

The international role of the euro: main developments since the inception of Stage Three of Economic and Monetary Union

This article briefly reviews the main features of the international role of the euro, i.e. its use by non-residents of the euro area. Since 1999, non-resident use of the euro has gradually gained ground. The euro has consolidated its role as second international currency, exhibiting both specific features and characteristics shared with the leading international currency, the US dollar. Among non-residents of the euro area, the main users of the euro include large financial institutions and corporations from industrialised countries. The role of the euro has developed in particular in regions close to the euro area, including the City of London as regards financial markets and the countries of central and south-eastern Europe where the euro's legacy currencies were in circulation before the start of Monetary Union. These developments are essentially market-driven and highlight the degree of confidence of non-euro area residents in the euro. A more analytical "Review of the international role of the euro", providing greater detail, is published each year by the ECB.

I Developments in the last four years

This article reviews some segments of the international financial markets where currency considerations play a decisive role. It focuses on the issuance and placement of debt securities, foreign exchange activity in the spot market and the international operations of banks – including interbank markets – either cross-border or foreign currency-denominated. Other market segments where currency considerations are less significant – such as equities or some types of derivatives – are not covered in this article.

Looking at the three aforementioned segments, the euro has firmly established its status as second international currency. Its

market share has increased, rising steadily between mid-1999 and mid-2001, and more gradually between mid-2001 and mid-2003 (see Table I).

1) Data on the denomination of amounts outstanding of international debt securities (including bonds, notes and money market instruments) issued in a currency different from the one of the country in which the borrower resides show that the euro's share reached 30% in mid-2003, 9 percentage points higher than in mid-1999 (see also Chart I).

Table I
The international use of currencies – currency shares in selected financial markets

	US dollar	Euro	Japanese yen	Others
Bonds, notes and money market instruments issued by non-residents of the respective domestic financial market ^{1), 2)}				
June 1999	46.8	21.7	16.6	14.9
June 2001	44.1	27.4	14.3	14.2
June 2003	43.7	30.4	10.5	15.3
Total foreign exchange transactions against local currency outside the euro area ³⁾				
April 2001	47.5	16.9	12.5	23.1
International bank liabilities ^{1), 4)}				
June 1999	55.2	19.6	8.7	16.5
June 2001	54.4	24.1	7.7	13.7
December 2002	53.2	24.6	6.2	16.0

Sources: BIS and ECB calculations.

1) At constant 1994 Q1 exchange rates.

2) Amounts outstanding of debt securities issued in a currency different from that of the borrower's country of residence (for the euro, the entire euro area).

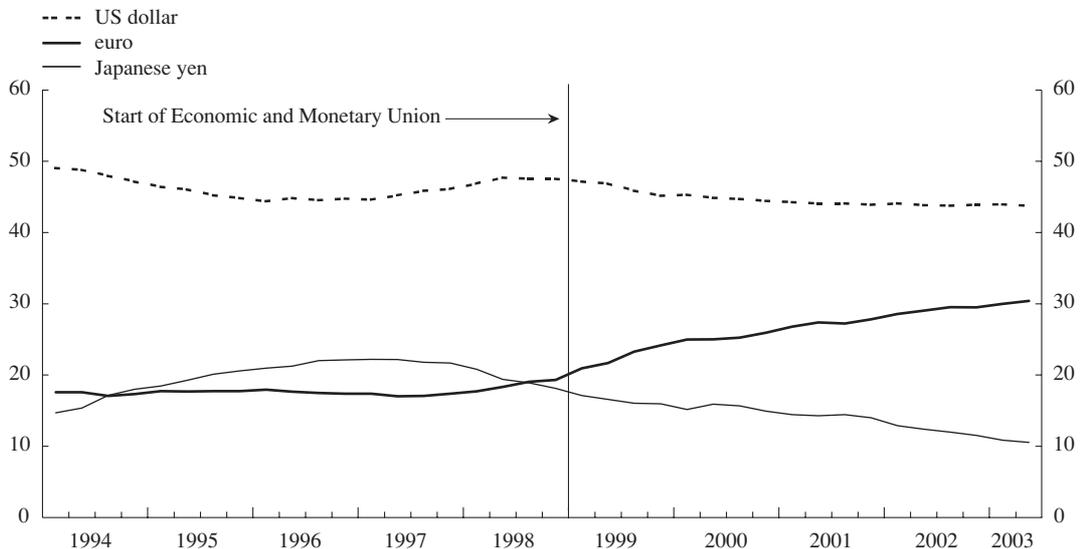
3) Including foreign exchange transactions against the US dollar in the United States and against the Japanese yen in Japan.

4) Cross-border liabilities of credit institutions and their domestic liabilities in foreign currencies.

Chart I

International debt securities stock: currency shares¹⁾

(percentages)



Sources: BIS and ECB calculations.

1) Bonds, notes and money market instruments, excluding home currency issuance, as a percentage of the total amount outstanding and at 1994 Q1 exchange rates.

2) In foreign exchange activity (spot, forward and swap markets) in financial centres outside the euro area, the euro was used in about 17% of trades in April 2001,¹ as indicated by data from the BIS Triennial Survey published in 2002. In global foreign exchange markets (including financial centres located in the euro area), the USD/EUR currency pair was that traded most, representing 30% of all trades.²

3) Turning to international activity in the banking sector (which includes relations between euro area MFIs and non-euro area residents), the euro represented 24.6% of international bank liabilities and 25.5% of international assets at end-2002. This was an increase of 5 and 6 percentage points respectively compared with mid-1999.

Statistical evidence on the location of non-resident financial activity in euro is fragmentary. However, evidence available for bond issuance, foreign exchange trading and asset management suggests that the City of London plays a crucial role in this respect. According to market sources, in the period

1999-2002, borrowers resident in the United Kingdom accounted for 30% of euro-denominated bonds issued by non-residents of the euro area. Entities based in the United Kingdom represented 60% of what are known as “book runners” (namely the financial institutions organising the underwriting of debt securities in the primary market). In foreign exchange markets outside the euro area, 47% of transactions involving the euro were carried out in the United Kingdom in April 2001.³ Moreover, the euro-denominated assets and liabilities of banks resident in the United Kingdom accounted for around 60% of total euro-denominated assets and liabilities outside the euro area.

1 A comparison with 1998 BIS data is not straightforward due to the structural break created by the disappearance of foreign exchange trade between legacy currencies with the start of Stage Three of Economic and Monetary Union (EMU) in 1999 (as explained in detail in the article entitled “The international role of the euro” in the August 1999 issue of the Monthly Bulletin).

2 Data on currency pairs (e.g. EUR/USD) are not immediately comparable with the share of individual currencies (e.g. the euro) in foreign exchange markets. The next BIS survey will be conducted in 2004.

3 Foreign exchange activities in euro were also carried out in the United States (23% of trades outside the euro area), Switzerland (7%), and Japan and Singapore (6% each).

Box 1**Benefits and drawbacks of a “narrow” definition of the international role of the euro**

The international role of the euro refers to the use of the single currency by non-euro area residents. From a financing perspective, this means only those securities issued by residents outside the euro area. From an investment perspective, euro area securities held by non-euro area residents should also be accounted for. However, a currency breakdown of foreign holdings of euro area securities does not yet exist. In this article, a “narrow” definition of “international” is used, meaning only those securities issued by residents outside the euro area. In addition to this narrow definition, a “broad” definition exists, whereby the BIS considers a debt security issued by a euro area resident to be international if it is targeted at international investors (e.g. through a syndicate of banks comprising non-euro area financial institutions). The narrow definition excludes assets commonly considered by financial market participants to be genuinely international, even if they originate from the euro area. However, the broad definition includes those cases where both the issuer and the holder of the securities are resident in the euro area, even if the issuance was originally intended to be truly “international”.

The share of the euro in the stock of international debt securities is larger under the broad measure (41.5% in mid-2003) than under the narrow measure. Under the broad definition, the share of the euro is almost the same as that of the US dollar (42.5% in mid-2003). While, in the past, the ECB made reference to both definitions, this article focuses on the narrow definition only, not least for the sake of clarity and simplicity. However, the conclusions would remain the same if the broad definition were to be used instead.

Turning to the use of the euro as a medium of exchange in international trade, the euro has recently also gained greater status as a settlement/invoicing currency. Statistical evidence, currently available for a number of euro area countries, suggests that around 50% of their exports to non-euro area residents and 45% of imports from non-euro area residents are now priced in euro (see Table 2). The difference between the share in imports and that in exports reflects the impact of raw materials – largely invoiced in

US dollars – on imports to the euro area. It is also in line with the hypothesis (also known as “Grassmann’s law”) that economic agents are able to impose their own currency as currency of invoice/settlement more easily for exports than for imports. The increase in the use of the euro began before the introduction of the euro banknotes and coins, but became more evident in 2002. It is possible that the cash changeover may have encouraged exporters and importers to review their invoicing practices in favour of the euro.

Table 2**The share of the euro as a settlement/invoicing currency of selected euro area countries in extra-euro area trade in goods***(percentages)*

	Exports			Imports		
	2000	2001	2002	2000	2001	2002
Belgium	...	...	53.4	...	...	53.3
France	48.0	49.2	55.3	35.0	39.8	46.8
Germany	...	...	49.0	...	...	48.0
Greece	...	23.5	39.3	...	29.3	35.8
Italy	...	52.7	54.1	...	40.8	44.2
Luxembourg	...	...	51.6	...	...	35.3
Portugal	40.1	43.5	48.5	47.0	53.6	57.6
Spain	49.0	52.0	57.6	44.0	49.7	55.8

Sources: NCBs and ECB calculations.

Note: “...” stands for “not available”. Data refer to the use of the euro as a settlement currency, except in Germany. For Germany, data reflect the average value of data collected in sample surveys carried out on behalf of the Deutsche Bundesbank in the first and third quarters of 2002. All 2000 and 2001 data above include trade settled in euro and in legacy currencies.

2 The four main groups of users

Since 1999, four groups of users have shaped the international role of the euro: (i) non-resident private agents, particularly financial institutions and large international corporations; (ii) non-resident public authorities, although to a lesser extent; (iii) euro area investors, as purchasers of euro-denominated bonds issued outside the euro area; and (iv) neighbouring countries of the euro area.

bulk of euro-denominated bonds in the period under review, namely 80% of the total. Table 3 shows the top ten issuers from the non-financial corporate sector. On the investment side, demand from residents outside the euro area was mostly from institutional investors, with a significant share thereof coming from the United Kingdom and European countries outside the euro area. Interest from US investors remained limited.

Non-resident private agents

Non-resident financial institutions and non-financial corporations, mostly in the United States and the United Kingdom, issued the

Non-resident public authorities

Issuance by non-euro area governments and public sector entities averaged 14% of total euro-denominated international bonds in the

Table 3

Top ten non-resident issuers from the non-financial corporate sector (from 1999 to end-August 2003)

Company	Number of issues	Total issuance (EUR billions)	Country of residence
General Electric Capital Corp	71	29.1	United States
Ford Motor Credit Co	19	23.3	United States
General Motors Acceptance Corp – GMAC	21	19.4	United States
Tecnost International Finance NV	4	15.6	Netherlands Antilles
DaimlerChrysler North America Holding Corp	19	12.5	United States
Spintab AB	42	11.0	Sweden
British Telecommunications plc	7	9.5	United Kingdom
Household Finance Corp	12	8.4	United States
BAT International Finance plc	7	4.9	United Kingdom
Vodafone Group plc	7	4.3	United Kingdom

Sources: Dealogic (Bondware) and ECB calculations.

Table 4

Top ten non-resident issuers from the public sector (from 1999 to end-August 2003)

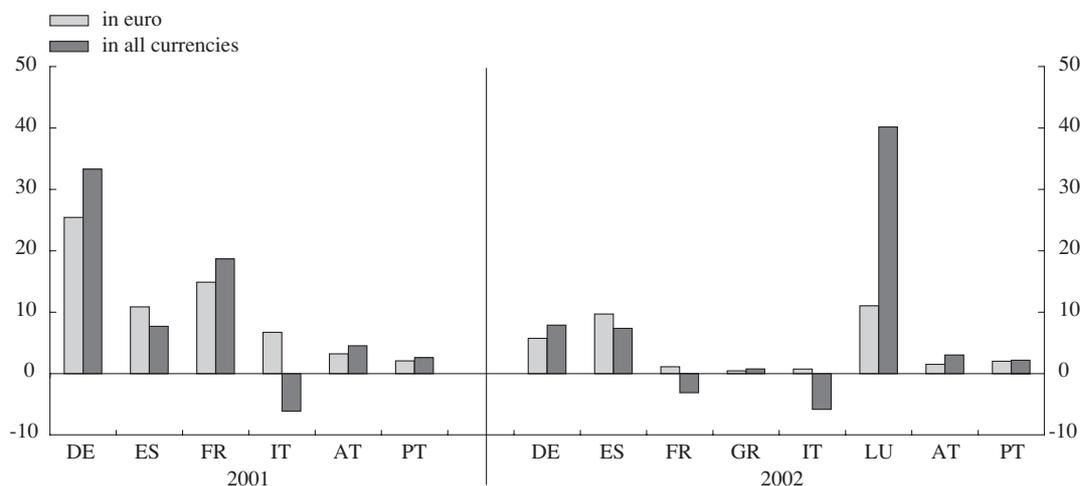
Company	Number of issues	Total issuance (EUR billions)	Country of residence
Federal Home Loan Mortgage Corp – Freddie Mac	12	44.5	United States
Republic of Argentina	35	11.5	Argentina
Republic of Turkey	19	9.1	Turkey
Federative Republic of Brazil	10	6.8	Brazil
Hamburgische LB Finance (Guernsey) Ltd	22	6.8	Guernsey
Swedish National Housing Finance Corp – SBAB	21	4.9	Sweden
Republic of Poland	6	4.6	Poland
Vattenfall Treasury AB	16	4.1	Sweden
Republic of Hungary	7	4.0	Hungary
United Mexican States	4	2.9	Mexico

Sources: Dealogic (Bondware) and ECB calculations.

Chart 2

Bonds and notes issued by non-residents: net purchases by residents of selected euro area countries

(EUR billions)



Sources: NCBs and ECB calculations.

Note: The currency identified is that of denomination of the securities, except in Luxembourg, Spain and Greece, where it is the currency of settlement of transactions. Positive (negative) amounts represent net purchases (sales) of bonds and notes by euro area residents from (to) non-euro area residents. Data for Greece and Luxembourg are not available for 2001.

period from 1999 to 2002, with the largest issuer being Freddie Mac, a US federal agency granting mortgage loans (see Table 4).⁴ The share of emerging markets' sovereign issuers has decreased over time, especially since the debt default in Argentina.

On the investment side, public authorities do not appear to have been major purchasers for most of the period under review. IMF data show that the share of the euro in central bank reserves increased slightly, from 12.6% in 1999 to 14.6% in 2002. This also reflected stronger interest from emerging market countries, with the share of the euro in their reserves increasing from 14.1% in 1999 to 16.8% in 2002. This is in line with past developments suggesting that the currency composition of reserves changes only gradually.

Euro area residents

A significant proportion of euro-denominated bonds and notes issued by non-residents of the euro area is purchased by euro area residents. Statistics on the currency breakdown of the balance of payments

available for some euro area countries suggest that – with the notable exception of Luxembourg – euro area residents have a preference for euro-denominated bonds, as they account for the largest share of their net purchases of bonds in all currencies from non-euro area residents (see Chart 2).

This is further supported by evidence available from market sources on the location of roadshows in the international bond market, showing that international issuers of euro-denominated bonds have explicitly targeted investors located in the euro area, the United Kingdom and Nordic countries.

Neighbouring regions of the euro area

The neighbouring regions of the euro area have employed the euro for a much wider range of uses than other regions of the world. This range covers the following four

⁴ The Bank of England, formerly on behalf of the UK Treasury and now on its own account, is also an active issuer of euro-denominated debt securities, issuing three-year notes to the value of €6.6 billion between 2001 and 2003. The Bank of England also regularly issues euro short-term bills.

functions: the use of the euro as a financing currency; the use of the euro as a vehicle currency⁵ in foreign exchange markets; the use of the euro as a reference currency in exchange rate policies; and, finally, currency and asset substitution, i.e. the use of the euro in cash as well as book-money form outside the euro area.

For some governments, especially in central and eastern Europe, the choice of the euro as the preferred borrowing currency is linked to strategic policy considerations. The authorities of countries acceding to the EU issue euro-denominated government debt, in line with their goal to adopt the euro. In other countries, the choice of the euro as borrowing currency is in line with the very high degree of asset substitution in the banking system (e.g. Croatia), or with the significant use of the euro as invoicing currency for foreign trade (Morocco and Tunisia).

While most transactions between two currencies in global foreign exchange markets are effected through the US dollar, this "vehicle" role is played by the euro in some financial centres close to the euro area. In these countries a large majority (Hungary and Slovenia) or a high share (Czech Republic and Slovakia) of all foreign exchange operations against the local currency involve the euro. The percentage of trades involving the euro is also comparatively high in western European countries outside the euro area (Denmark, Sweden and Switzerland).

In EU neighbouring regions, moreover, several countries run an exchange rate policy that includes a reference to the euro, which may vary from hard pegs to managed floating. Some countries operate a euro-based currency board arrangement (Bosnia and Herzegovina, Bulgaria, Estonia and Lithuania) or have a hard peg to the euro (the countries of the CFA Franc Zone in western and central Africa). Certain territories have unilaterally given the euro the status of official currency (Kosovo and Montenegro). Two EU acceding

countries allow a fluctuation band of 15% on either side of a central rate against the euro (Cyprus and Hungary) and others manage their exchange rate against the euro (Slovenia, Slovakia and Romania). Finally, some countries assign an important role to the euro in the currency basket against which they orient their foreign exchange policy (Latvia, Malta, Morocco and Tunisia).

Parallel currency circulation outside the euro area is mostly found in its immediate geographical vicinity, as recently described in the article entitled "The demand for currency in the euro area and the impact of the euro cash changeover" in the January 2003 issue of the Monthly Bulletin. Data from the Eurosystem on banknote shipments to destinations outside the euro area suggest that, since this article was published, the circulation of euro banknotes has increased further. The amount of euro banknotes sent outside the euro area (net of inflows) has increased from €28 billion (end-2002) to around €38 billion (July 2003). Euro cash transferred through other means (tourism, remittances, grey economy, etc.), however, is not accounted for in this figure.

The euro circulates as a parallel currency especially in some countries of central Europe and the western Balkans and is used in both cash and deposit form. More generally, in around 30 emerging economies in the region neighbouring the euro area for which data are available, euro-denominated deposits rose by €13.5 billion in the months preceding the cash changeover, reaching around €52 billion at end-2001 as people deposited "under the mattress" legacy currency cash holdings in banks.⁶ Since then, euro-denominated deposits have increased only slightly in absolute terms, while remaining fairly stable as a share of total deposits.

⁵ In foreign exchange markets, transactions between two currencies may be effected through the purchase and sale of a third currency (called the "vehicle" currency), if trades against this latter currency are more liquid, and therefore less expensive to traders.

⁶ Figures are based on a survey conducted by the ECB in cooperation with the central banks of 30 neighbouring countries.

3 Main determinants shaping the international role of the euro

In the period considered in this article both elements of continuity and factors of change have shaped the international role of the euro.

Balkans and around the Mediterranean have added a new perspective to these links.

Elements of continuity

Elements of continuity that shape the euro's international role comprise the heritage from the legacy currencies and the historical, institutional and economic relations of the euro area with its neighbouring regions.

- Owing to the status inherited from some legacy currencies, the euro immediately gained international currency status when it came into being. As a legacy mainly of the Deutsche Mark and the French franc, the euro was immediately used as an international reserve currency and as an anchor in the exchange rate policies of some EU neighbouring countries.
- The regional role of the euro has also been supported by close economic and institutional relations between the euro area and its neighbouring regions, which largely existed prior to the introduction of the euro. The euro area accounts for an overwhelming share of external trade and financial exposure to these neighbouring regions. The prospect of EU enlargement and the launch of association policies by the EU with the countries in the western

Factors of change

Factors of change relate to the deepening of euro area financial markets and the increasing internationalisation of the borrowing strategies of international corporations.

- The increase in the size of the euro area financial markets, supported by the creation of payment and security settlement systems for the euro area, has created greater interest among international borrowers in the euro. They can now target investors from an increasingly unified domestic market, therefore benefiting from increased liquidity by comparison with the individual markets of the 12 euro area countries.
- Confronted with the challenge of increasing financial needs, international corporations have endeavoured to enlarge their investor base outside their domestic financial market. This has contributed to reducing their dependence on the domestic investor base, and occasionally to lowering their borrowing costs, when favourable swap opportunities have arisen. For some US and UK corporations, euro-denominated issuance has achieved this aim.

Box 2

Progress in the set-up of a statistical framework to assess the international role of the euro

As the assessment of the international role of a currency is relevant only to a limited number of currencies, global statistical standards do not deal with the currency of denomination of economic and financial transactions. As a result, the statistical data available for the assessment of the international role of the euro (as well as other currencies) are limited, and very often not obtained through standardised sources. Since 1999, the ECB has devoted significant efforts to identifying relevant sources of information and has in some cases contributed to the collection of additional data, intended to facilitate a better assessment of the various dimensions of the international role of the euro.

Key dimensions to be taken into account when assessing the international role of the euro

The measurement of the international role of a currency covers two dimensions: the functions of the currency and its geographical use. As regards the former, the functions of international currencies were described in the aforementioned article in the August 1999 issue of the Monthly Bulletin: they include (i) private use of a currency, i.e. for the purpose of investment, financing, payment or quotation, and (ii) official use, for the denomination of international reserves, or as a pegging currency.

Gradual expansion of the dataset available to measure the international role of the euro

The sources used in the August 1999 article drew to a large extent on the statistics made available by multilateral agencies, in particular IMF data on the currency composition of reserve assets worldwide and BIS data on the issuance of international debt securities.

Since then, further improvements have been made:

- collection of data on the shipment of euro banknotes outside the euro area;
- use of currency breakdowns in some items of the balance of payments and international investment position of euro area countries: various national central banks of the Eurosystem have been able to identify this currency breakdown for transactions or positions vis-à-vis non-residents of the euro area with regard to transactions in goods and services, as well as holdings of foreign debt securities.

In parallel, the following data are available:

- a currency breakdown of external trade statistics is published in various countries, including Japan, the United Kingdom, Poland, Bulgaria and Tunisia;
- a number of EU neighbouring countries collect data on the currency breakdown of bank deposits.

The Eurosystem plans to further develop its statistical sources regarding transactions between the euro area and non-euro area residents. A systematic collection of a currency breakdown of several balance of payment items is currently under discussion among European compilers of balance of payment statistics.

4 Conclusions

The euro has consolidated its role as second international currency in the first four years of Monetary Union, which highlights the degree of confidence of non-euro area residents in the euro. The ECB closely monitors these developments and publishes a “Review of the international role of the euro” each year. A full-fledged analysis, however, will be deferred until the results of the ongoing further enhancements of the statistics in this field are available.

The international role of the euro has been shaped in particular by non-euro area financial institutions and corporations in industrialised countries, especially the United States and the United Kingdom. In international trade,

the euro has also increased its role as a settlement/invoicing currency, as evidenced by data from a number of euro area countries.

In the first few years since the start of Monetary Union, the increasing use of the euro by non-residents has been most visible in terms of the issuance of euro-denominated debt securities. A variety of other factors have supported the international role of the euro. They include efficiency gains from the broadening of financial markets in the euro area and financing strategies of large corporations in industrialised countries.

The international role of the euro has not increased to the same extent in all regions

of the world. The City of London has seen the largest share of financial activity in euro outside the euro area, especially in debt securities markets and in foreign exchange trading. For a number of countries in the neighbouring regions of the euro area, the euro serves a variety of purposes and is a preferred borrowing currency, a vehicle currency in foreign exchange markets, an anchor for exchange rate policies and, in some countries, also a parallel currency.

These developments have materialised as a result of a market-led process, and therefore reflect the preferences of private agents. The ECB has neither fostered nor hindered this process, in line with its policy position. The leading part has been played by the corporate sector – in financial markets, in foreign exchange transactions and in the invoicing of trade – and, in countries where the euro circulates as a parallel currency, by households.