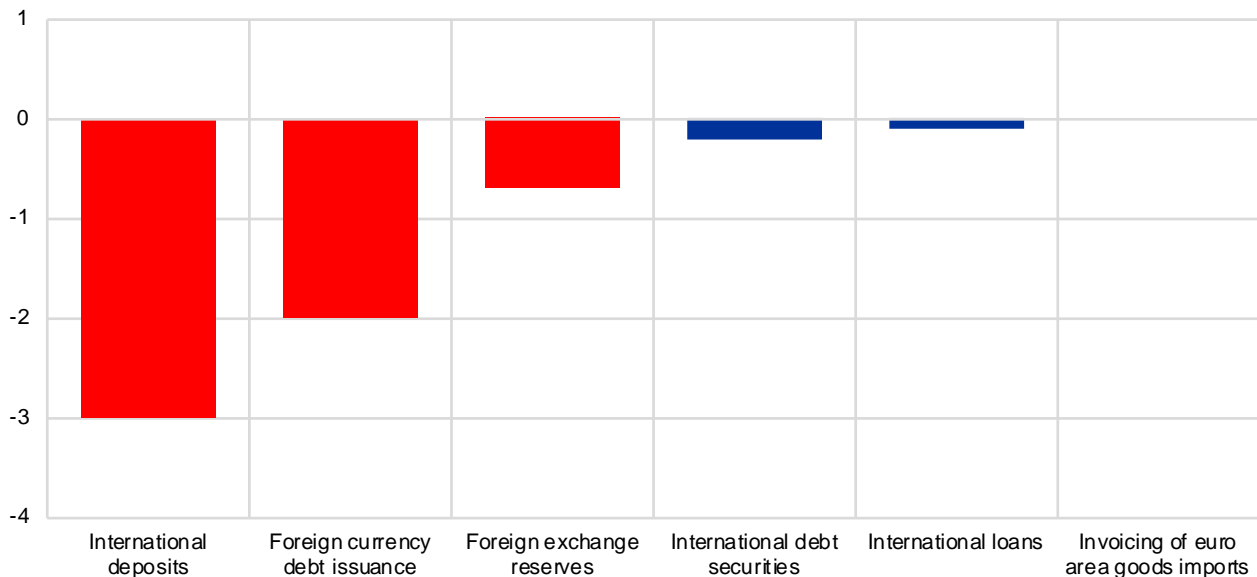
Sources: BIS, IMF, SWIFT and ECB calculations.

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.

I vari indicatori dell'uso internazionale dell'euro hanno reagito in modo diverso alla pandemia

Cambiamento nei principali indicatori dell'uso internazionale dell'euro

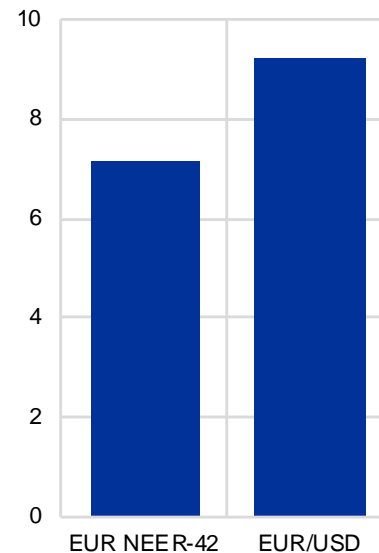
(cambiamenti Q4 2020 – Q4 2019, percentuali, a tassi di cambio costanti al Q4 2020)



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

Tassi di cambio nel 2020

(fine-2020 – fine-2019, percentuali)



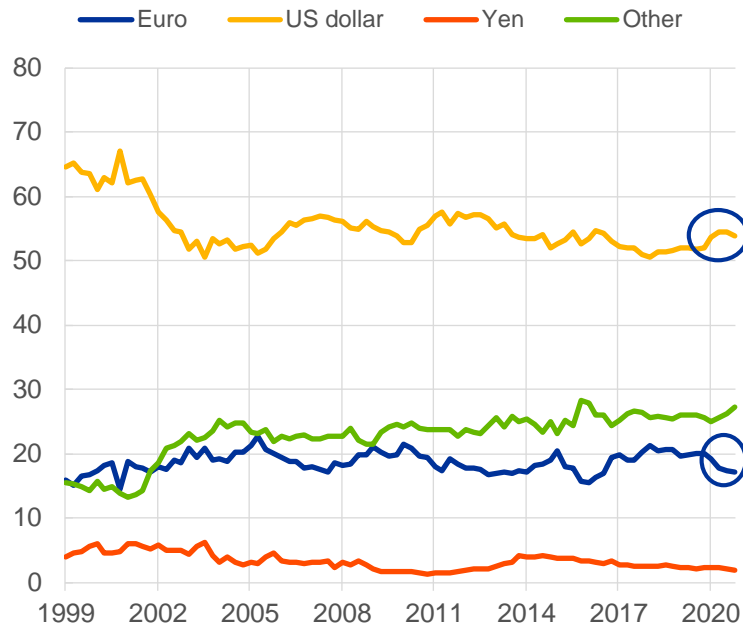
Source: ECB.

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.

La “ricerca di liquidità” durante la pandemia ha beneficiato il dollaro come valuta di denominazione dei depositi internazionali

Composizione per valuta dei depositi internazionali

(percentuali, a tassi di cambio costanti al Q4 2020)



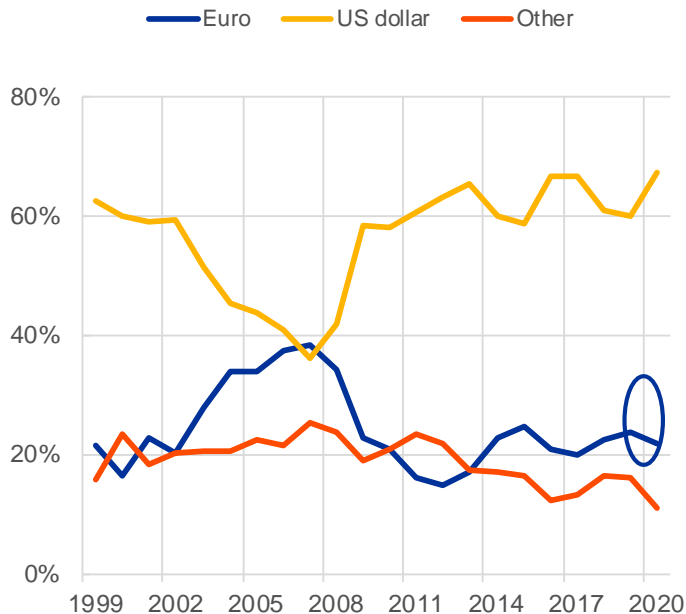
Sources: BIS and ECB calculations.

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

Una forte emissione di debito in dollari nei mercati emergenti ha portato a una riduzione della percentuale di debito denominato in euro

Composizione per valuta dei bond denominati in valuta straniera

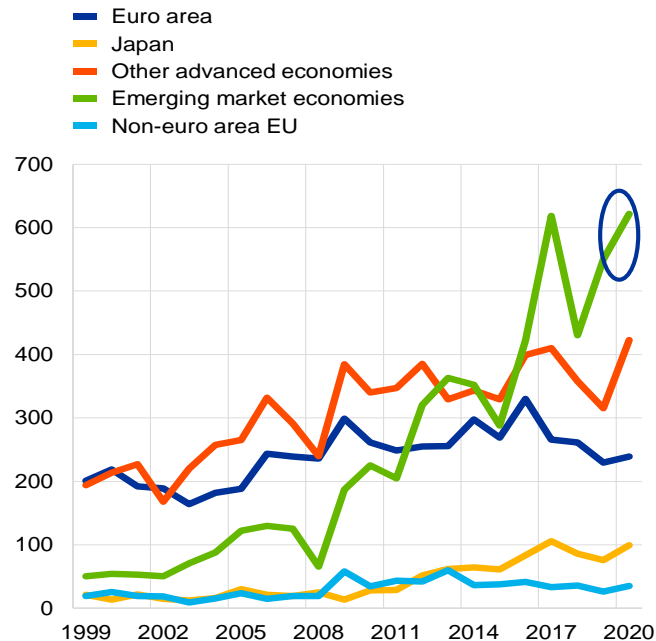
(percentuali)



Sources: Dealogic and ECB calculations.
Note: The latest observations are for end-2020.

Composizione per area geografica dei bond denominati in dollari americani

(miliardi di USD)

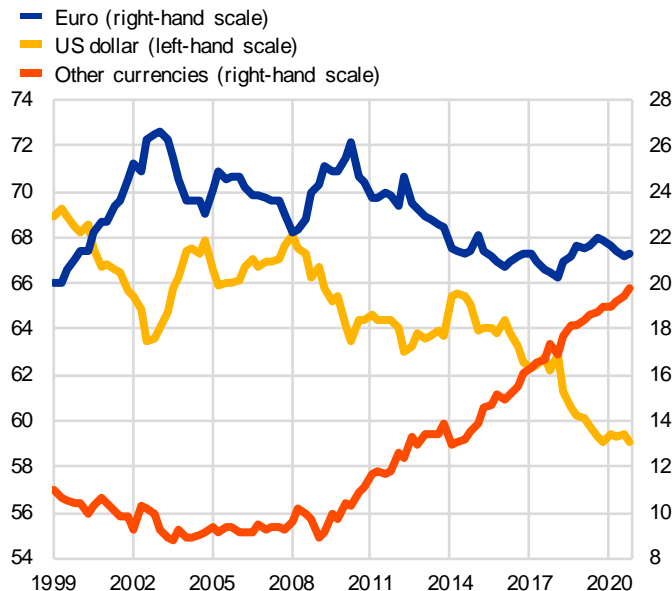


Sources: Dealogic and ECB calculations.
Note: The latest observations are for the fourth quarter of 2020.

La quota dell'euro nelle riserve internazionali si è parzialmente ridotta nel 2020, il dollaro è vicino al minimo storico

Evoluzione delle principali valute in uso nelle riserve internazionali

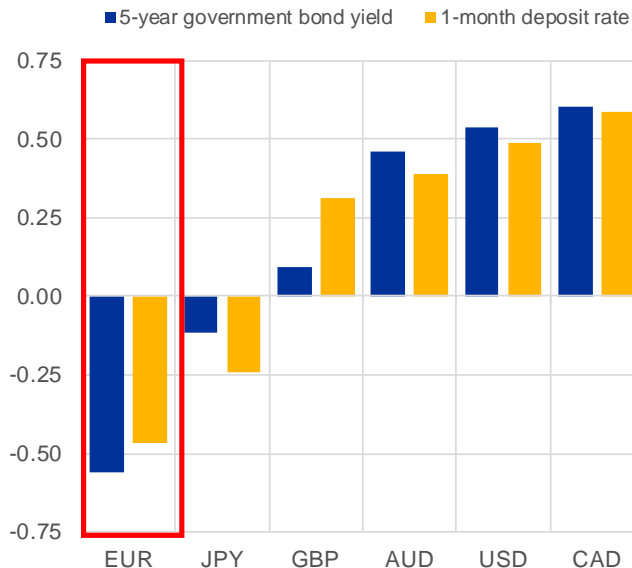
(percentuali; a tassi di cambio costanti al Q4 2020)



Sources: IMF and ECB calculations.
Note: The latest observations are for the fourth quarter of 2020.

Tassi di interesse associati alle principali valute nel 2020

(percentuali)



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.

Risultati principali parte1

- Generale stabilità nell'uso internazionale dell'euro dopo lo shock pandemico
- Questo risultato è in contrasto con gli sviluppi dopo la crisi finanziaria globale e sottolinea l'effetto positivo delle politiche di risposta coordinate a livello europeo
- Le diverse metriche di valutazione suggeriscono che l'utilizzo internazionale dell'euro rimane a livelli relativamente bassi rispetto ai massimi storici (pre-Lehmann)
- Continua il trend verso la diversificazione nella composizione delle riserve in valuta straniera
- L'euro ha il potenziale per aumentare la sua importanza nel segmento dei “green bonds”

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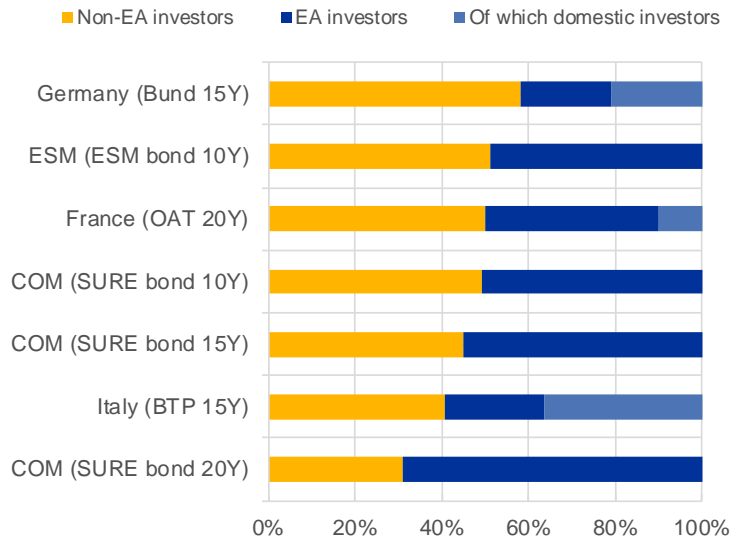
- **Risposte di UE & ECB alla pandemia e ruolo dell'euro nei mercati internazionali**
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3. Conclusioni

I bond emessi nel programma SURE sono stati apprezzati dagli investitori extra-europei

Distribuzione geografica dei diversi investitori nei bond emessi dalla UE nel 2020

(percentuali)



Sources: ECB staff calculations based on data released by the European Commission (COM), the European Stability Mechanism (ESM) and national authorities.

Notes: data refers to the distribution at the time of first allocation of bonds.

Tipologie di investitori al momento del collocamento

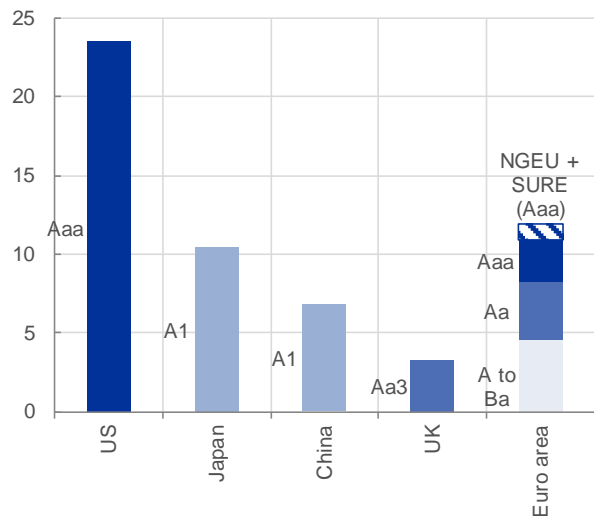
Maturity (years)	Value (€bn)	Central banks and official institutions	Insurance and pension funds	Other asset managers	Non-euro area investors
5	8	30%	5%	65%	60%
10	10	37%	6%	57%	49%
15	8.5	15%	14%	71%	45%
20	7	13%	13%	74%	31%
30	6	15%	23%	62%	35%

Source: ECB staff calculations based on data released by EU and national authorities. Data refers to distribution at the time of the first allocation of SURE bonds. "Other asset managers" includes the following categories: fund managers, bank treasuries, banks, hedge funds, others.

L'NGEU è il primo passo verso la creazione di un “safe asset” europeo ma è improbabile che cambi radicalmente il ruolo internazionale dell'euro

Valore del debito sovrano in circolazione

(triloni di USD)

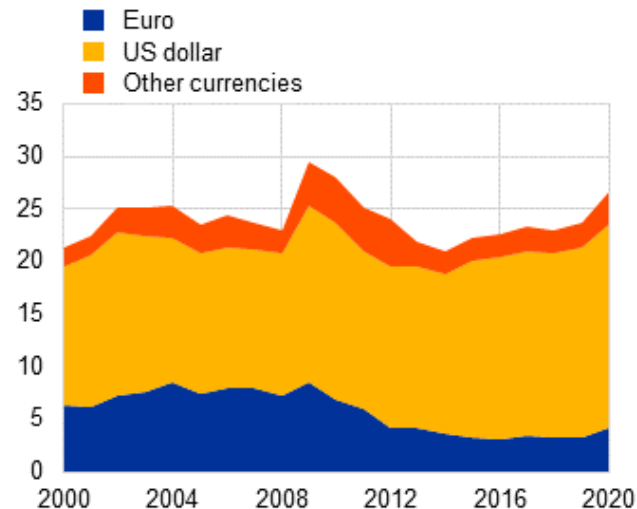


Sources: BIS, Haver Analytics, Bloomberg, European Commission and ECB calculations.

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.

Capitalizzazione di mercato dell'indice Bloomberg Barclays Global Aggregate Aaa

(percentuale del PIL mondiale)



Sources: Bloomberg, IMF and ECB staff calculations.

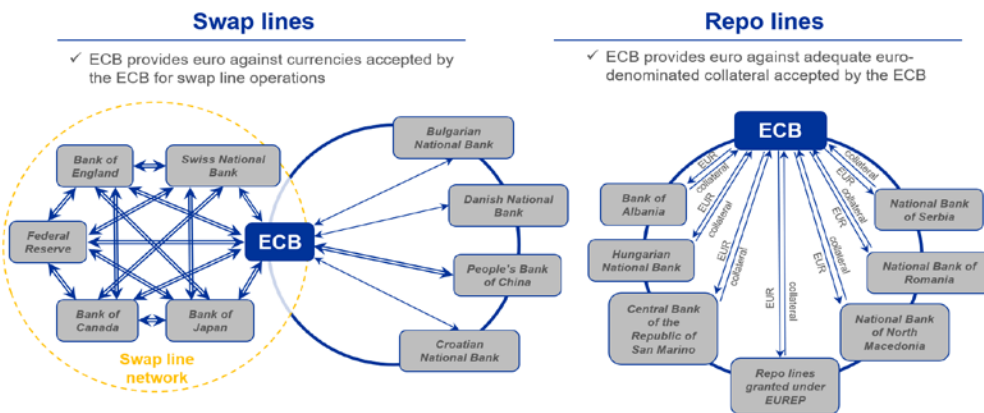
Notes: The Bloomberg Barclays Global Aggregate - Aaa Index is a measure of Aaa index rated debt including treasury, government-related, corporate and securitized fixed-rate bonds.

La risposta di politica monetaria della ECB alla pandemia è stata veloce e significativa e ha contribuito alla stabilizzazione dell'economia della zona euro

- Lancio del “pandemic emergency purchase programme” (PEPP) nel Marzo 2020:
 - Quantitativo totale incrementato da €750 miliardi a €1,850 miliardi nel Dicembre 2020.
- Espansione delle operazioni di rifinanziamento a lungo termine (TLTRO III):
 - Il volume ha raggiunto i €2 trilioni nel Maggio 2021
 - Misure per aumentare l'attrattività del TLTRO III
 - Tasso di prestito ridotto a -1%.
 - Aumento della quantità erogabile
 - Espansione degli asset accettati come collaterale

L'offerta di liquidità in euro nei mercati internazionali ha contribuito a ridurre gli effetti negativi della pandemia nell'area euro

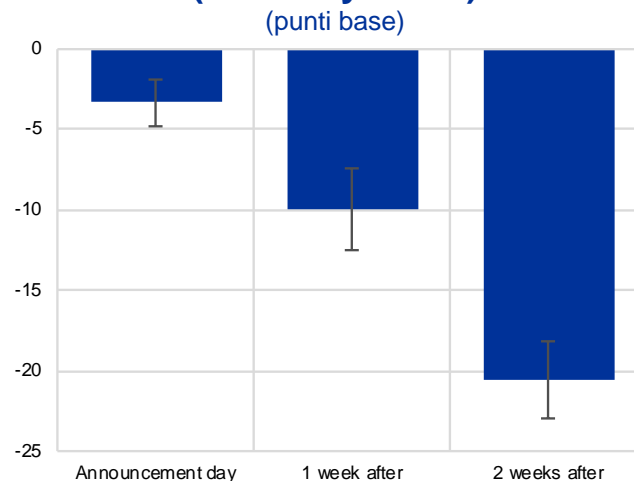
Framework dell'Eurosistema per fornire liquidità in euro ad altre banche centrali



Source: 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.

Stima dell'impatto delle linee di liquidità della ECB sul costo di finanziamento dei riceventi (currency basis)



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.

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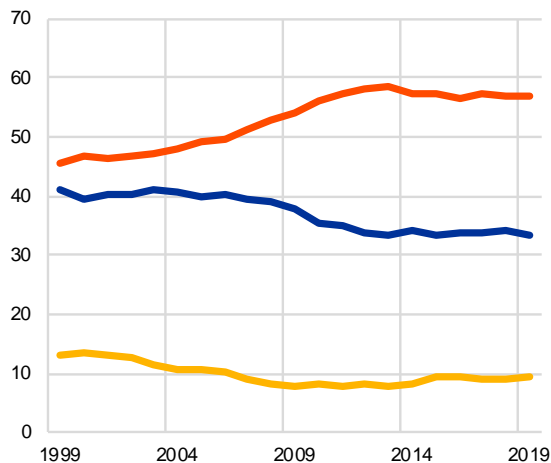
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L'uso del dollaro e dell'euro come valute di denominazione del commercio internazionale è aumentato

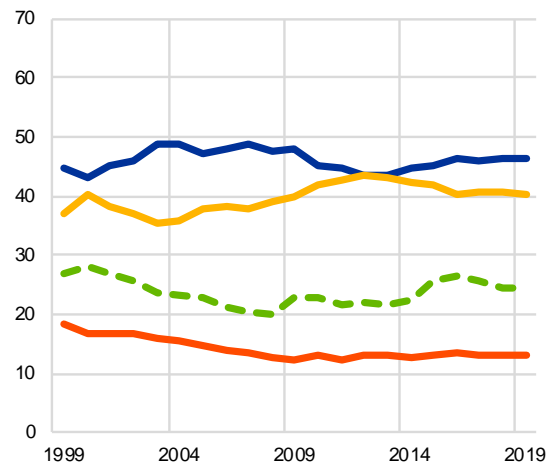
Export internazionale per destinazione (percentuali)

- Share of exports to the euro area
- Share of exports to the United States
- Share of exports to the rest of the world



Export internazionale per valuta di denominazione (percentuali)

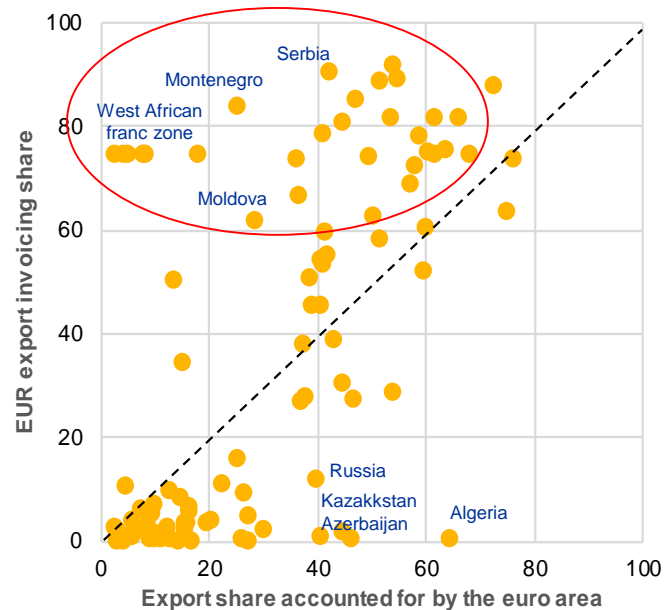
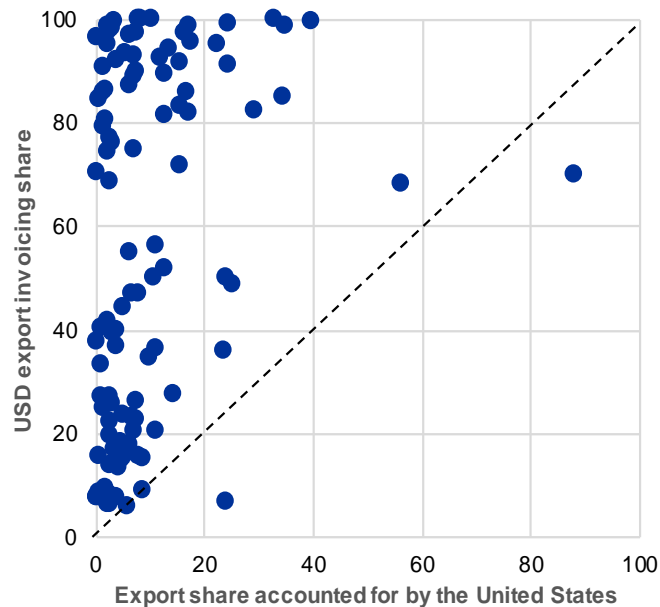
- Share of exports in EUR
- Share of exports in USD
- Share of exports in other currencies
- Share of exports in USD (excluding commodities)



Source: Boz, E., Casas, C., Georgiadis, G., Gopinath, G., Le Mezo, H., Mehl, A. and Nguyen, T., "Patterns in invoicing currency in global trade", Working Paper Series, No 2456, ECB, Frankfurt am Main, 2020.
Notes: The left panel shows the evolution of the share of exports to the United States, the euro area and the rest of the world in global exports; the right panel plots the share of global exports that are invoiced in US dollars, euro and other currencies. Only exports to countries for which invoicing data are available are shown. The charts are based on interpolated and extrapolated data.

Il dollaro è usato nelle transazioni a livello globale, l'euro ha un ruolo regionale in Europa e alcune parti dell'Africa

Commercio e valuta di denominazione: dollaro vs. euro (percentuali)



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.

Stima delle determinanti del ruolo del dollaro e dell'euro come valuta di denominazione del commercio internazionale

	US dollar			Euro		
	(1) Full sample	(2) Excluding euro area	(3) Excluding Europe	(4) Full sample	(5) Excluding euro area	(6) Excluding Europe
Share of exports to the United States in total exports	0.81 *** (0.00)	0.78 *** (0.00)	0.95 *** (0.00)			
Share of exports to the euro area in total exports				0.26 *** (0.00)	0.17 ** (0.02)	0.12 *** (0.00)
Share of homogeneous good in total exports	0.23 *** (0.00)	0.26 *** (0.00)	0.12 ** (0.01)	-0.12 *** (0.00)	-0.12 *** (0.00)	-0.06 *** (0.00)
Backward global value chain integrations	-0.14 (0.31)	0.12 (0.32)	0.07 (0.50)	0.29 ** (0.03)	-0.00 (0.96)	0.04 (0.70)
Within R^2	0.32	0.34	0.51	0.35	0.40	0.23
Observations	1,006	714	457	1,014	718	461
Countries	91	73	56	90	72	55

Source: Georgiadis et al. (forthcoming).

Notes: Inference is based on Driscoll-Kraay robust standard errors. p-values are reported in parentheses below the point estimates and ***, ** and * indicate statistical significance at the 10%, 5% and 1% significance levels. Country and time-fixed effects are included in all regressions. The coefficient estimates for countries' bilateral exchange rates against the US dollar and the euro and for the shares of exports to countries have the US dollar (euro) as a currency anchor in total exports are not shown to save space

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Le CBDCs possono combinare le caratteristiche di diversi strumenti di pagamento

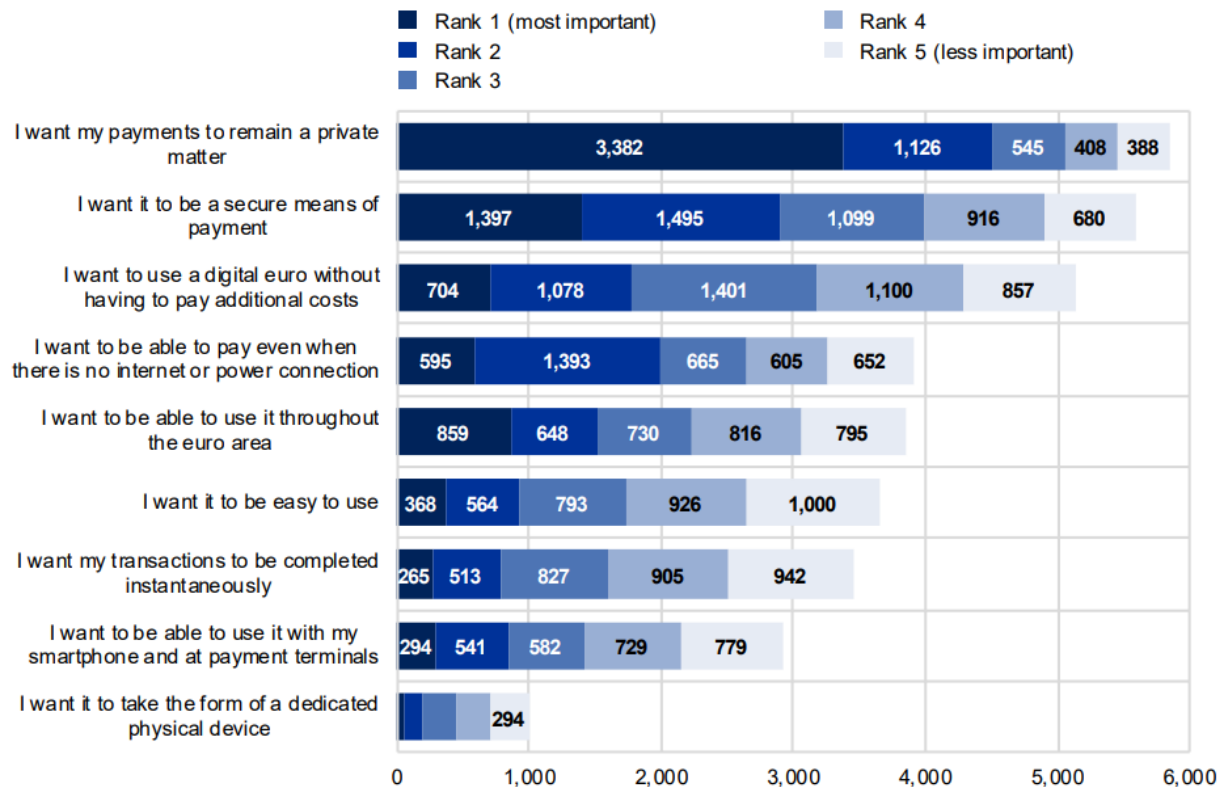
Caratteristiche di diversi strumenti di pagamento

	Scalabilità	Liquidità	Sicurezza	Remunerazione	Uso internazionale
Banconote		✓	✓		
Bond	✓			✓	✓
Depositi	✓			✓	✓
CBDC	✓	✓	✓	✓	✓
Stablecoin	✓	?	?	✓	✓

Scelte di design determineranno l'uso internazionale delle CBDCs:

- *Interoperabilità, restrizioni per i non residenti e remunerazione in particolare*

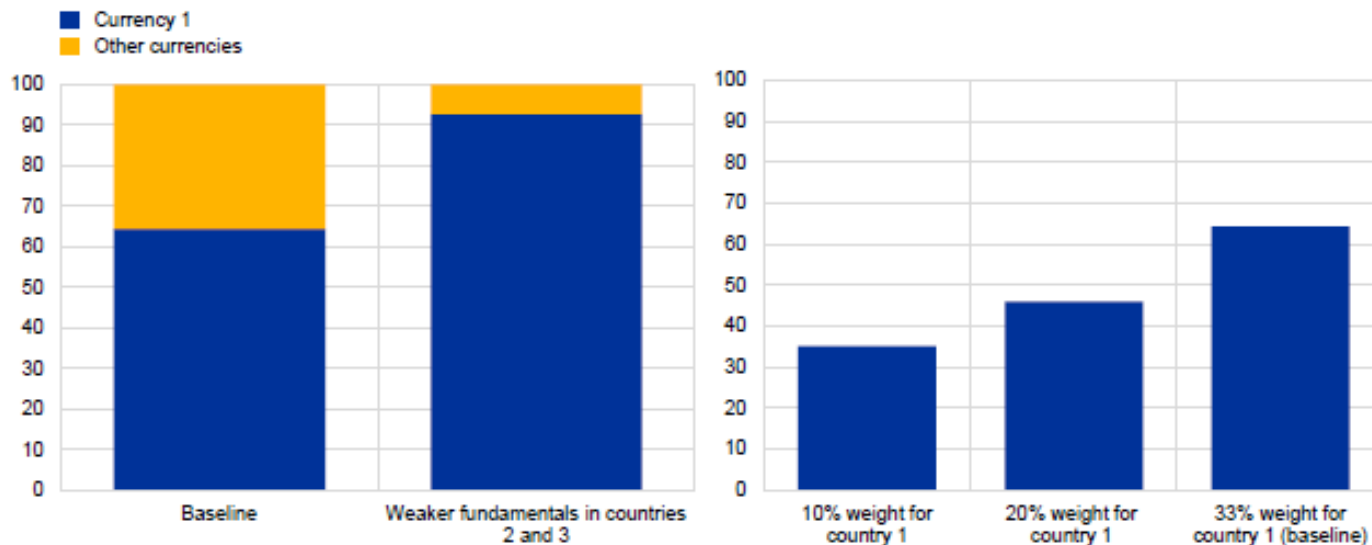
Risultati della consultazione pubblica sull'euro digitale



Un modello di scelta delle valute internazionali

Scelta endogena della valuta senza CBDCs

(percentuale di denominazione dell'export per differenti calibrazioni dei fondamentali macroeconomici, percentuali)



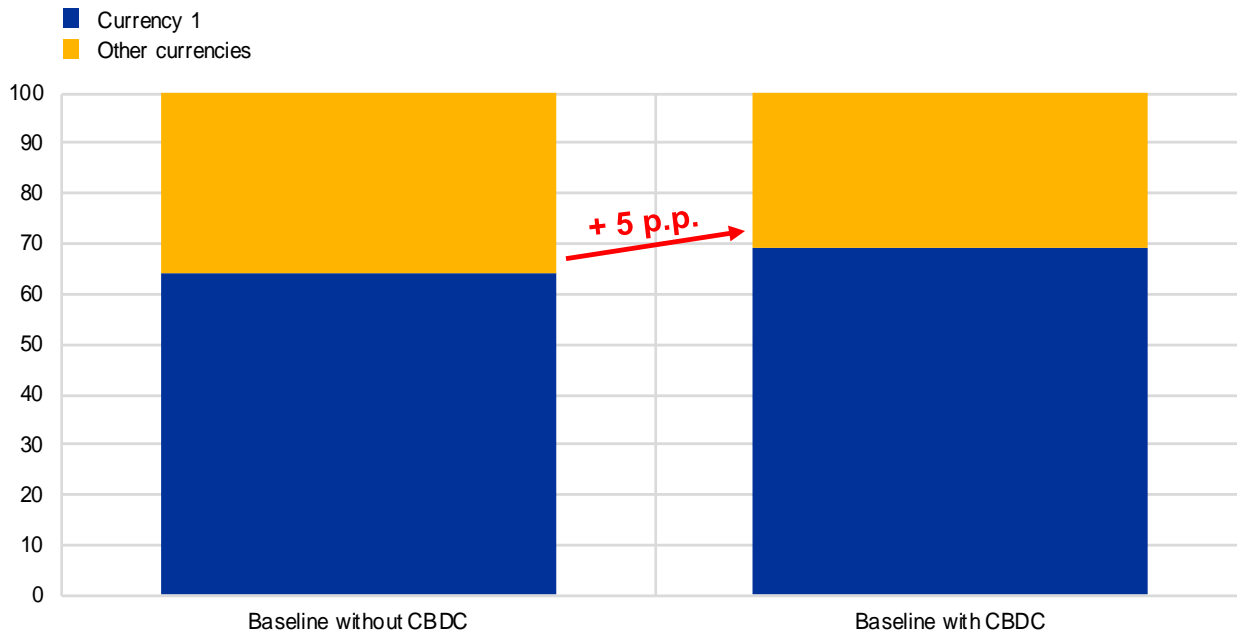
Source: ECB calculations.

Notes: The left panel shows simulations based on a three-country DSGE model in the spirit of Eichenbaum et al. (2020), where it is assumed that there are no capital controls, a 1% liquidation cost for debt securities and symmetric 33% weights for each of the three countries. In the baseline simulation, the volatility of the shocks in countries 1, 2 and 3 are calibrated to 0.01, 0.015 and 0.015 respectively, against 0.01, 0.02 and 0.02 in the alternative simulation with weaker fundamentals in countries 2 and 3. The right panel shows simulations using the baseline assumptions (see the last bar) and simulations where country 1 is smaller (i.e. with weights of 10% and 20%).

Una CBDC sostiene l'uso internazionale delle valute ma non genera cambiamenti radicali

Simulazione dell'impatto di una CBDC sull'uso internazionale delle valute

(percentuale di denominazione dell'export per diverse simulazioni, percentuali)



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.

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- Stabilità del ruolo internazionale dell'euro dopo lo shock pandemico, in contrasto con quanto avvenne dopo la crisi del debito sovrano.
- La coordinata risposta alla pandemia a livello europeo ha sostenuto il ruolo internazionale dell'euro.
- La stabilità del ruolo dell'euro a un livello basso suggerisce che solo ulteriori misure decise e sforzi di riforma consentirebbero di realizzare il suo potenziale globale.

3. Conclusioni

- Le implicazioni sottolineate dall'Eurosistema in passato sono ancora valide:
 - “*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.*”
- Il mercato dei capitali nell'area euro è meno sviluppato e liquido rispetto agli Stati Uniti
 - *Progressi verso una unione dei mercati dei capitali*
- Altri fattori che possono aumentare il ruolo internazionale dell'euro:
 - *NGEU e la creazione di un safe asset comune*
 - *Green bonds e la definizione di standard globali e leadership sul mercato*

Background

Acknowledgements

DGI/IPA editorial team:

P. Anaya Longaric, E. Eichler, M. Habib, M. Kellers, P. McQuade, A. Mehl

Contributors:

R. Beck, M. Ferrari, G. Georgiadis, H. Le Mezo, S. Titzck (all DGI-IPA) C. Grynberg (DGI/EIF), E. Beckmann (OeNB), A. Zamora-Pérez (DBN/CMA), E. Sipos Szabo and M. Schmitz (DGS/ESSA)

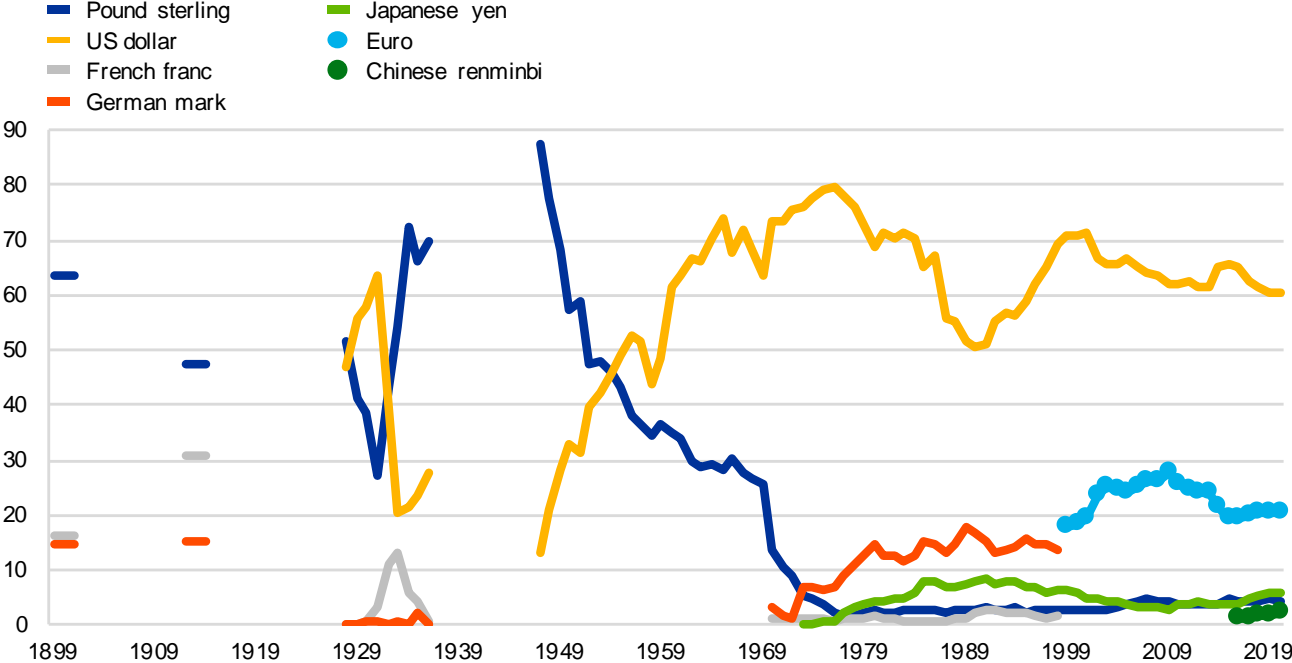
Many thanks to colleagues in

DGC, DGE, DGI, DGMP, DGM, DGMIP, DGSEC

History offers lessons for the euro

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

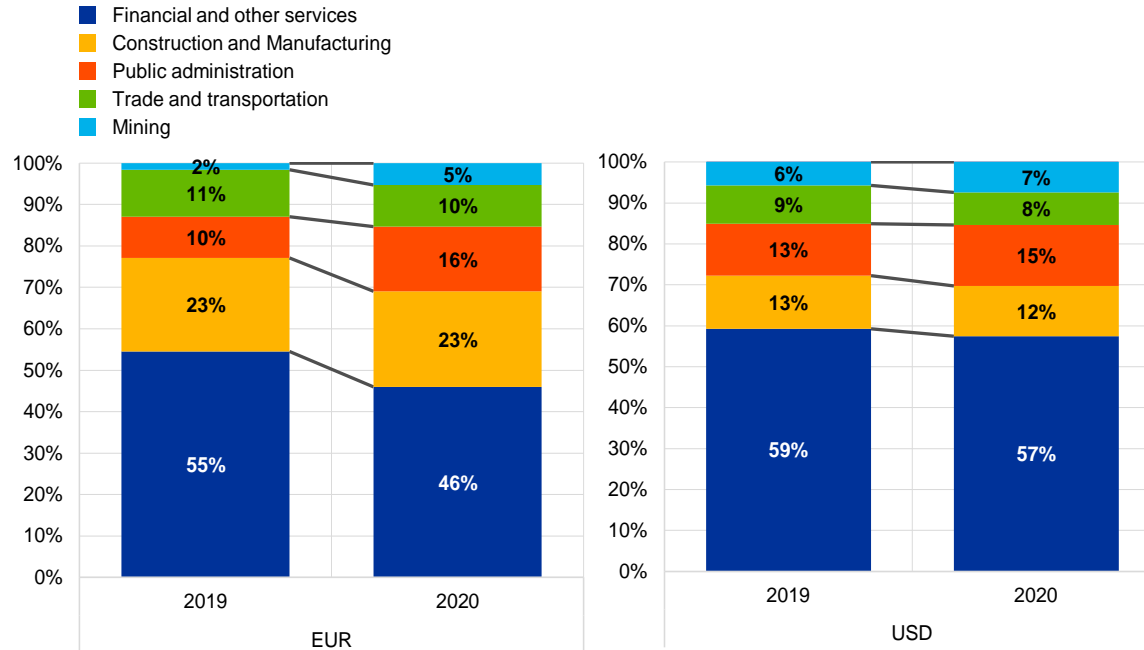
(percentages; at current exchange rates)



Source: Updated from Eichengreen, Barry, Arnaud Mehl and Livia Chitu (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.

The sectoral composition of international issuance of euro-denominated debt securities shifted from financials to sovereigns

Sector breakdown of euro- and US-dollar denominated international debt issuance (percentages)

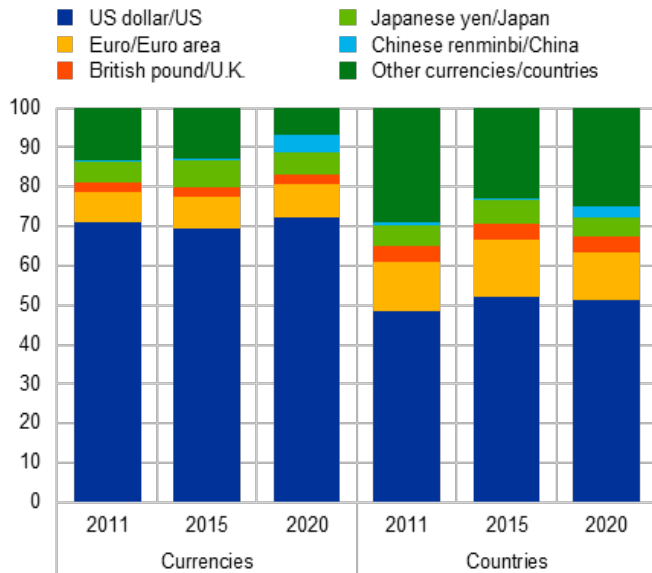


Sources: Dealogic and ECB calculations.

US dollar dominance in international debt markets: strong home “currency bias” of top US bond funds with global mandate

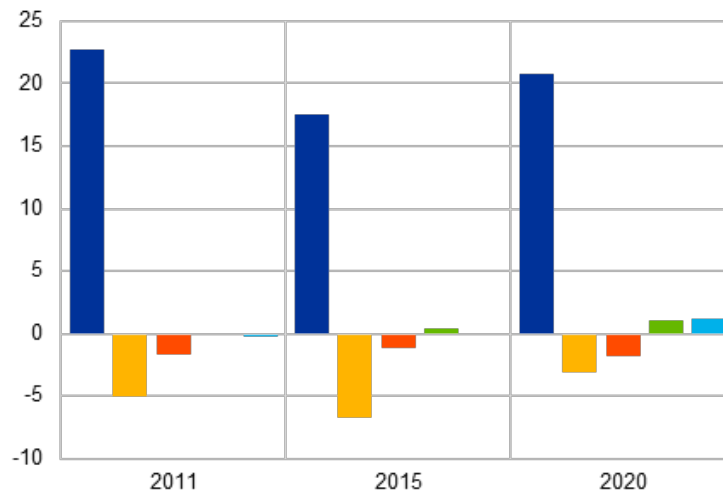
Portfolio allocation of top US fixed-income funds by currency and country

(percentages)



Currency bias of top US fixed-income funds

(percentages)



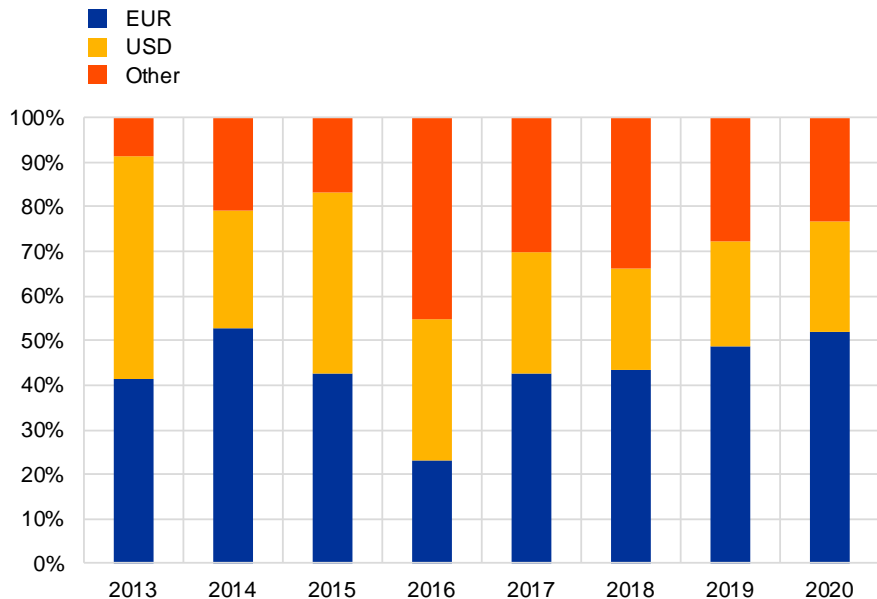
Sources: Lipper for Investment Management and ECB calculation

Note: Currency bias is defined as the difference between the share of assets denominated in a particular currency and the share of securities in the total portfolio issued by residents of the economy issuing that particular currency.

The euro remained a key currency in international green bond markets

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

(percentages)

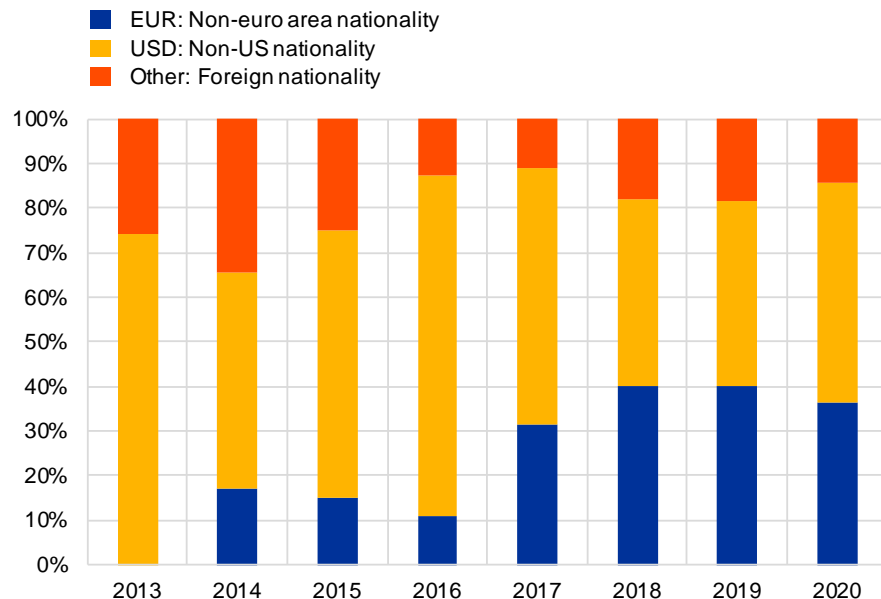


Sources: Dealogic and ECB calculations.

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

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

(percentages)



Source: Dealogic and ECB calculations.

Note: Bonds issued by non-national issuers. The latest observations are for 31 December 2020.

Reasons for the decline in the euro's role since the global financial crisis

General

- The euro area sovereign debt crisis raised concerns about the euro's future

Investment currency

- Increased diversification of official portfolios towards other currencies (AUD, CAD, RMB)
- Relatively low interest rates lowered the attractiveness of investments in euro-denominated securities

Financing currency

- Rising share of global debt issuance by emerging market economies (which is traditionally dollar-oriented)
- Higher currency swap costs reduced the attractiveness of the euro as a funding currency for acquiring dollars

Determinants can be influenced by policies

Economic size

Stability (economic, financial, political)

Sound institutions



- Price stability, Financial stability
- Sound fiscal & structural policies
- Deeper EMU & Banking Union

Financial openness

Liquidity/depth of financial markets

Efficient financial market infrastructures for payments and settlements



- Capital Markets Union
- Common debt issuance
- ECB euro liquidity lines
- Initiatives on markets and payments infrastructure

Geopolitical outreach

Inertia and network effects

Completing the Banking Union and the architecture of EMU will make the euro area more resilient and support the international role of the euro

- **Completing the Banking Union is essential to improve the euro area's ability to ensure its financial stability and resilience:**
 - Swift finalization of the review of the crisis management framework for banks.
 - Progress towards a European deposit insurance scheme.
 - Fewer barriers to cross-border integration.
- **A complete banking union will create the right policy environment for a more resilient euro area banking sector.**
- **Other dimensions of deepening the Economic and Monetary Union are also essential:**
 - In particular, more progress toward a permanent EU fiscal stabilisation facility will also be needed to make the EU and euro area more resilient.

The Capital Markets Union is also important to raise the euro's global status

- **A genuine EU Capital Markets Union could strengthen the international role of the euro by integrating and developing EU financial markets.**
- Ultimately, this would lead to deeper, more liquid and well-functioning euro-denominated financial markets.
- **Some initiatives can have a direct impact by generating classes of financial products** which are harmonised across the European Union:
 - Euro as leading global currency of green finance.
 - Initiatives on e.g. regulation of covered bonds and simple, transparent and standardised securitisation.
- **Other initiative are important for the integration and development of capital markets** in the euro area:
 - Harmonisation of insolvency frameworks, strengthening of supervisory convergence and common consolidated corporate tax base.

Efficient market infrastructures and payments raise the euro's global status indirectly

- **The Eurosystem operates infrastructure services facilitating the free flow of cash, securities and collateral across Europe.**
 - TARGET2 (real time gross settlement of payments), T2S (securities settlement) and TIPS (instant payments settlement).
 - TARGET2 and T2S consolidation will bring us closer to the goal of a truly single financial market in Europe.
 - As part of the European payments strategy, the Eurosystem supports initiatives towards a pan-European retail payment solution.
- **These services strengthen efficiency of market infrastructures and foster financial market integration; in turn, euro-denominated financial markets become more attractive to foreign market participants.**

Monetary policy considerations on a stronger international role of the euro

1999 assessment in blue

Benefits

Seigniorage

Lower transaction and hedging costs

Exorbitant privilege

(lower external financing costs)

Greater monetary policy autonomy

Stronger international transmission of monetary policy with positive spillbacks

Lower pass-through reduces impact of FX shocks on CPI

Reduced exposure to unilateral decisions from third countries

2021 assessment in red

Costs

Blurred monetary aggregate signals

(?)

Capital flow volatility (?)

Exorbitant duty

(stronger exchange rate and risk of asset fire sales in global stress episodes; need for provision of liquidity backstop)

Lower effects of monetary policy on import prices

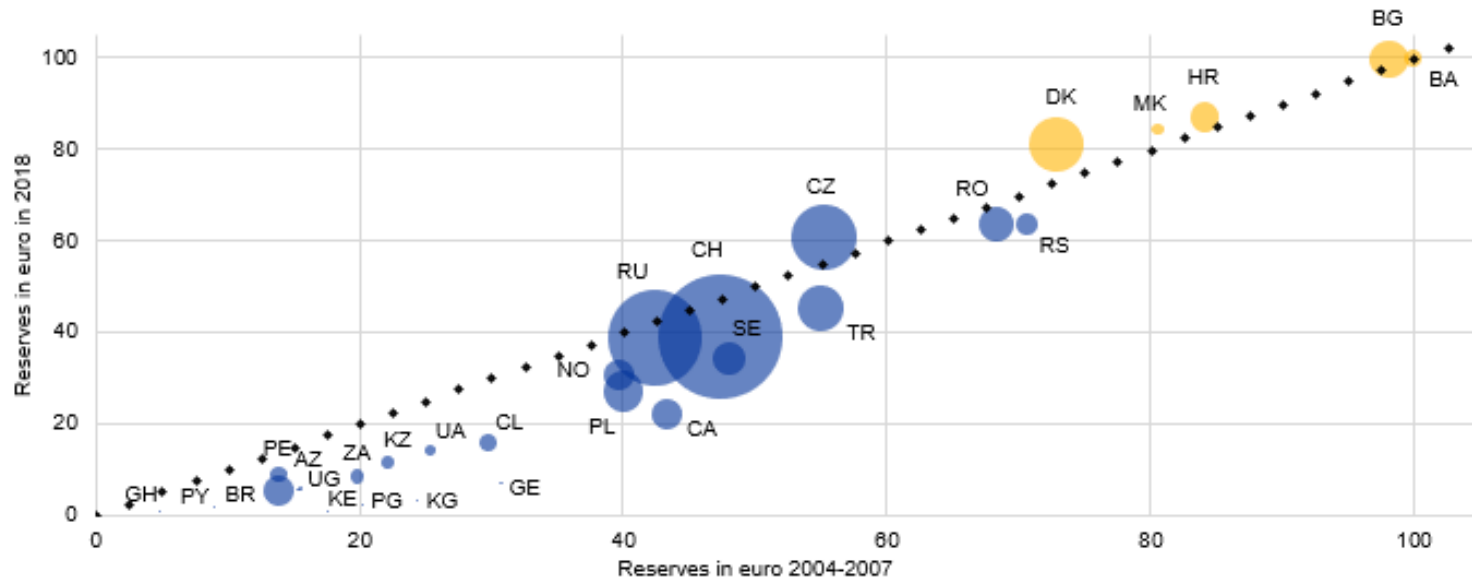
ECB liquidity lines are motivated by monetary policy objectives

- The provision of euro liquidity to non-euro area central banks aims at **addressing euro liquidity needs of banks and companies located in these countries** in a stressed market environment.
- Providing euro liquidity to non-euro area central banks in crisis times **reduces risks related to a) sell-off episodes of euro-denominated assets and b) adverse spillovers** from other economies to the euro area economy, including through global confidence effects.
- Overall, these arrangements **aim to facilitate a smooth transmission of monetary policy**, which benefits all euro area citizens.

New insights on currency denomination of official holdings of foreign exchange reserves

New insights on currency denomination of official holdings of FX reserves

Share of the euro in official reserves before global financial crisis (average 2004-07) vs. 2018 (percentage points)

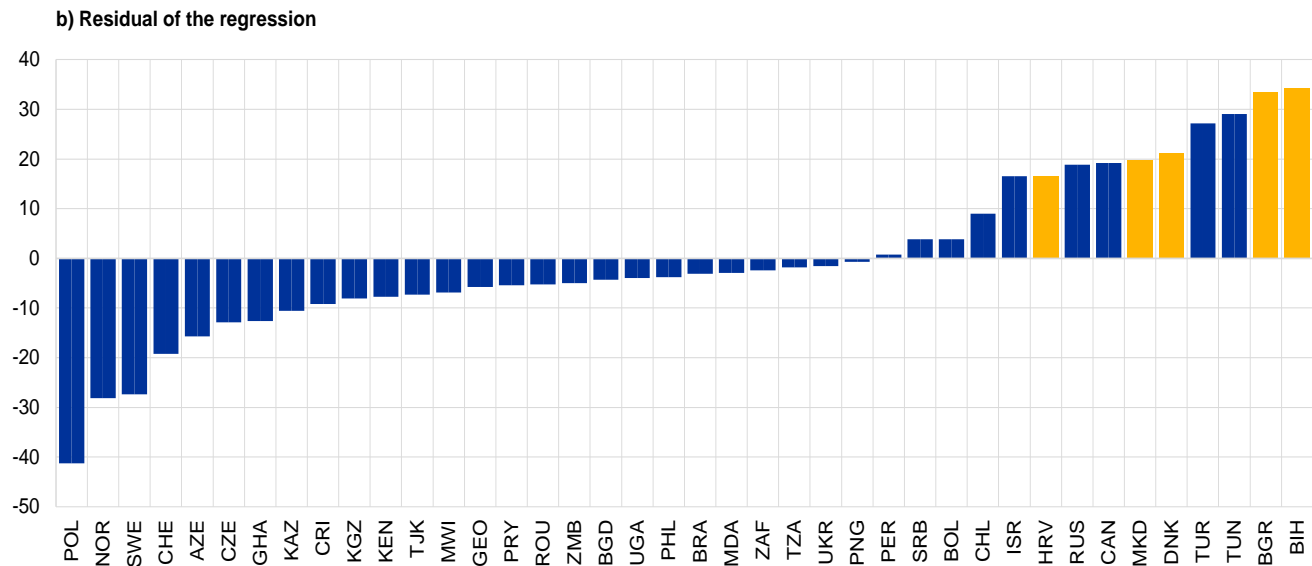


Sources: COFER, IMF and ECB calculations.

Note: The chart in the lower panel compares the share of reserves in euro by country in 2018 and the average share of the euro in the period 2004-07. The size of the bubbles corresponds to the average amount of reserves held in euro between 1999 and 2018 by each country. The yellow bubbles are countries with exchange rate regimes closely linked to the euro. In 2018, Denmark was part of ERM II, Bulgaria and Bosnia and Herzegovina had a euro-based currency board, Croatia a tightly managed floating regime and North Macedonia a stabilised arrangement with the euro as a reference currency. Country ISO codes are used for country names for the sake of readability.

Countries with exchange rate regimes that tightly anchor to the euro tend to hold a higher share of official reserves in euro

Estimated “excess” share of the euro in official foreign exchange reserves (percentage points)



Sources: ECB calculations.

Note: “Excess” euro reserves calculated as the residual of a cross-sectional regressions using indicators for trade and financial linkages, exchange rate anchoring and data for 2018. The yellow bars are countries with exchange rate regimes anchored to the euro. In that year, Denmark was in ERM II, Bulgaria and Bosnia and Herzegovina had a euro-based currency board, Croatia a tightly managed floating regime, and North Macedonia a stabilised arrangement with the euro as a reference. Country ISO codes are used for country names for the sake of readability.