Explanatory notes

Euro foreign exchange reference rates of the European Central Bank

On 1 January 1999, 11 Member States of the European Union initially adopted the euro as their single currency. On 1 January 2001, Greece joined the euro area, followed by Slovenia on 1 January 2007, Cyprus and Malta on 1 January 2008, Slovakia on 1 January 2009, Estonia on 1 January 2011, Latvia on 1 January 2014, Lithuania on 1 January 2015, Croatia on 1 January 2023 and Bulgaria on 1 January 2026 (for details, see Table I. 1., p. 7).

Since the introduction of the euro, there has been no autonomous foreign exchange market for the currencies replaced by the euro; the euro alone is quoted against non-euro area currencies, such as the US dollar and the Japanese yen.

Since 4 January 1999, the ECB has published euro foreign exchange reference rates for selected currencies each working day. These rates are calculated on the basis of the daily concertation between central banks which takes place at 14:10 CET. Only one reference rate, i. e. the middle rate, is established by this procedure. For information on the framework for the euro foreign exchange reference rates, see the ECB's website: https://www.ecb.europa.eu/stats/pdf/exchange/Frameworkfortheeuroforeignexchangereferencerates.en.pdf?c883afa875c74877fdf4634dcb85688c.

Effective euro exchange rates

The indices of the nominal effective exchange rates of the euro are designed to measure, in aggregated form, the impact of changes in exchange rates on the price competitiveness of the euro area economy as a whole. They are calculated by the Deutsche Bundesbank on the basis of weighted averages of the bilateral euro exchange rates against the currencies of selected trading partners of the euro area, with Q1 1999 = 100. An increase in the index rate indicates an appreciation of the euro and thus, taken in isolation, a negative impact on the price competitiveness of the domestic economy. The weights are based on the trade in manufactured goods (Sections 5 to 8 of the Standard International Trade Classification (SITC)) and services (Extended Balance of Payments Services Classification (EBOPS) – Total EBOPS services) and also reflect third-market effects.

The table entitled "Overall trade weights used in the calculation of the effective exchange rates (EER) of the euro" on page 49 shows trading partners' membership of the extended or the broad EER group as well as their percentage weights. To prevent breaks in the time series, the indices of two consecutive weighting periods are chain-linked beyond the end of the preceding period. See the ECB's website for information on the revised trade weights published from July 2020 (https://www.ecb.europa.eu/stats/pdf/exchange/updatedtradeweights201708202007.pdf?f184ad85cc2c5ccefd05680706893cde).

The real effective exchange rates of the euro additionally take account of the differences in price movements between the groups of countries under review. If the current price indices for determining the real effective exchange rate based on consumer price indices are not yet available, estimates are used for the calculation.

For further information on the calculation method, see the ECB's methodological notes relating to the daily nominal effective exchange rate of the euro and ECB Occasional Paper No 134 of June 2012 in conjunction with ECB Statistical Paper Series No 49 of June 2024, which can be downloaded from the ECB's website (www.ecb.europa.eu).

Indicators of the German economy's price competitiveness

The calculation of indicators of the German economy's price competitiveness is methodically consistent with the ECB's procedure for determining the effective exchange rates of the euro. For more detailed information on methodology and weighting scale, see the website of the Deutsche Bundesbank (https://www.bundesbank.de/content/796162).

The indicators are broken down into three groups in Table III. 3. (p. 17).

The group of 28 selected industrialised countries comprises the respective composition of euro area countries

Overall trade weights used in the calculation of the effective exchange rates (EER) of the euro°

Figures in % — As of January 2026

Trading partner	Calculation period for weights[1]											
	Extended EER group of trading partners						Broad EER group of trading partners					
	1995 to 1997	1998 to 2000	2013 to 2015	2016 to 2018	2019 to 2021	2022 to 2024	1995 to 1997	1998 to 2000	2013 to 2015	2016 to 2018	2019 to 2021	2022 to 2024
	Period of use of weights[1]											
	Up to end of 1997	1998 to 2000[2]	2013 to 2015	2016 to 2018	2019 to 2021	From 2022	Up to end of 1997	1998 to 2000[2]	2013 to 2015	2016 to 2018	2019 to 2021	From 2022
Broad EER group							100	100	100	100	100	100
Extended EER group	100	100	100	100	100	100						
Australia	1.00	0.90	1.06	1.02	0.94	0.99	0.81	0.74	0.83	0.80	0.75	0.79
Canada	1.84	1.94	1.77	1.75	1.75	1.83	1.51	1.59	1.39	1.38	1.40	1.46
China	4.13	4.88	17.60	17.57	19.80	19.30	3.37	4.02	13.86	13.92	15.85	15.42
Czechia	2.37	2.50	4.21	4.52	4.43	4.49	1.94	2.06	3.32	3.58	3.55	3.59
Denmark	3.17	2.84	2.39	2.34	2.37	2.48	2.58	2.34	1.88	1.85	1.89	1.98
Hong Kong	3.69	3.81	2.84	2.63	2.45	2.09	3.02	3.14	2.23	2.08	1.96	1.67
Hungary	1.62	2.15	2.68	2.81	2.82	2.75	1.32	1.77	2.11	2.23	2.26	2.20
Japan	9.99	9.08	4.79	4.83	4.61	3.91	8.15	7.48	3.77	3.82	3.69	3.13
Korea. Republic of	2.86	2.63	3.17	3.10	3.06	3.04	2.34	2.17	2.50	2.46	2.45	2.43
Norway	1.68	1.58	1.42	1.25	1.17	1.22	1.37	1.30	1.11	0.99	0.94	0.97
Poland	2.58	2.94	5.88	6.37	6.96	7.36	2.10	2.42	4.63	5.04	5.57	5.88
Romania	0.72	0.80	2.12	2.35	2.37	2.44	0.59	0.66	1.67	1.86	1.90	1.95
Singapore	2.39	2.14	2.49	2.64	2.78	2.97	1.95	1.77	1.96	2.09	2.22	2.37
Sweden	5.16	4.87	4.00	3.86	3.76	3.72	4.21	4.01	3.14	3.06	3.01	2.97
Switzerland	9.82	8.58	8.37	7.88	7.58	7.54	8.01	7.07	6.59	6.24	6.07	6.02
United Kingdom	22.90	22.30	15.58	15.03	13.08	12.12	18.68	18.37	12.27	11.91	10.47	9.68
United States	24.08	26.06	19.63	20.05	20.07	21.75	19.64	21.47	15.46	15.88	16.06	17.38
Additional countries in the broad EER group												
Algeria							0.37	0.32	0.39	0.31	0.23	0.21
Argentina							0.55	0.50	0.36	0.33	0.24	0.25
Brazil							1.28	1.24	1.33	1.10	0.96	1.08
Chile							0.32	0.29	0.31	0.27	0.26	0.26
China (Taiwan)							1.81	1.88	1.16	1.22	1.30	1.38
Colombia							0.21	0.18	0.22	0.19	0.17	0.20
Iceland							0.07	0.08	0.09	0.11	0.09	0.12
India							1.12	1.17	2.63	2.82	3.12	3.37
Indonesia							0.82	0.59	0.60	0.61	0.53	0.52
Israel							1.04	1.04	0.81	0.89	1.04	1.09
Malaysia							1.12	1.01	0.93	0.89	0.84	0.81
Mexico							0.77	1.10	1.21	1.34	1.30	1.41
Morocco							0.53	0.60	0.65	0.71	0.67	0.81
New Zealand							0.16	0.13	0.15	0.15	0.14	0.12
Peru							0.14	0.11	0.15	0.14	0.12	0.12
Philippines							0.36	0.45	0.38	0.41	0.38	0.38
Russian Federation							2.33	1.78	3.03	2.52	2.30	1.12
Saudi Arabia							0.47	0.43	0.81	0.77	0.65	0.79
South Africa							0.90	0.86	0.75	0.72	0.66	0.64
Thailand							1.11	0.89	0.99	1.04	0.90	0.88
Turkey							2.03	2.10	2.79	2.68	2.57	2.98
Ukraine							0.43	0.37	0.44	0.39	0.45	0.38
United Arab Emirates							0.47	0.50	1.10	1.20	1.04	1.19

° Weights based on trade in goods and services. Figures have been rounded. In addition, the ECB publishes weighting schemes and indicators for the narrow EER group of trading partners with 12 countries. **1** Selected calculation periods; for a comprehensive overview, see https://www.bundesbank.de/en/statistics/exchange-rates/effective-exchange-rates/-/methodology-and-quality-796162. **2** Including the reference period of the indices.

(see Table I. 1., p. 7) as well as Canada, Denmark, Japan, Norway, Sweden, Switzerland, the United Kingdom and the United States.

The group of 37 countries comprises the euro area countries and the countries of the extended EER group of trading partners; the group of 60 countries consists of the euro area countries as well as the countries of the broad EER group.

Overview of world currencies

The end-of-month exchange rates listed in Table IV. 1. (pp. 18-40) are the latest rates known to us at the end of a given month; in general, they have been taken from reliable sources (central bank or a commercial bank in the country in question). However, we do not know whether transactions were actually executed at those rates in all cases. If no exchange rates for euro or US dollar are available from a country, we have calculated comparative values at the exchange rates or parities available and identified them with a "V" in the column "type of rate".

The previous-year average specified in this table was basically calculated from all of the rates or comparable figures available to us.

In addition to the generally accepted currency name, the three-character alphabetical ISO currency code is specified (see Table VII., pp. 46-47). This was developed by the International Organization for Standardization as ISO Standard 4217. This currency code is designed to enable uniformly abbreviated designations for currency-related values to be used in international financial transactions. This applies, inter alia, to all external payments under the SWIFT system. The ISO code should not, however, be confused with the official national currency abbreviations.

Value of the special drawing right

The value of a SDR (ISO code: XDR) is currently defined as the sum of the values of fixed amounts of five currencies.

The composition of the currency basket as well as the weights and amounts of the currency units in the basket are generally reviewed every five years. As a result of the latest review, conducted in 2022, since 1 August 2022, the SDR basket has contained the fixed currency amounts shown in column (a). These were fixed on 29 July 2022 on the basis of the average exchange rates in the London spot exchange market over the preceding three-month period (2 May to 29 July, 2022) and the initial new percentage weights (column b) such that, on 29 July 2022, the new SDR value corresponded with the value calculated on the basis of the old basket (see https://www.imf.org/en/Publications/Policy-Papers/Issues/2022/07/29/Review-of-the-Method-of-Valuation-of-the-SDR-Amendment-to-Rule-O-1-521564).

	(a)	(b)
US dollar	0.57813	43.38
Euro	0.37379	29.31
Chinese yuan (renminbi)	1.0993	12.28
Japanese yen	13.452	7.59
Pound sterling	0.080870	7.44

The above-mentioned currency amounts are converted into US dollar amounts on the basis of the market rates on every business day. In principle, the middle rates between the buying and selling rates fixed at noon in the London spot exchange market are used as market rates. The sum of the US dollar equivalents of the currency amounts yields the value of the SDR expressed in terms of the US dollar. Values of the SDR in terms of all other currencies are ascertained, using the value for the SDR in terms of the US dollar, from the representative market exchange rates of these currencies vis-à-vis the US dollar; for the euro, it is the foreign exchange reference rate of the European Central Bank.

The current criteria for inclusion were adopted by the Executive Board in 2000. They establish that the SDR basket comprises the currencies that are issued by member countries or monetary unions whose exports had the largest value over a five-year period, and have been determined by the IMF to be "freely usable". In the case of a monetary union, exports of goods and services do not cover cross-border trade between the members of the monetary union.

The export criterion, which acts as a "gateway", aims to ensure that currencies that qualify for the basket are those issued by member countries or monetary unions that play a central role in the global economy. This criterion has been part of the SDR methodology since the 1970s.

The requirement for currencies in the SDR basket to be also freely usable is the second criterion, and it was incorporated in 2000 to reflect formally the importance of financial transactions for the purposes of valuing the SDR basket.

A "freely usable" currency is defined in the IMF's Articles of Agreement to mean a currency that the IMF determines

is, in fact, widely used to make payments for international transactions, and is widely traded in the major exchange markets. The concept of a freely usable currency concerns the actual international use and trading of a currency, and is different from whether a currency is either freely floating or fully convertible. A currency can be widely used and widely traded even if it is subject to some capital account restrictions. On the other hand, a currency that is fully convertible is not necessarily widely used and widely traded.

The formula adopted by the IMF for determining currency weights for the SDR basket assigns equal shares to the currency issuer's exports and a composite financial indicator. The financial indicator comprises, in equal shares, official reserves denominated in the member country's (or monetary union's) currency that are held by other monetary authorities that are not issuers of the relevant currency, foreign exchange turnover in the relevant currency, and the sum of all outstanding international bank liabilities and international debt securities denominated in the currency.

The IMF uses the SDR as unit of account for its transactions and for all conversions into national currencies. In addition, the SDR is used by public and private bodies in Germany and abroad, inter alia as the "successor" to those units of account which had hitherto been defined in terms of gold (e. g. gold francs).

Global exchange rate arrangements and monetary policy framework

The overview of the exchange rate arrangements and monetary policy framework as at the end of April 2023 (see Table VI., pp. 44-45) is based on the IMF's "Annual Report on Exchange Arrangements and Exchange Restrictions 2023", which can be accessed online (https://www.elibrary-areaer.imf.org).

The IMF's classification system is generally based on the actual, de facto exchange rate regimes identified and operating in member countries. These may differ from the official, de jure exchange rate arrangements in these countries.

Exchange rate arrangements are primarily classified on the basis of the degree to which the exchange rate is determined by the market rather than by official action, with market-determined exchange rates being on the whole more flexible. The IMF's system distinguishes between four major categories. The category "hard pegs" (fixed exchange rate anchors) is subdivided into exchange arrangements with no separate legal tender and currency board arrangements (institutionalised, unilateral exchange rate peg). The category "soft pegs" (less stringent exchange rate anchors) comprises conventional fixed peg arrangements (exchange rate guarantee but no irrevocable parity), stabilised arrangements (exchange rate within a narrow band without any political obligation), crawling pegs (moving central rate without a band), crawl-like arrangements (moving central rate with an annual minimum rate of change) and pegged exchange rates within horizontal bands. The category "floating regimes" (market-determined rates) distinguishes between free-floating rates (intervention in exceptional cases only) and floating rates (more frequent modes of intervention). All other exchange rate arrangements are grouped under the category "residual" (other managed arrangements). The classification system presents members' exchange rate arrangements against alternative monetary policy frameworks in order to highlight the role of the exchange rate in broad economic policy and to illustrate that different exchange rate arrangements can be consistent with similar monetary frameworks.

The monetary policy frameworks listed are as follows.

Exchange rate anchor
The monetary authority buys or sells foreign exchange to maintain the exchange rate at its predetermined level or within a range. The exchange rate thus serves as the nominal anchor or intermediate target of monetary policy. These frameworks are associated with exchange rate arrangements with no separate legal tender, currency board arrangements, pegs (or stabilised arrangements) with or without bands, crawling pegs (or crawl-like arrangements) and other managed arrangements.

Monetary aggregate target
The monetary authority uses its instruments to achieve a target growth rate for a monetary aggregate, such as reserve money, M1 or M2, and the targeted aggregate becomes the nominal anchor or intermediate target of monetary policy.

Inflation-targeting framework
This involves the public announcement of numerical targets for inflation, with an institutional commitment by the monetary authority to achieve these targets, typically over a medium-term horizon. Additional key features normally include increased communication with the public and the markets about the plans and objectives of monetary policymakers and increased accountability of the central

bank for achieving its inflation objectives. Monetary policy decisions are often guided by the deviation of forecasts of future inflation from the announced inflation target, with the inflation forecast acting (implicitly or explicitly) as the intermediate target of monetary policy.

Other
The country has no explicitly stated nominal anchor, but rather monitors various indicators in conducting monetary policy. This category is also used when no relevant information on the country is available.

Explanatory notes on individual countries

Algeria

It is understood that there is a considerably different, black market rate alongside the official, published exchange rate.

Argentina

The Central Bank of Argentina decided to introduce a more flexible exchange rate regime within bands, with effect from 14 April 2025. In addition, some of the capital controls that had been in place since September 2019 were lifted. The uniform tax of 30%, which was introduced with effect from 23 December 2024, will now be levied only on the following transactions:

- the exchange of foreign currency intended for the purchase of goods or services or for the purchase of services abroad;
- foreign transactions with Argentine bank cards.

Bangladesh

Units of account for larger amounts: 1 lakh (in digits: 1,00,000) = 100,000 taka; 1 crore (in digits: 1,00,00,000) = 100 lakh = 10,000,000 taka.

Bhutan

The Indian rupee is likewise legal tender alongside the Bhutanese ngultrum (convertible at par).

Brunei Darussalam

Under an agreement between Brunei Darussalam and Singapore, the Singapore dollar (convertible at par) is also accepted as customary tender.

Cuba

With effect from 18 December 2025, another official rate was introduced. We have the following information on the applicability of the rates:

Rate for transactions by general government
For all government sector transactions.

Rate for registered enterprises
Preferred rate for registered non-government enterprises.

Rate for other enterprises and households
For all transactions by other non-government enterprises and households.

From 4 August 2022 to 17 December 2025, there was a rate for transactions by general government and a rate for non-government transactions.

The euro is also an accepted form of payment in some tourist locations.

El Salvador

The US dollar is likewise legal tender alongside the El Salvador colón.

Eswatini

The South African rand is likewise legal tender alongside the lilangeni (convertible at par).

India

Units of account for larger amounts: 1 lakh (in digits: 1,00,000) = 100,000 rupees; 1 crore (in digits: 1,00,00,000) = 100 lakh = 10,000,000 rupees.

Iran, Islamic Republic of

In addition to the quoted central bank rates, there are to be other rates for which we do not have any information.

The term "toman" (an old Persian currency) is also used to denote 10 Iranian rials.

Iraq

According to the central bank's announcement, the fixed value of the Iraqi dinar against the US dollar was changed with effect from 7 October 2026. We recorded the following exchange rates (buying/selling):

6 October 2026	USD 1 = IQD 1,300.00/1,310.00
	EUR 1 = IQD 1,464.970/1,476.239
7 October 2026	USD 1 = IQD 1,500.00/1,510.00
	EUR 1 = IQD 1,676.550/1,687.727

Calculated using these rates, the Iraqi dinar depreciated by 13.3% against the US dollar and by 12.6% against the euro (calculated on the basis of the middle rates).

Kenya

The term "Kenya pound" is a unit of account equivalent to 20 Kenya shillings.

Korea, Democratic People´s Republic of

We have no exchange rates for the won.

Lesotho

The South African rand is likewise legal tender alongside the loti (convertible at par).

Liberia

The US dollar is likewise legal tender alongside the Liberian dollar.

Macao

The Hong Kong dollar, to which the pataca is pegged at a rate of HKD 100 = MOP 103, is in circulation as a common currency alongside the pataca.

Namibia

The South African rand is likewise legal tender alongside the Namibia dollar (convertible at par).

New Caledonia

CFP was originally the abbreviation for "Colonies Françaises du Pacifique" and is still used as a currency symbol (in connection with the franc).

Panama

The US dollar is legal tender alongside the balboa, which is in circulation exclusively in coin form.

Singapore

Under an agreement between Singapore and Brunei Darussalam, the Brunei dollar (convertible at par) is also accepted as customary tender.

Somalia

We have no exchange rates for the Somali shilling.

Syrian Arab Republic

In Syria, with effect from 1 January 2026, a currency conversion took place in the ratio of 100 (old) Syrian pounds to 1 (new) Syrian pound.

Turkmenistan

It is understood that there is a considerably different, black market rate alongside the official, published exchange rate.

United Arab Emirates

The United Arab Emirates include Abu Dhabi, Ajman,Dubai, Fujairah, Ras al Khaimah, Sharjah and Umm al Qaiwain.

United Kingdom

In Scotland and Northern Ireland, a small volume of banknotes issued by commercial banks in these territories is in circulation alongside notes issued by the Bank of England.

Venezuela, Bolivarian Republic of

It is understood that there is a considerably different, black market rate alongside the official, published exchange rate.

Yemen

We have no exchange rates for the Yemeni rial.

Zimbabwe

In addition to the Zimbabwe gold, various foreign currencies, including the US dollar, euro, South African rand, pound sterling and Japanese yen, are also authorised as legal tender.