



EUROPEAN CENTRAL BANK

EUROSYSTEM

Macro-Financial Stability in the EU: Some Lessons on the occasion of Fifty Years of Irish Membership of the EU

Ireland EU50 Seminar Series

Organised by Consulate General of Ireland,
Frankfurt

Hosted by Goethe University, Frankfurt



27 February 2023

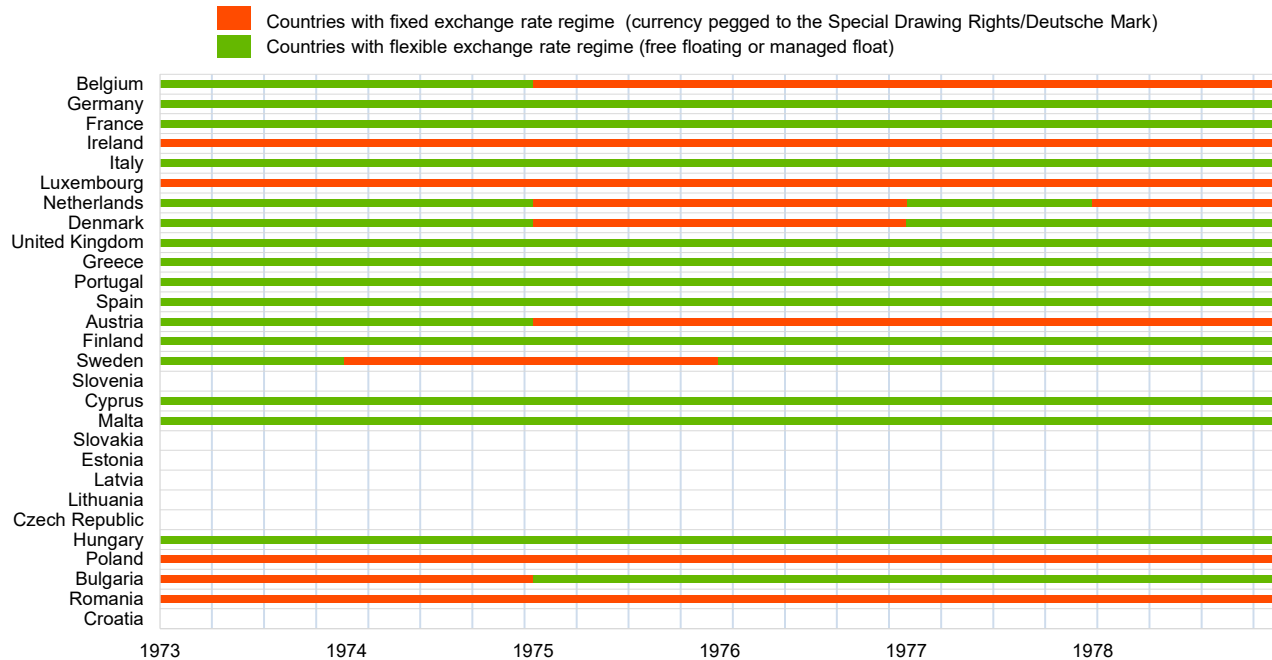
Philip R. Lane
Member of the Executive Board

- Ireland: link with Sterling until 1979; adjustable exchange rate 1979 to 1998; founder member of euro 1999 onwards
- Exchange rate regimes and trade
- Exchange rate regimes and financial linkages
- International monetary policy trilemma; international financial trilemma; international political economy trilemma
- Ancillary policies: financial openness; financial regulation (micro- and macro- prudential); fiscal stance

- 1973: Break-up of Bretton Woods system
- Various attempts to regulate intra-European exchange rate movements
- 1979 onwards: European Monetary System (adjustable exchange rates within a framework)
- 1992-1993 currency crises
- 1993-1998: Ireland – more exchange rate flexibility
- 1999-onwards: EMU
- 2008-2009: Global Financial Crisis
- 2010-2012: European Sovereign Debt Crisis
- 2013-2015: Cyprus, Greece
- 2015 onwards: macro-financial stability embedded

The evolution of the European Monetary Union

Exchange Rate Regimes of EU Member States

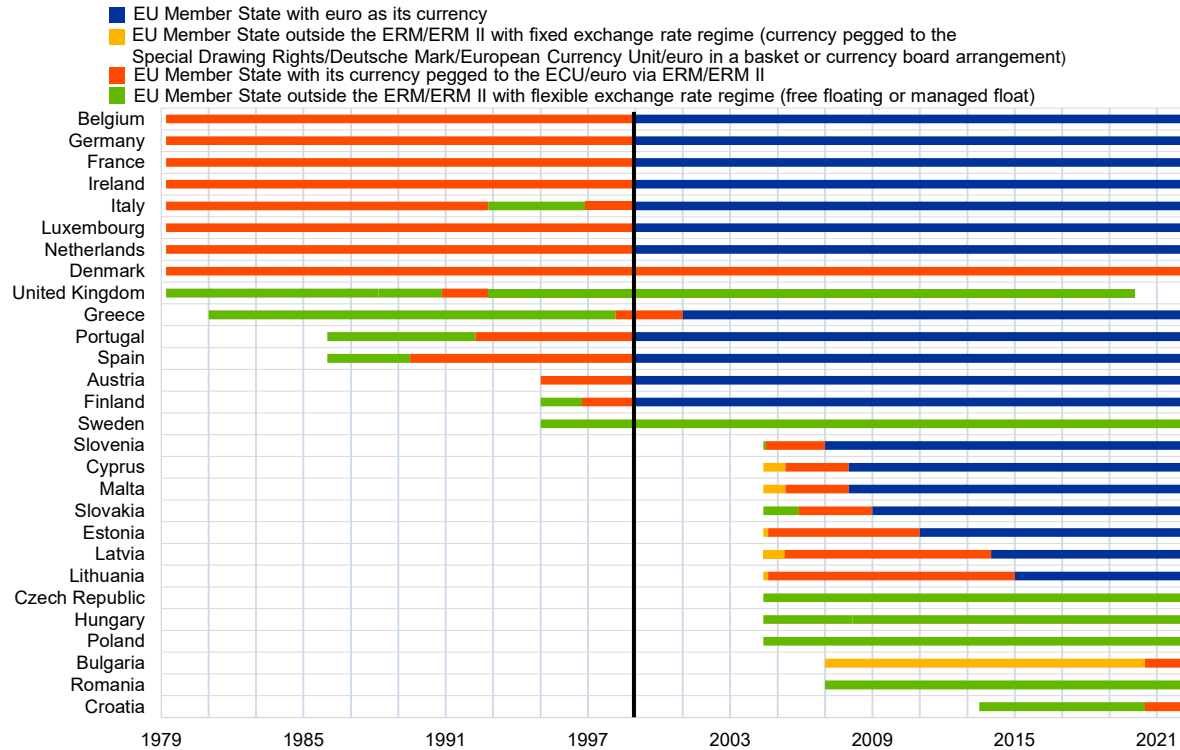


Source: ECB and ECB staff calculations.

Note: Latest observation in 1978.

The evolution of the European Monetary Union

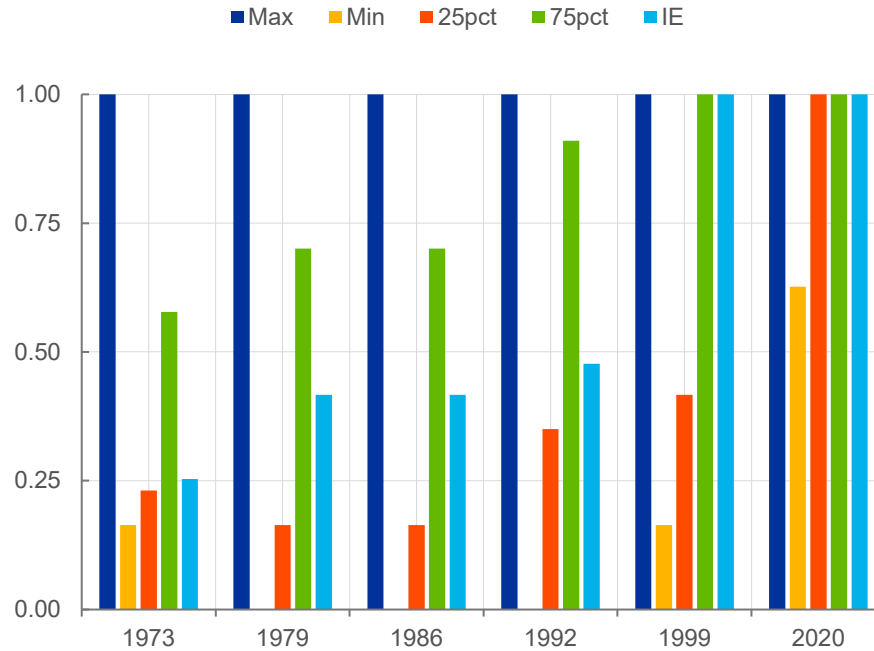
Exchange rate regimes of EU Member States since the start of the European Monetary System



Source: ECB.

Note: The latest observations are for 2022.

Capital account openness in EU countries (normalised values)



Source: Chinn-Ito index and ECB staff calculations.

Notes: Chinn-Ito index normalised. The latest observation is for 2020.

- Resilience of the euro intertwined with resilience of the EU
- Rising share of EU countries in the euro area
- International monetary policy trilemma; international financial trilemma; international political economy trilemma
- EU/euro: hybrid, fuzzy solutions, rather than “corner” solutions

- Crisis prevention and crisis management: European Stability Mechanism (ESM)
- Solvency and official funding: ESM; Liquidity role: OMT
- Macroprudential policy: limits to leverage of households (LTV, LTI limits), firms, sectors and banks
- Banking regulation and supervision: higher capital-asset ratios; pan-European supervision (SSM; ESAs); BRRD; SRM/SRB/SRF
- Conduct of national fiscal policies: IFCs; also EFB; European semester

- Banking Union: EDIS; pan-European banking
- Capital Markets Union:
- Central Fiscal Capacity: Macroeconomic stabilisation (asymmetric shocks; common shocks); international public goods

- EU SURE bonds (on-lent to national governments)
- ESM contingent credit lines
- EIB: credit guarantees for firms
- NGEU: EU bonds to fund grants and loans to national governments, within RRP framework
- 2021-2026 disbursement; multi-horizon funding (up to 2058)
- Exceptional type of central fiscal capacity (CFC)
- Impact on risk premia

- Interconnections between euro area and broader European regional economy: trade, financial, monetary
- Spillovers and spillbacks across all countries but sensitive to exchange rate regime
- ECB: integrates regional European economic developments in economic projections and policy assessments

Volatility of exchange rate changes against the euro and the US dollar – countries strictly anchored to the euro

<i>Base currency</i>	Euro <i>standard deviation of monthly percentage changes</i>	US dollar	IMF de facto classification <i>de facto arrangements as identified by IMF staff</i>	IMF de jure classification <i>de jure arrangements as identified by IMF staff</i>
Bulgarian lev (ERM II)	0.001	1.67	Currency board	Currency board
Danish krone (ERM II)	0.04	1.68	Conventional peg	Conventional peg
Serbian dinar	0.12	1.68	Stabilised arrangement	Floating
Bosnia and Herzegovina convertible marka	0.19	1.70	Currency board	Currency board
Macedonian denar	0.20	1.69	Stabilised arrangement	Floating
Romanian leu	0.30	1.66	Crawl-like arrangement	Managed floating
Croatian kuna (ERM II)	0.39	1.77	Stabilised arrangement	Stabilised arrangement
Albanian lek	0.73	1.73	Floating	Free floating
Tunisian dinar	0.80	1.27	Crawl-like arrangement	Floating
Moroccan dirham	0.98	1.63	Pegged exchange rate within horizontal bands	Pegged exchange rate within horizontal bands

Sources: BIS, IMF Annual Report on Exchange Arrangements and Exchange Restrictions 2021 and ECB staff calculations.

Notes: The standard deviation of monthly percentage changes is calculated for the period from 31 January 2020 to 31 August 2022. The IMF classifications are as at 30 April 2021.

Volatility of exchange rate changes against the euro and the US dollar – countries loosely anchored to the euro or floating in the EU neighbourhood region

<i>Base currency</i>	Euro <i>standard deviation of monthly percentage changes</i>	US dollar	IMF de facto classification <i>de facto arrangements as identified by IMF staff</i>	IMF de jure classification <i>de jure arrangements as identified by IMF staff</i>
Swiss franc	1.13	1.50	Crawl-like arrangement	Free floating
Swedish krona	1.21	2.20	Free floating	Free floating
Singapore dollar	1.25	0.99	* Stabilised arrangement	Other managed
Yuan renminbi	1.45	1.12	* Crawl-like arrangement	Managed floating exchange rate arrangement
Kuwaiti dinar	1.51	0.30	* Other managed arrangement	Conventional peg vis-à-vis a currency composite
Pound sterling	1.55	1.82	Free floating	Free floating
Polish zloty	1.56	2.75	Free floating	Free floating
Czech koruna	1.78	2.69	Free floating	Free floating
Algerian dinar	1.82	1.12	* Stabilised arrangement	Managed floating
Hungarian forint	1.85	3.05	Floating	Free floating
Iceland krona	2.35	2.87	Floating	Free floating
Norwegian krone	2.86	3.33	Free floating	Free floating

Sources: BIS, IMF Annual Report on Exchange Arrangements and Exchange Restrictions 2021, and ECB staff calculations.

Notes: The highlighted currencies, identified by an asterisk (*), are less volatile against the US dollar than against the euro. The standard deviation of monthly percentage changes is calculated for the period from 31 January 2020 to 31 August 2022. The IMF classifications are as at 30 April 2021.

Countries and territories with exchange rate regimes linked to the euro

(as of March 2022)

Countries	Exchange rate regimes	Monetary policy framework
European microstates (non-EU members), some French overseas collectivities	Euroisation	Other ¹
CFA franc zone, CFP franc zone, Comoros, Cabo Verde, São Tomé and Príncipe	Pegs based on the euro	Exchange rate anchor
Samoa	Pegs based on the SDR or other currency baskets involving the euro	Monetary aggregate target
Fiji, Libya	Pegs based on the SDR or other currency baskets involving the euro	Exchange rate anchor

Sources: National central banks, IMF and ECB.

Note: The table refers to de facto exchange rate regimes.

¹ No separate legal tender/no nominal anchor; various indicators are taken into account in the conduction of monetary policy.

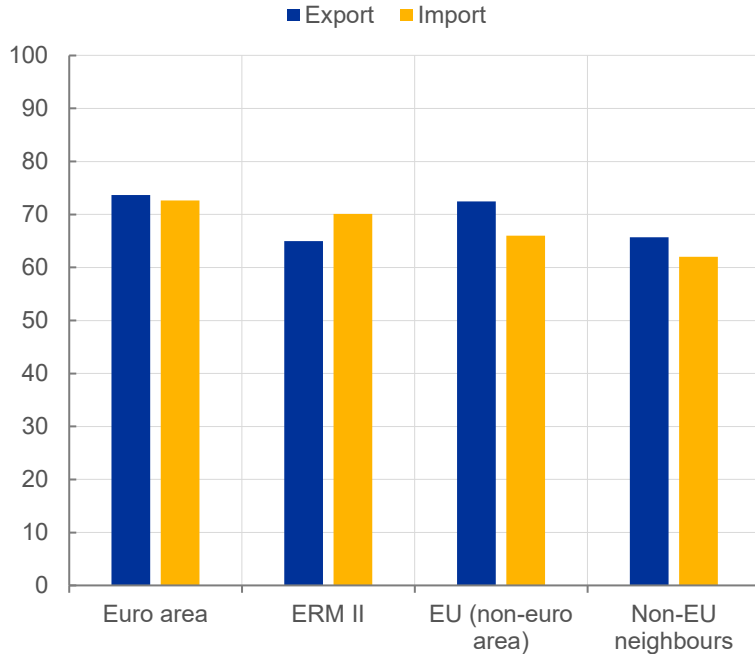
Classification is based on the IMF's 2021 Annual Report on Exchange Arrangements and Exchange Restrictions.

European microstates: Republic of San Marino, Vatican City, Principality of Monaco and Andorra are entitled to use the euro as their official currency. French overseas territories: Saint Barthélemy, Saint Martin and Saint-Pierre and Miquelon use the euro as their official currency. CFA franc zone: CEMAC (Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea and Gabon) and WAEMU (Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo). In December 2019, a reform of the WAEMU was announced where the CFA franc would be replaced with a new unit – the eco – with a fixed exchange rate vis-à-vis the euro. CFP franc zone: New Caledonia and the French overseas territories of French Polynesia and Wallis and Futuna. The CFP Franc has had a fixed exchange rate against the euro since its introduction in 1999. Cabo Verde and São Tomé and Príncipe: both countries have had fixed exchange rates against the euro since 1998 (Cabo Verde) and 2010 (São Tomé and Príncipe). Samoa: the central bank maintains an exchange rate peg based on a basket of currencies that includes the euro, as well as the US dollar, New Zealand dollar and Australian dollar.

Fiji: the currency was pegged to a basket of international currencies in May 2007. The external value of the Fiji dollar is officially determined on the basis of a weighted basket of currencies comprising the Australian dollar, Japanese yen, New Zealand dollar, euro and US dollar.

Euro invoicing in international trade

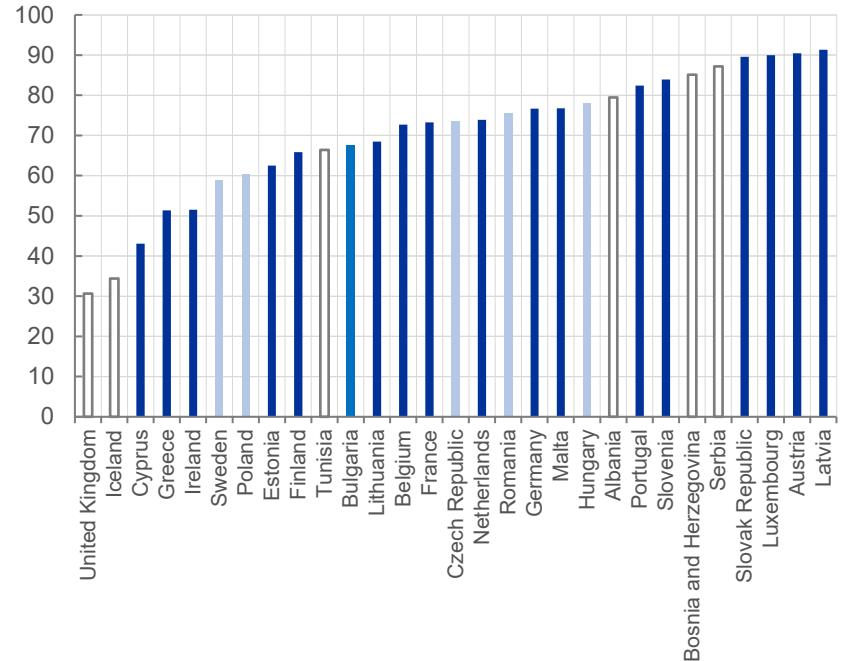
Share of exports and imports invoiced in euro (percent)



Sources: IMF and ECB staff calculations.

Notes: ERM II includes Bulgaria; EU (non-euro area) is the average of the Czech Republic, Hungary, Poland, Romania and Sweden; Non-EU neighbours is the average of Albania, Bosnia and Herzegovina, Iceland, Serbia, Tunisia and the United Kingdom. The shares for Italy, Spain, Denmark and Croatia are missing. The latest observations are for 2019.

Total trade invoiced in euro (percent)

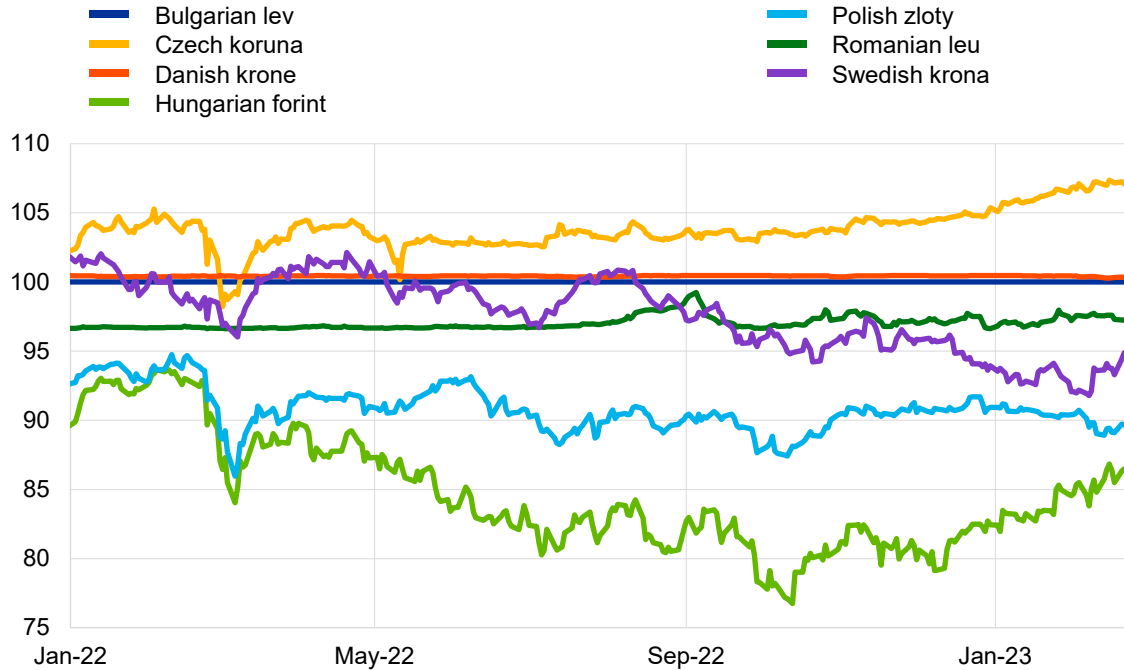


Sources: IMF and ECB staff calculations.

Notes: The bars show the average of the shares of exports and imports invoiced in euro in 2019. Dark blue shows euro area countries, blue shows ERM II countries, light blue shows EU (non-euro area) countries and white shows non-EU neighbour countries. The shares for Italy, Spain, Denmark and Croatia are missing. The latest observation is for 2019.

Exchange rates of non-euro area EU countries' currencies against the euro

(Jan 2020 = 100)

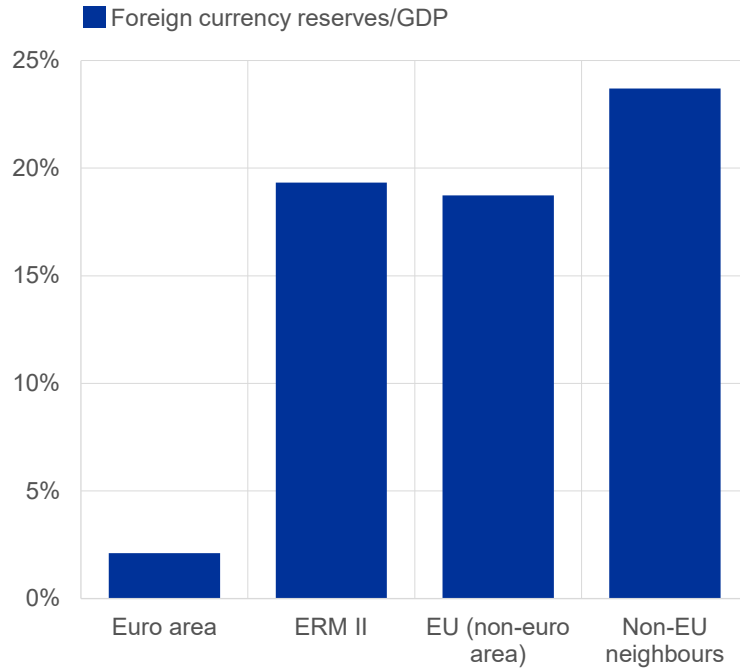


Source: ECB.

Notes: An increase corresponds to an appreciation. The latest observations are for 24 February 2023.

Level of foreign exchange reserves

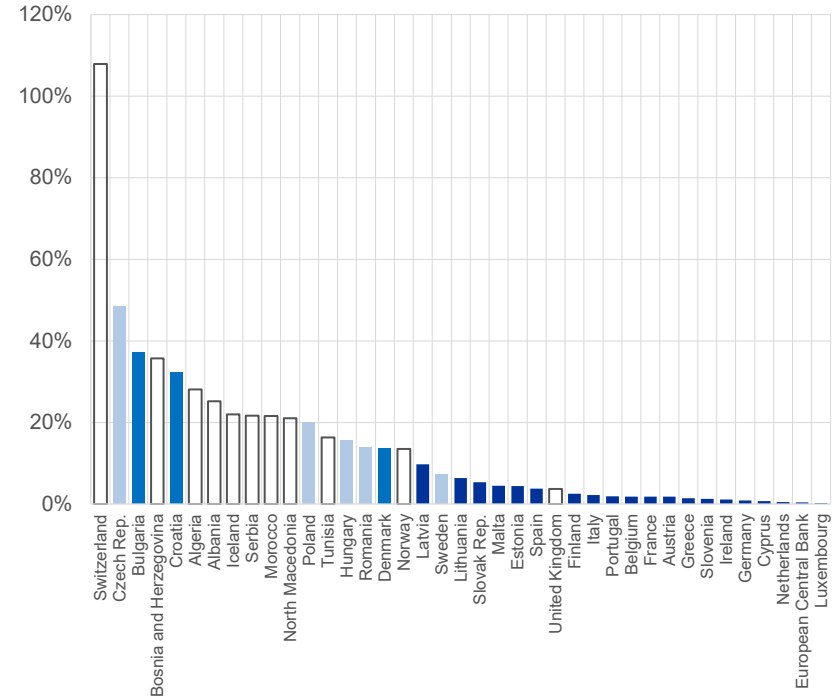
Foreign exchange reserves by region (as a percentage of GDP)



Sources: IMF and ECB staff calculations.

Notes: Euro area includes the ECB's reserve assets and those held by the national central banks of euro area countries; ERM II includes Bulgaria, Croatia and Denmark; EU (non-euro area) includes Czech Republic, Hungary, Poland, Romania and Sweden; Non-EU neighbours includes Albania, Algeria, Bosnia and Herzegovina, Iceland, Macedonia, Morocco, Norway, Serbia, Switzerland, Tunisia and the United Kingdom. GDP weighted averages. The latest observation is for August 2022.

Foreign exchange reserves by country (as a percentage of GDP)

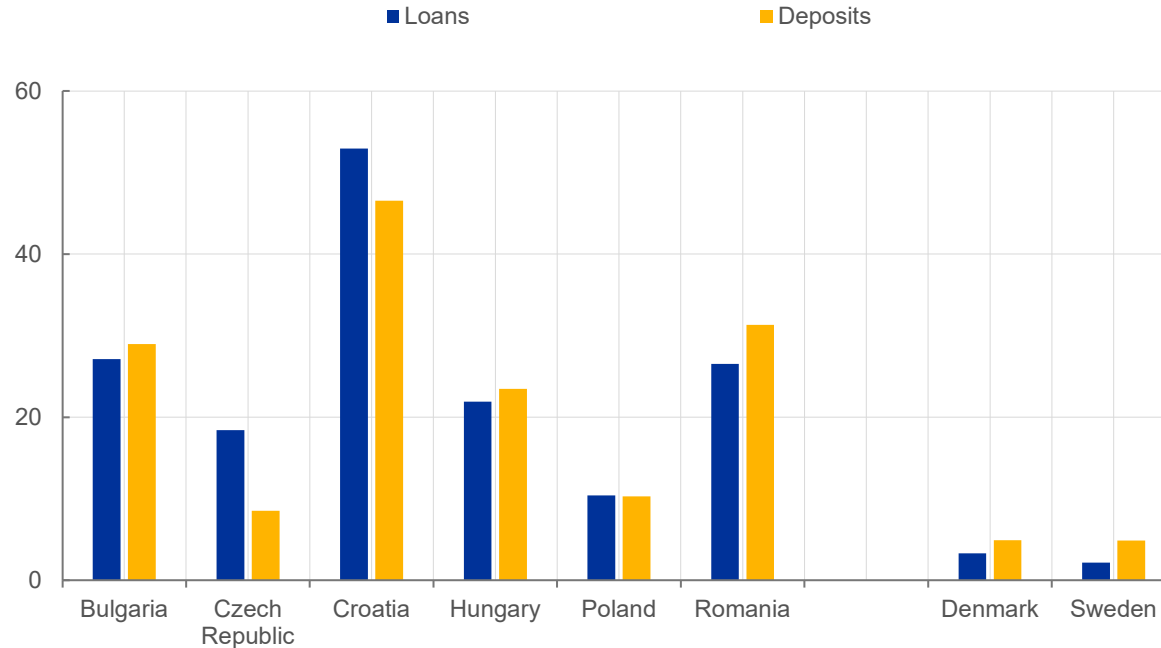


Sources: IMF and ECB staff calculations.

Notes: Dark blue shows euro area countries and the ECB, blue shows ERM II countries, light blue shows EU (non-euro area) countries and white shows non-EU neighbour countries. The latest observations are for August 2022.

Share of the euro in deposits and loans for non-euro area EU countries in 2022

(in percentage)



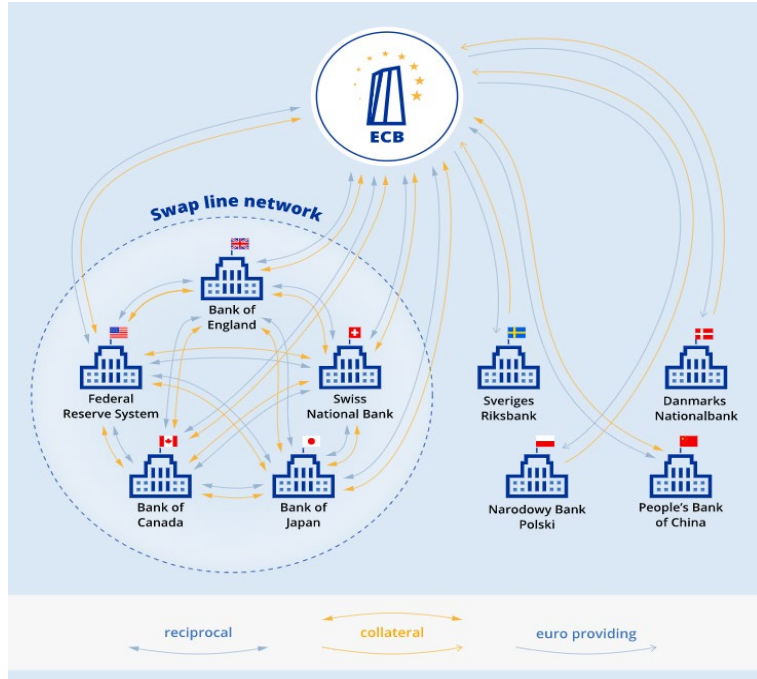
Source: ECB.

Note: Data are taken from the ECB Balance Sheet Items statistics and refer to outstanding amounts of loans/deposits of/with Monetary Financial Institutions at the end of August 2022.

Countries receiving swap/repo lines

Swap lines

(foreign currencies that are accepted as collateral)

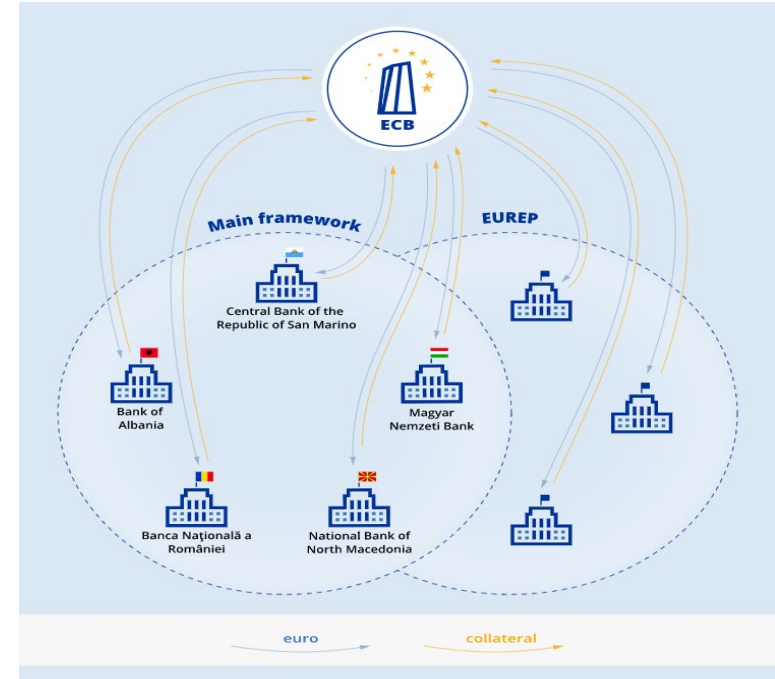


Source: ECB.

Note: Illustration of the agreements in place as at April 2022.

Repo lines

(adequate euro-denominated collateral accepted by the ECB)



Source: ECB.

Note: Illustration of the agreements in place as at April 2022.

List of central bank liquidity lines the Eurosystem maintains under its main framework for swap and repo lines

<i>Non-euro area counterpart</i>	Type of arrangement	Maximum borrowable amount (EUR millions)	Expiry date	Reciprocal
Danmarks Nationalbank	Swap line	24,000	Standing	No
Sveriges Riksbank	Swap line	10,000	Standing	No
People's Bank of China	Swap line	45,000	8 October 2025	Yes
Narodowy Bank Polski	Swap line	10,000	15 January 2023	No
Magyar Nemzeti Bank	Repo line	4,000	15 January 2023	No
Banca Națională a României	Repo line	4,500	15 January 2023	No
Bank of Albania	Repo line	400	15 January 2023	No
National Bank of North Macedonia	Repo line	400	15 January 2023	No
Central Bank of the Republic of San Marino	Repo line	100	15 January 2023	No

Source: ECB.

Notes: The table does not include swap lines established within the swap line network. The table does not include repo lines established with non-euro area central banks under the Eurosystem repo facility for central banks (EUREP), for which the ECB does not disclose its counterparties. The maximum borrowable amount for the People's Bank of China is set to CNY 350 billion when CNY is provided to the ECB. This is an illustration of the agreements in place as at April 2022.

- Euro as anchor of monetary and financial stability for EU
- Ancillary policies: micro-prudential regulation and common supervision; macroprudential regulation; EU fiscal framework
- More ambition: banking union; capital markets union; central fiscal capacity
- Adaptation: digital finance – digital euro
- Effective sovereignty: capacity to manage common challenges; effective policymaking