The euro: internationalised at birth

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I. Introduction

The birth of an international currency can be defined as the point in time at which a currency starts meaningfully assuming one of the traditional functions of money outside its country of issue.[2] In the case of most currencies, this is not straightforwardly attributable to a specific date. In the case of the euro, matters are different for at least two reasons. First, internationalisation takes on a special meaning to the extent that the euro, being the currency of a group of countries participating in a monetary union is, by definition, being used outside the borders of a single country. Hence, internationalisation of the euro should be understood as non-residents of this entire group of countries becoming more or less regular users of the euro. Second, contrary to other currencies, the launch point of the domestic currency use of the euro (1 January 1999) was also the start date of its international use, taking into account the fact that it had inherited such a role from a number of legacy currencies that were issued by countries participating in Europe's economic and monetary union (EMU).

Taking a somewhat broader perspective concerning the birth period of the euro, this paper looks at evidence of the euro's international use at around the time of its launch date as well as covering subsequent developments during the first decade of the euro's existence. It first describes the birth of the euro as an international currency, building on the international role of its predecessor currencies (Section II). It then presents a number of stylised facts that have characterised the euro's role abroad during the first 10 years of EMU (Section III). It subsequently turns to an analysis of the most recent data and provides some preliminary thoughts on the possible impact of the global financial crisis on the euro's international role (Section IV). Section V concludes.

II. The international legacy of the euro's predecessors

Before the launch of the euro, the European Monetary Institute (EMI) was leading intensive technical and policy preparations for the future monetary union in Europe. Core activities of the EMI Council and staff at that time included the preparation of the ECB's monetary policy strategy and its operational framework, the setup of an area-wide payment system, the design, printing and circulation modalities of the euro banknotes, and the assessment of the state of preparedness of the EU member states to join the single currency area. Questions on currency internationalisation, whether the euro would also play a role outside the future euro area, and how that might have an impact on the euro area, did not figure in the list of priorities and were hardly discussed.

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[2] See Cohen (1971) for the classical distinction between the private and public use of money in its three functions of unit of account, means of payment and store of value. See Kenen (2009) for a more elaborate description.

At the same time, it was clear from the outset that the euro was bound to be used also outside the euro area borders. Indeed, the euro was predisposed to almost mechanically inherit some of the international functions of its legacy currencies, such as the circulation of Deutsche mark banknotes across eastern Europe, the role of the French franc as an exchange rate anchor in some parts of the world, or the role that some smaller currencies such as the Dutch guilder were also playing in global bond markets or in official currency reserves. In addition, the euro was to become the successor currency to the ECU, which was a basket of EU component currencies that was used as international money in its own right, by both public and private users. To the extent that some of those users were residents of countries other than the ones joining the euro area, the international use of the euro was also predestined to occur as from its birth.

From this “flying start” position in 1999, however, the future direction of the euro’s international role was uncertain, with some academics and opinion makers predicting a structural increase in the euro’s international role over the medium to longer term and others projecting a continued strong “hegemony” of the US dollar over the next decades. But even as regards the very short term, opinions diverged on whether the euro would remain as prominent an international currency as the sum of its legacy currencies, ie the national ones and the ECU combined.[3] Two known unknowns were at play in weighing the short-term prospect of the euro’s international use immediately after its launch in 1999: first, whether the weight of the euro in international markets after 1999 would continue to equal the sum of the shares of the national currencies until 1998; and second, which attitude the central bank issuing the euro, ie the ECB, would adopt as regards the international role of the euro, taking into account, notably, the views of the central bank that issued the most internationally used legacy currency of the euro, ie the Deutsche Bundesbank.

Concerning the first known unknown, the central scenario was one of an initial, though temporary, fall in the euro’s international use, compared with that of the sum of its legacy currencies, followed by a gradual but steady recovery. Underpinning this scenario were the following three sets of arguments. First, a statistical reason: because a number of international currency transactions involved non-residents of different countries that would join the euro area, such transactions would, by definition, become domestic currency transactions after the start of monetary union.[4] Second, an economic reason: because the euro area policymakers, and in particular its monetary policymaker issuing the euro, would first have to gain credibility before investors started considering the euro as good as the most credible legacy currencies previously, international demand for the new currency was likely to be hesitant and reflect a “wait-and-see” attitude. Indeed, some observers, especially those most sceptical about the EMU project, put emphasis on the fact that the euro’s international status could be expected to suffer from uncertainty about the euro area’s monetary policy (to be conducted centrally by a new, and hence unknown, institution) and its fiscal policy (to be conducted decentrally in the context of a new, and hence untested, framework, ie the Stability and Growth Pact). Third, a financial reason: because euro area policymakers still had to undertake a number of measures to build up a sufficiently wide and deep single money and capital market, international demand for the euro could be expected to be subdued at first.

It is interesting to observe that, judging from the experience of the first decade of the international use of the euro, this central scenario has only rarely played out. Indeed, a

3 Next to the ECU, these currencies are the Austrian schilling, the Belgian franc, the Deutsche mark, the Finnish markka, the French franc, the Irish pound, the Italian lira, the Luxembourg franc, the Dutch guilder, the Portuguese escudo and the Spanish peseta.

4 See, for instance, Pollard (1997).

number of examples across market segments illustrate that the change from 11 national currencies to a single currency did not cause major ripples in the global use of currencies:

- In the foreign exchange reserves of central banks, the share of euro legacy currencies[5] amounted to 15.9% before the changeover to the euro (end-1998 figures), while the share of the euro was 14.0% in March 1999. The slight decline in this share was almost exclusively due to a statistical effect – namely, that a sizeable part of euro area member states' foreign exchange reserves (primarily Deutsche mark) had to be reclassified as domestic assets with the introduction of the euro.[6] Beyond this effect, the shift to the euro does not seem to have triggered any particular diversification of foreign exchange reserve portfolios.
- In foreign exchange markets, the role of the euro stayed relatively unchanged compared to that of its predecessors. The 2001 BIS Triennial Central Bank Survey indicates a share of the euro of 18.8% in total reported transactions, against a combined 18.2% for the Deutsche mark, the French franc and the ECU in the previous survey of April 1998. Absolute turnover levels, however, had declined on the foreign exchange market, on account of the elimination of intra-EMS currency trading.[7]
- In the market for international bond issuance, by contrast, there were some more pronounced shifts around the time of the euro's introduction. In the five years preceding the euro's introduction, euro legacy currencies accounted for between 19.9 and 32.4% of total issuance volumes, whereas the euro's share after its launch fluctuated between 30.1 and 40.1% up to late 2002, before increasing considerably further, peaking at 54.0% in the second quarter of 2005 and never falling short of 37.1% since then. The issuance of debt securities therefore stands out as one of the areas in which the new single currency swiftly gained popularity compared with the legacy currencies. A look at higher-frequency data covering the first half of 1998 and the first half of 1999 confirms the picture of a jump, rather than a dip, in the euro's use in the domain of international debt securities issuance. This assessment holds, irrespective of whether one takes a narrow definition of such issuance, which focuses on the financing currency function, or a broad definition, which focuses on both the financing and the investment currency function.[8]

Coming to the second known unknown at the time of the launch of the euro – the attitude which the ECB would adopt vis-à-vis the international role of the currency it was issuing – the question essentially boiled down to whether the euro's "takeover" of national legacy currencies in their international role, in particular that of the Deutsche mark, would also lead the ECB to espouse some of the policy views held on the internationalisation of currencies within Europe's central banking community, especially by the Deutsche Bundesbank. The Bundesbank, being the central bank of the second most widely used international currency after the US dollar, regularly monitored developments in the cross-border use of the

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[5] Sum of the Deutsche mark (12.9%), the ECU (1.4%), the French franc (1.3%) and the Dutch guilder (0.3%). A currency breakdown for foreign exchange reserves held in the remaining euro legacy currencies is unavailable.

[6] Adjusting for this effect, IMF estimates suggest that the euro's share in global foreign exchange reserves in March 1999 corresponded to that in December 1998.

[7] See Galati (2001).

[8] A narrow definition only covers debt securities issues in currencies other than that of the country in which the borrower resides; a broad definition, in addition, covers debt securities issued in the currency of the country of residence of the borrower, provided they are targeted at non-resident investors. For further details, see ECB (1999).

Deutsche mark. A number of articles in the bank's *Monthly Reports* documented the growing role of the mark from a currency that was hardly used internationally in the aftermath of the Second World War to the second most widely used international currency in the 1980s and 1990s.[9] While the Bundesbank did not formulate comprehensive public views about its policy towards this internationalisation of the mark, various elements suggest a rather prudent to negative stance. Until the early 1980s, the Bundesbank clearly attempted to moderate the international use of the Deutsche mark, mainly through restrictions on capital inflows, as currency internationalisation was seen to complicate the conduct of its monetary policy. In 1968, for instance, the Bundesbank entered into a "gentleman's agreement" with German banks that aimed at limiting the issuance of foreign Deutsche mark bonds by stipulating that only German banks could lead syndicates for Deutsche mark-denominated bonds and by making the volume of issues subject to the approval of a central capital-market committee.[10]

Throughout the 1990s, however, this restrictive policy lost effectiveness, as capital controls were gradually lifted. In addition, the Bundesbank's successful track record in terms of price stability unavoidably enhanced the mark's attractiveness and irresistibly propelled it to the position of second most widely used international currency.[11] That said, having a currency subjected to growing international use continued to carry with it the concern that non-residents might be in a position to acquire a significant amount of the country's liquid liabilities, which could provoke large-scale capital inflows with adverse implications for monetary policy control of broader policy objectives. Likewise, during bouts of uncertainty about the direction of the country's economic policy, the risk of a run on the currency would be greater in case of a large international use and the efforts needed to maintain the confidence of foreign investors commensurately larger.[12]

Although the French franc also fulfilled some of the functions of an international currency, the Bank of France was even less explicit in its policy views on the international role of its currency. This may be attributed to the fact that the French franc was first and foremost assuming official, rather than private, functions of money outside France, and policies on international monetary relations were accordingly determined by the French Treasury and government more generally. In international discussions on the global monetary system, for instance on the creation of global liquidity through the SDR in the 1960s, the French government took strong views on the need for a counterbalancing force to the US dollar. In specific regions, mainly in the countries with former colonial linkages, the French Treasury was the guardian of the international role of the franc. One prominent example was the agreement between the French Treasury and the countries of the CFA franc zone in Africa, whereby the Treasury stood ready to support the parity of the local currency in terms of the French franc.[13] The Bank of France assumed a supporting role, in the case of the CFA franc zone, through a close analysis of, and regular publications on, monetary and financial developments in the African countries concerned.

Early on after the launch of the euro, the ECB considered it necessary to develop and make explicit its policy views on the international role of the euro. In its *Monthly Bulletin* article of August 1999, the ECB made clear that "the internationalisation of the euro, as such, is not a policy objective" and that "it will be neither fostered nor hindered by the Eurosystem". At the same time, the article downplayed some of the fears regarding the potential negative implications of growing international use of the euro for its monetary policy conduct, which in

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9 See, for instance, Deutsche Bundesbank (1991) and (1997).

10 See Tavlas (1991).

11 See Frenkel and Goldstein (1999).

12 See also Marsh (1992).

13 See Hugon (1999).

the case of the Bundesbank and the Deutsche mark had probably been more justified, taking into account the relative size of the respective currency areas. In a nutshell, three sets of issues were addressed by the ECB – namely, the implications for the transmission mechanism of monetary policy, for the stability of money demand, and for the role of the exchange rate. For all three issues, a greater international use of the euro was considered to have effects that, on balance, should not lead to an overall negative assessment. It was, moreover, underlined that the ECB's monetary policy strategy, with its combination of an economic and a monetary analysis, was well equipped to take into account developments in terms of the international role of the euro. Finally, the neutral stance taken was also in recognition of the fact that it would be futile for policymakers, in a globalised world with increasingly integrated market-based financial systems and a floating exchange rate regime, to try to distinctly influence the use of the euro outside the euro area's borders. The internationalisation process should, in other words, remain the outcome of economic and financial developments, driven by the decisions of private market (and sometimes public) actors. Indeed, in terms of official use, the ECB fully expected the euro to perform a function as an international reserve currency, both de jure in the case of the countries participating in ERM II and de facto in the case of other currencies being pegged to the euro.

Of course, such a neutral attitude does not imply that the central bank, through some of its policies, cannot indirectly influence the international role of its currency. In the case of the ECB, its efforts to foster financial market integration in the euro area – by setting up, for instance, a particular financial market infrastructure or by stimulating the private sector to develop certain euro area-wide market instruments – is certainly of help in widening and deepening euro area money and capital markets that will raise the level of attractiveness for non-resident traders and investors of using the euro. Similarly, the conduct of a credible monetary policy aimed at maintaining price stability over the medium term can also be expected to have a positive impact on the attractiveness of the euro as an international store of value. However, these ECB policy objectives have exclusively domestic goals in mind, even though they may result in positive externalities for the international use of the euro.

That said, the neutral policy stance of the ECB vis-à-vis the international role of its currency should not be equated with an attitude of benign neglect. From very early on, the ECB – like some of the central banks issuing the legacy currencies of the euro – has been monitoring and analysing developments as regards the internationalisation of its currency, publishing its main findings in what have, broadly speaking, become annual reviews of the international role of the euro since 2001.

III. Stylised facts about the euro's international role

Having reviewed the starting period of the international use of the euro, which was altogether stronger than had been expected by the mainstream analysis prior to 1999, development during the first decade of the existence of the euro has been very much in line with what was anticipated. In essence, news on the international role of the euro has been largely unspectacular over the past 10 years.[14] The direction of change has been positive, and the euro has definitely become increasingly popular as a means of payment, as an investment currency or as an issuance currency. But the pace of change has been slow and gradual, confirming that the landscape of international currencies is characterised by considerable inertia and that the drivers of currency internationalisation are fundamental and slow-moving variables. As shown below, this inertia remained present even during the global financial

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[14] See Moss (2009) for further details.

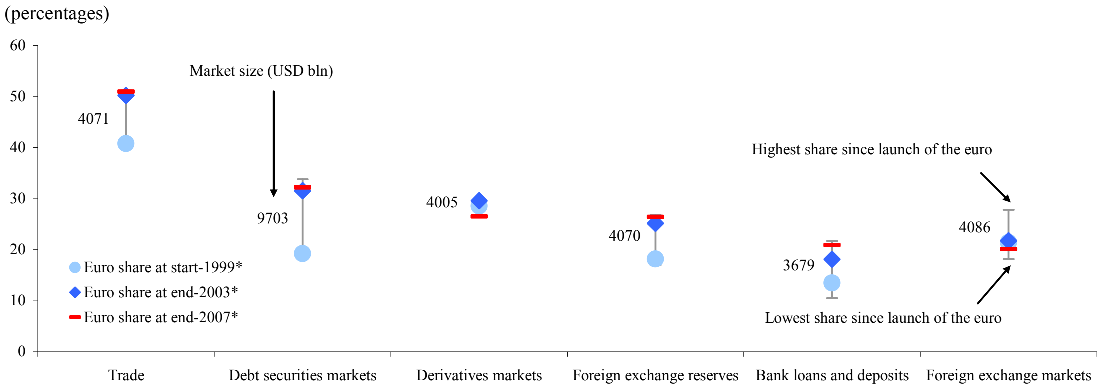
turmoil that started in mid-2007 and that turned into a global financial crisis in the last quarter of 2008.

When putting together the main findings which the ECB has expressed in its annual reviews on the international role of the euro, three key stylised facts on the use of the euro abroad can be derived.

Stylised fact no 1: the euro's international role has increased over time

The use of the euro outside the euro area borders is more important today than it was in 1999. The share of euro-denominated instruments in global financial markets (debt securities markets, derivatives markets, foreign exchange markets) has clearly increased over the past 10 years. This also holds for other domains of international currency usage, such as the currency denomination of trade, or the currency composition of official foreign exchange reserve holdings (see Figure 1). As a result, the euro has consolidated its role as the second international currency after the US dollar.

Figure 1: Share of the euro in different market segments



Sources: IMF, BIS, national sources and ECB calculations.
** or available data closest to that date.*

Stylised fact no 2: the increase was mainly concentrated in the first five years of the euro's existence

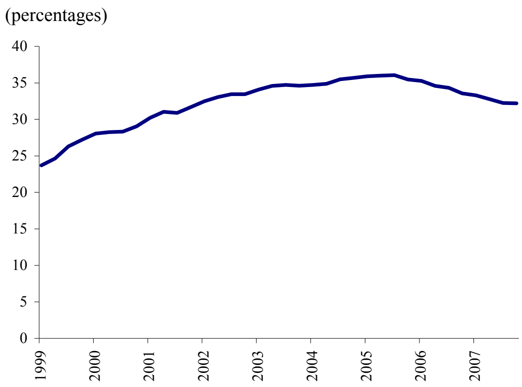
Notwithstanding the overall finding of a modestly upward-trending international use of the euro, it cannot be contested that, in the major market segments, the euro's international role had mostly advanced until around 2003–05, while it appears to have broadly stabilised subsequently or even slightly declined in some market segments:

- In the market for international debt securities, the share of the euro, net of valuation effects,[15] in the outstanding stock of debt securities from issuers located outside the euro area rose from close to 24% to more than 36% between the beginning of 1999 and mid-2005 (see Figure 2). Later, the share of the euro fell back to around 32% in the market for international debt securities by the end of 2007, mirroring, to a large extent, the vibrant financial environment in the United States (the latest evidence on developments into 2008 are provided in Section 3). This environment led to a

[15] The share of the euro in relation to the share of other widely used international currencies is considerably influenced by exchange rate movements of the euro against those currencies. Therefore, valuation effects stemming from exchange rate fluctuations are taken into account when assessing the euro's international status in the following analysis – ie where feasible, all data on shares are reported at constant exchange rates.

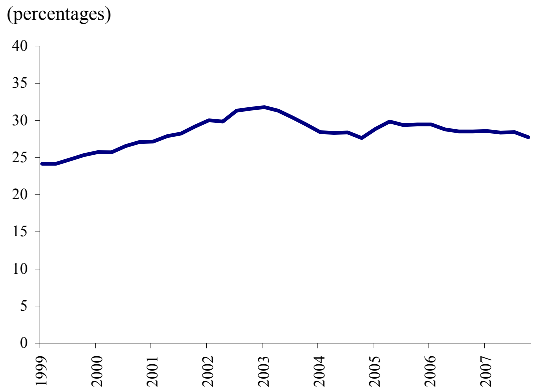
significant rise in US dollar-denominated international debt issuance in 2006 and 2007, which consequently reduced the prominence of the euro and even caused some retrenchment in the euro's share of the outstanding stock.

Figure 2: Share of the euro in the stock of international debt securities



Sources: BIS and ECB calculations.

Figure 3: Share of the euro in central banks' holdings of foreign exchange reserves



Sources: IMF and ECB calculations.

- Likewise, the euro visibly gained in importance as a reserve currency, with its share in central banks' holdings of foreign exchange reserves growing from about 24% at the start of EMU in 1999 to close to 32% by the first quarter of 2003 (all figures corrected for valuation effects; see Figure 3). After 2004, central bank holdings of foreign exchange reserves in the euro remained relatively stable at around 28%, potentially owing to the considerable reserve accumulation of several central banks, mainly in Asia, that were pursuing some strong form of exchange rate management against the US dollar. However, detailed data substantiating this assessment are lacking for the time being.[16]
- In cross-border loans and deposits of banks outside the euro area, the share of the euro followed a similar pattern, increasing until mid-2005 and receding slightly thereafter (see Figure 4).
- In terms of invoicing and settlement of imports and exports, the euro gained importance among those countries for which data are available,[17] increasing its share as the currency of denomination of their trade from around 40% in 2001 to more than 50% in 2003 (see Figure 5). In subsequent years, the euro's share stabilised at this level.

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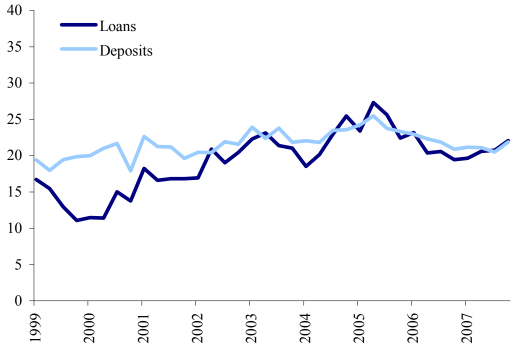
[16] The analysis of the currency composition of foreign exchange reserves is limited to those central banks which disclose this information. At the end of 2007, the currency composition was known for around two thirds of the central banks' holdings of foreign exchange reserves. Sovereign wealth funds, accounting for another quarter of global foreign reserves, do not generally disclose the currency composition of their assets. See, inter alia, Lim (2006).

[17] Data on the invoicing or settlement currency of international trade flows are available for only 23 countries, together representing less than a fifth of world trade.

Figure 4: Share of the euro in the stock of international loans and deposits

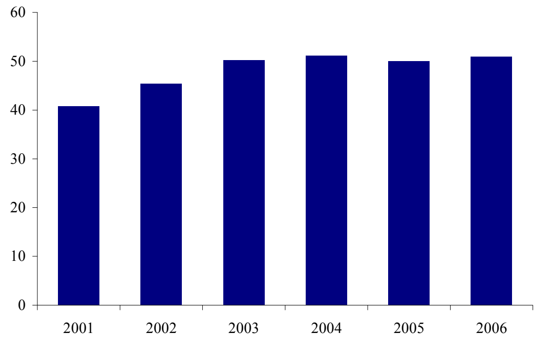
(percentages)



Sources: BIS and ECB calculations.

Figure 5: Share of the euro in the settlement/invoicing of merchandise trade

(percentages, trade-weighted averages)



Sources: national sources, IMF and ECB calculations.

Why did the euro very quickly become more widely used than its legacy currencies by non-residents, and why has the trend overall remained positive? Diversification considerations on the part of debt issuers and investors appear to have been a major driving force behind the observed developments. The establishment of the euro area – encompassing, from the start, the economies of 11 European countries, including five of the six biggest economies in Europe, alongside a progressive harmonisation of the framework governing the euro area's financial system – fundamentally contributed to enhancing the euro's attractiveness. Furthermore, the prospect of a growing economic weight of the euro area, on account of its enlargement, which started in 2000, added to this attraction, even though, in economic terms, the additional members did not contribute much. Hence, from the viewpoint of a geographically wider distribution of funding sources and investments, global portfolio optimisation strategies advocated a larger role for the euro.

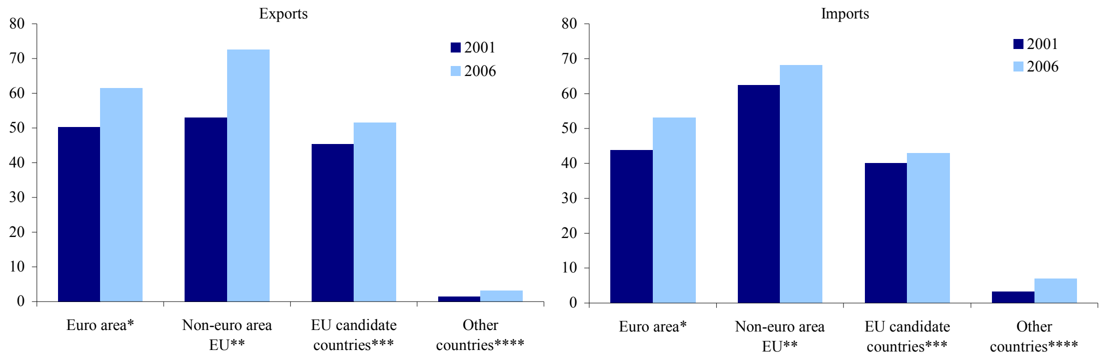
Stylised fact no 3: the euro has a predominantly regional role

While the euro's use outside the borders of the euro area has increased on a global scale, available evidence suggests that its rise is most prominent in countries neighbouring the euro area, especially those with strong institutional or political links to the European Union. Whereas this pattern is clearly discernible in the invoicing and settlement of trade flows, it is also observable in other domains, such as the market for international debt securities (see Figure 7) or in cross-border loans from banks located in the euro area to residents outside the euro area (see Figure 8).[18]

[18] See the special focus on the trends and determinants of asset substitution in central, eastern and southeastern Europe in ECB (2007).

Figure 6: Share of the euro in the settlement/invoicing of merchandise trade of selected country groups

(percentages, trade-weighted averages)

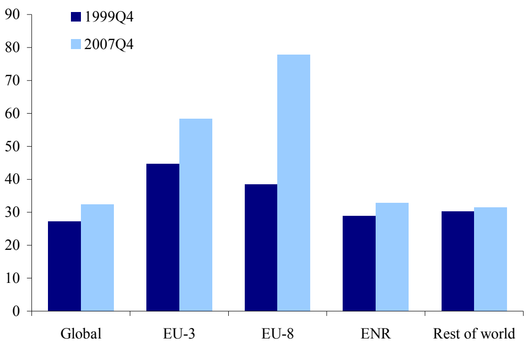


Sources: national sources, IMF and ECB calculations.
** Belgium, France, Germany, Greece, Luxembourg, Italy, Portugal, Spain; trade with countries outside the euro area.*
*** Bulgaria, Cyprus, Czech Republic, Estonia, Latvia, Lithuania, Romania, Slovak Republic.*
**** Croatia, FYR Macedonia, Turkey.*
***** Indonesia, Thailand, Ukraine.*

Moreover, the pattern appears to have become more pronounced over time, with countries located in the vicinity of the euro area expanding their use of the euro at a faster pace than those further away. As a matter of fact, a high degree of euroisation can be found in some countries of eastern Europe.

Figure 7: Share of the euro in the stock of international debt securities of selected country groups

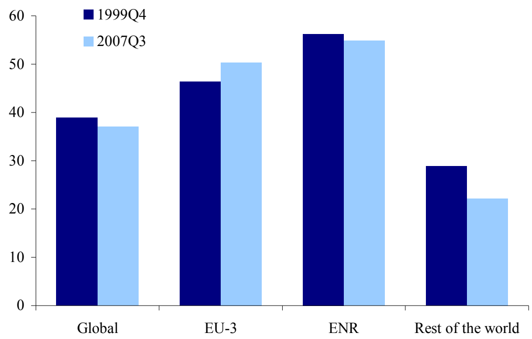
(percentages)



Sources: BIS and ECB calculations.
EU-3: UK, Denmark, Sweden.
EU-8: Other non-euro area EU Member States.
ENR: Other Europe, Africa, Middle East.

Figure 8: Share of the euro in cross-border loans of euro area banks to residents in selected country groups

(percentages)



Sources: BIS and ECB calculations.
EU-3: UK, Denmark, Sweden.
ENR: Other EU, other Europe, Africa, Middle East.

In the market for international bonds and notes, in particular, debt securities denominated in the euro's legacy currencies were already mainly concentrated in countries neighbouring the future euro area, with the share of instruments denominated in these currencies decreasing the further away the respective issuer was located from a euro area member state (see Figure 9). Ten years after the advent of the euro, this pattern appears to persist, even though the prominence of the euro in terms of total volumes of debt securities has risen considerably overall (see Figure 10). Again, however, this increase seems to be most notable in the geographical neighbourhood of the euro area.

Figure 9: International bonds denominated in euro legacy currencies as a share of total outstanding volumes

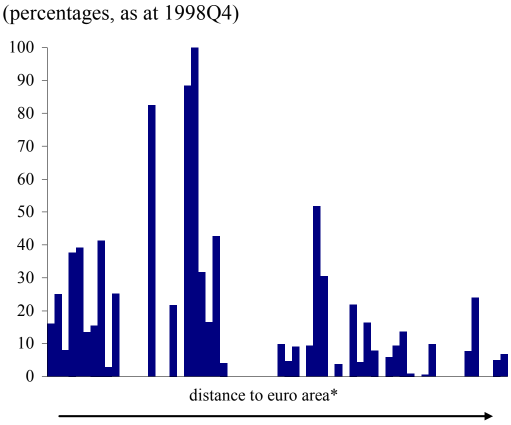
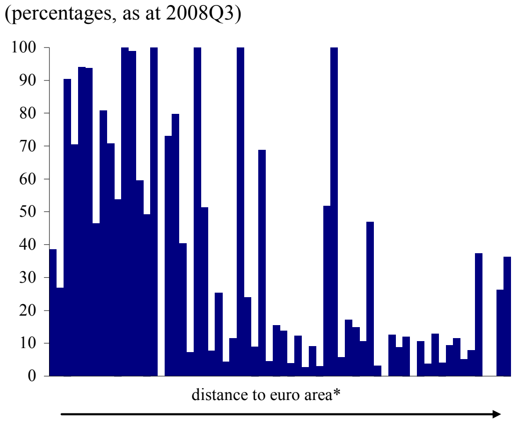


Figure 10: International bonds denominated in euros as a share of total outstanding volumes



* Geographical distance between Brussels and country capital with international bonds outstanding in the respective quarter.

Source: BIS and ECB calculations.

Finally, it is worth underlining that this regional concentration of the international use of the euro also extends to its public use. Indeed, most of the countries that have anchored their currency to the euro in a tight or semi-tight arrangement are located in neighbouring regions of the euro area. Similarly, these countries tend to use the euro as the preferred vehicle currency for defending the external value of their domestic currency.

IV. The impact of the global financial crisis on the international use of the euro

Comments have been voiced as to the longer-term implications for the global importance of the US economy in general, and that of the international role of the US dollar in particular, of the ongoing financial crisis which originated in the United States.[19] The impact of the crisis, and especially its intensification and broadening after September 2008, on the US dollar's and, by implication, also on the euro's international role has been impossible to assess so far. Even as regards the very short-term implications, a clear assessment cannot yet be made, as most recent systematic statistics capturing the international role of currencies cover, at best, the period until the third quarter of 2008.[20] Furthermore, the crisis is ongoing and its final repercussions on financial markets, on the shape of the global financial landscape and, as part of that, on the balance among the world's leading international currencies remain highly uncertain.

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[19] On the eve of the 13–14 March 2009 meeting of the G20 Finance Ministers and Governors, the Finance Ministers of the BRIC countries issued a communiqué in which they called for a study of developments in the international monetary system, including the role of reserve currencies. This general call became more specifically targeted at the US dollar subsequently, especially on the part of the Chinese authorities.

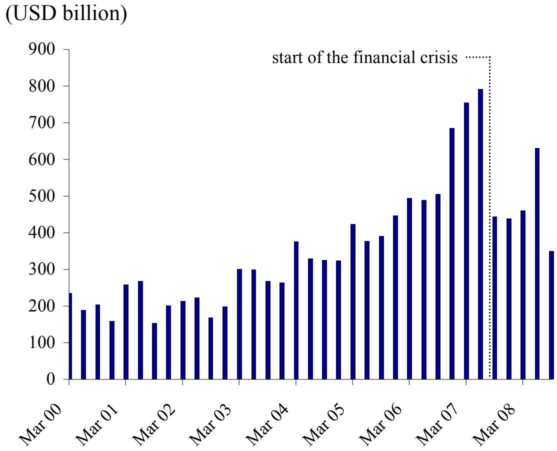
[20] For the international market of bank loans and deposits, for instance, comprehensive statistics with a currency breakdown are available only until end-Q2 2008 as of end-February 2009.

Nonetheless, evidence available from currently obtainable comprehensive data, complemented by narrower datasets on the issuance of bonds, notes and asset-backed securities (ABS) extending to the fourth quarter of 2008, indicates an overall significant decline in volumes of international securities issuance. As to the distribution of this issuance across different currencies, shifts have thus far, by and large, been fairly limited with regard to the market for international bonds and notes, with fluctuations for the euro share remaining inside the ranges observed over the past decade. Concerning asset-backed securities, however, an increasing share of euro-denominated paper since the onset of the financial crisis is noticeable on account of the collapsing supply of US dollar-denominated ABS issuance. By the end of 2008, the euro's share in this market segment had accordingly reached an unprecedented level. However, this apparent attractiveness of the euro should not be overrated in view of the presumed temporary nature of the crumbling issuance in US dollars. On the other hand, such a striking development does show that the usually displayed inertia with regard to the international use of currencies can evaporate in the presence of serious market disruptions of the scale currently witnessed for ABS.

More specifically, concerning the issuance of international bonds and notes,[21] volumes contracted to USD 351 billion by the third quarter of 2008, a level last observed in the fourth quarter of 2004, which compares with a peak in issuance of USD 791 billion in the second quarter of 2007 (see Figure 11). Across different currencies, the decline was most pronounced for the US dollar and sterling, where issuance in the third quarter of 2008 was more than two thirds lower than in the second quarter of 2007. The drop in issuance activity for other major currencies, albeit still significant, was markedly less, with the euro, yen and Swiss franc recording declines of 38%, 43% and 35%, respectively, over the same period. Consequently, these currencies' shares in total issuance have expanded since the onset of the financial crisis in the summer of 2007 (see Figure 12). Most notably, the share of the US dollar has fallen from 48.0% to 39.4% whereas the euro's share has increased from 30.1% to 33.6% since the second quarter of 2007. To put matters into perspective, however, it is worth pointing out that such a development is not unprecedented. In fact, a similar change in preferences from US dollar to euro issuance took place between late 2003 and early 2005, without any major financial market disruptions being present at the time.

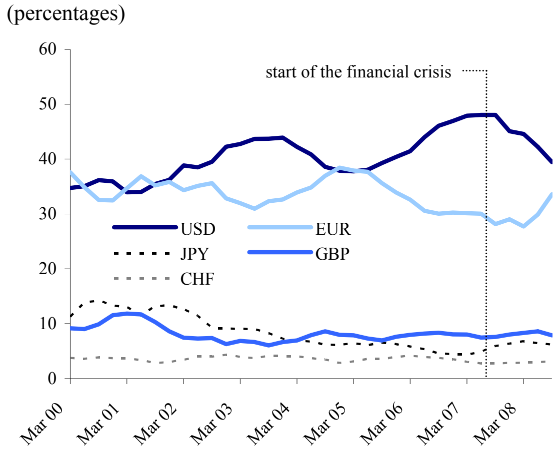
[21] International bonds and notes are defined as debt securities issued in currencies different from those of the currency area in which the issuer is residing.

Figure 11: Issuance of international bonds and notes



Source: BIS.

Figure 12: Issuance of international bonds and notes, currency shares[1]



Source: BIS and ECB calculations.

[1] In order to account for seasonality in issuance and valuation effects due to fluctuations in foreign exchange rates, these shares are reported as a four-quarter moving average and at September 2008 exchange rates.

Supplementary data[22] covering international debt securities issuance up to end-2008 indicate a further contraction in activity in the fourth quarter, with volumes declining to USD 126 billion, after USD 216 billion, USD 448 billion and USD 326 billion in the third, second and first quarter of 2008, respectively. The share of euro-denominated issuance continued its rising trend, amounting to 33.1% in the last quarter of 2008, based on a four-quarter moving average.[23]

Turning to international ABS,[24] parallels with the shifts observed in the market for international bonds and notes are evident, although fluctuations have been considerably more pronounced than those for bonds and notes, owing at least in part to the closeness of the US dollar-denominated ABS market to the US mortgage market, the epicentre of the financial crisis.[25] Issuance in this financial market segment collapsed after the summer of 2007, with the total in 2008 only a quarter of that witnessed in the course of 2007 (see Figure 13).

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[22] Data are gathered from Thomson Financial and are less comprehensive than comparable information obtainable from the BIS but with daily availability on an issue-by-issue basis. In 2007, international bond issuance reported by Thomson Financial amounted to USD 1,400 billion while the BIS recorded USD 2,428 billion.

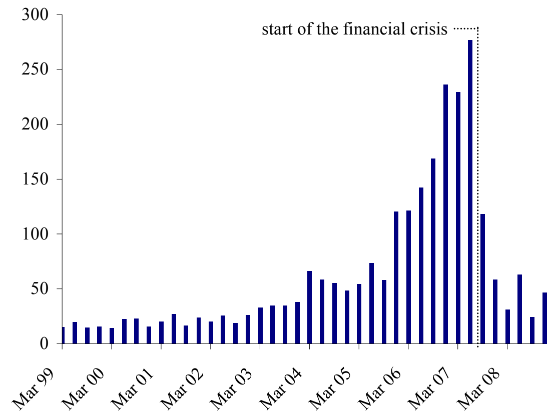
[23] This compares with shares of 30.9%, 28.4% and 27.6% in the preceding three quarters.

[24] Similar to international bonds and notes, an international asset-backed security is defined as an instrument issued in a currency different from that of the currency area in which the issuer is residing.

[25] Of the USD 2.5 trillion of international ABS issued between 1999 and 2008, around a third was backed by some kind of residential or commercial mortgage.

Figure 13: Issuance of international ABS

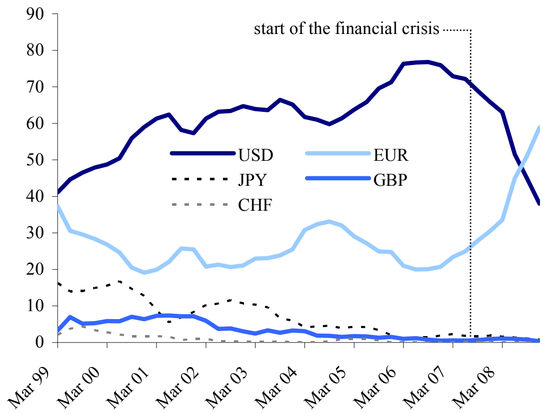
(USD billion)



Source: Thomson Financial.

Figure 14: Issuance of international ABS: currency shares[1]

(percentages)



Source: Thomson Financial and ECB calculations.

[1] In order to account for seasonality in issuance and valuation effects due to fluctuations in foreign exchange rates, these shares are reported as a four-quarter moving average and at December 2008 exchange rates.

The retrenchment was again most notable in the US dollar, but also in sterling-denominated international ABS, where volumes in 2008 dropped by 88% and 91% compared with 2007. Activity in the euro has held up comparatively well to date, registering a decline of only 46%. Consequently, the share of the euro in the issuance of ABS expanded from 25% in the second quarter of 2007 to close to 59% at the end of 2008 (see Figure 14), mainly to the detriment of rapidly decreasing US dollar issuance.

Looking beyond the short-term developments influenced by the financial crisis, as observed until late 2008, and turning towards possible longer-term future evolutions, it is safe to assume that the global financial crisis is unlikely to be followed by a status quo ante. Instead, this crisis may well change a number of paradigms of global finance, which could, in turn, alter the global landscape of internationally used currencies and could, by implication, have a distinct bearing on the future relative role of both the US dollar and the euro in this landscape. At the same time, the financial crisis could provoke outcomes along various avenues that are not all necessarily negative for the US dollar. The following four possible evolutions are likely to be of relevance in this context:

- A first observation relates to a key feature of the ongoing financial crisis – namely, the severe difficulties experienced in the market for wholesale bank funding in major international currencies, especially since the last quarter of 2008. Until August 2008, mainly European banks had been confronted with funding problems in US dollars. Later, liquidity strains extended to other regions and other currencies, including the euro and Swiss franc. Central banks reacted by setting up mutual swap lines. The Federal Reserve established swap lines with the ECB and the Swiss National Bank, and they started to be used in December 2007. As the crisis became more global, the Federal Reserve expanded its swap network to other central banks, also reaching out to emerging market economies such as Brazil, Korea, Mexico and Singapore.[26] The

[26] See Ho and Michaud (2008) for an overview of inter-central bank swap lines.

arrangements for the provision of euro- or Swiss franc- denominated liquidity across central banks have a more regional focus. For instance, the ECB and the Swiss National Bank concluded a swap arrangement in October 2008 to ensure smooth funding in Swiss francs within the euro area. In the last quarter of 2008, the ECB entered into arrangements with the central banks of Denmark, Hungary and Poland.[27] Also in Asia, the augmented swap lines among central banks under the Chiang Mai Initiative follow a regional pattern. By contrast, the People's Bank of China seems to be engaged in a global effort to develop swap lines in renminbi with other central banks in the world. At some point in time, the wholesale interbank market will return to more normal conditions, obviating the need for an active use of the swap lines set up between various central banks. However, supply and demand conditions in this market may no longer be the same as before the crisis, for instance because non-US banks might want to be less short than before in their international US dollar funding. Obviously, this will have ramifications for some aspects of the international usage of the US dollar.

- Second, ambitious fiscal expansion programmes across different parts of the globe may trigger an important sectoral shift in international financing requirements. Specifically, large-scale issuance of new government paper could be accompanied by more subdued growth in private sector debt issuance as corporate and financial sectors in the major economies consolidate and repair their balance sheets. In this scenario, the supply of new international debt securities would be driven much more than before by the official sector. There is already evidence of such a trend in global securities markets during the fourth quarter of 2008, when most issuance of debt securities originated from the official sector. Whether this trend would reinforce the international role of the euro depends very much on the geographical composition of the new debt securities issuance. Since public sector deficits, at least in the current and next year, are likely to be more significant in the United States and the United Kingdom than in the euro area, this could systematically reduce the share of the euro in global bond markets. On the other hand, the larger public debt stocks in euro area countries, compared with those of the United States and the United Kingdom, point to a greater rollover need for the euro area public sector, which could compensate for the trend in new debt issuance.

- Third, aside from the sectoral (from private to public) and compositional effects (which region of the world will make a larger command on international savings), global financial markets may, over the next few years, also face structural shifts in the relative importance of financing instruments once the financial system settles into a new equilibrium. The aftermath of this crisis may well provoke a shift in the relative roles of bank lending versus direct market funding through bond or equity issuance. Shifts in the relative importance of bank lending, debt-based financing or equity financing could have an impact on the structure of markets in the major financial centres, and on the international use of the respective currencies. For example, the growth of bank lending may become stronger on account of a lesser recourse to the "originate-to-distribute" model of securitisation. On the other hand, new regulatory and supervisory arrangements, together with a need for balance sheet repair, may result in a more subdued rate of bank lending growth. To date, bank loans have been relatively more important in the euro area, where they constitute 115% of GDP (2007 figures), than in the United States, where they

[27] In the case of Denmark, that country being an ERM II member, the arrangement took the form of a swap, implying an exchange of euros against Danish kroner. In the cases of Hungary and Poland, the arrangements were in the form of a repurchase agreement and, therefore, did not involve an exchange of different currencies.

account for only 48% of GDP during the same period. Conversely, stock market capitalisation is far higher in the United States, at 95% of GDP as of 2007, than in the euro area, where it stands at around 74% of GDP.

- A fourth factor that is more specific to the euro relates to the prospects for further financial market integration in the euro area. Deep and liquid domestic financial markets are a key precondition for the development of an international currency. Unsurprisingly, progress towards deeper, more liquid and more integrated financial markets in the euro area has, over the past years, contributed to the gradual increase in the international role of the euro. A retrenchment towards national financial market solutions for the financial crisis in the European Union might trigger a slowdown of the past trend and could consequently reduce the rate of increase in the international attractiveness of the euro.[28] The ongoing coordination within the European Union of national action plans in financial and banking sectors does not, however, seem to point to risks of an overly great "home bias" in the euro area. Hence, there seems to be little danger of current developments jeopardising the considerable gains made in terms of financial market integration inside the euro area. In any case, the ECB is monitoring developments in this domain.[29]

The global financial crisis may change not only the landscape for the major international currencies, but also the conditions for smaller currencies to develop an international role. Until the onset of the crisis, there was some evidence of an increasing international role of emerging market currencies. One striking example was found in the foreign exchange market, where, according to the BIS Triennial Central Bank Survey, the share of emerging market currencies in foreign exchange transactions increased from 16.9% in 2001 to 19.8% in 2007.[30] The following countervailing forces of a steady progression of emerging market currencies deserve to be mentioned in this connection:

- The increasingly strong spillover of the global financial crisis to the real economy has weakened the macroeconomic and financial outlook of emerging market economies, and could therefore, at least temporarily, act as a brake on the relative attractiveness of their currencies. Since mid-2008, the exchange rates of many emerging market economies have depreciated considerably, or have come under significant depreciation pressure. Reserve accumulation has come to a halt, or even been reversed, in particular in cases where the authorities used the official reserves either to support the domestic currency or to provide foreign currency funding to the domestic banking sector. Moreover, there are signs of re-dollarisation or re-euroisation in some countries, including central, eastern and southeastern European economies where there is some evidence that households have switched part of their deposits out of local currency into the key international currencies. All these developments could potentially either delay the prospective progression of specific emerging market currencies in their role as fully fledged international currencies on a regional scale or, more generally, diminish the confidence of international currency users in emerging market currencies.
- At the same time, the crisis has heightened the risks of international banking and finance activities and, hence, also the use of foreign currencies more generally, which could cause economic agents in emerging market economies to make greater use of their domestic currencies, thereby complementing the phenomenon

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[28] The euro area is part of the single financial market which encompasses all 27 EU member states.

[29] For the last few years, the ECB has published an annual report on euro area financial integration developments.

[30] See BIS (2007).

witnessed in industrialised countries of an intensifying "home bias". More specifically, in some countries, currency depreciations have triggered huge balance sheet effects, propelling the stock of those countries' external debt as a percentage of GDP, on account of large foreign exchange rate losses suffered by households and corporates that had indebted themselves in lower-yielding foreign currencies. Banking sectors in those emerging market economies may, as a consequence, start to face a deteriorating credit portfolio, to the extent that they have also extended domestic currency loans to such largely unhedged households and corporates, which are now facing larger debt burdens as a result of the domestic currency depreciation. The materialisation of these currency risks could encourage economic agents in emerging market economies overall to move towards a greater use of national currencies and to deepen local financial markets with domestic currency instruments, which would, in turn, pave the way for a greater international use of those currencies. Prior conditions for such a development would need to include the existence of a sound domestic macroeconomic policy framework with, notably, a commitment to a low-inflation environment, and a public sector that is predisposed to pursuing structural reforms aimed at developing the domestic financial sector.

V. Concluding remarks

The international use of currencies does not rank among the most exciting fields of international economics. The global use of currencies tends to be very slow-moving, driven by stable equilibria and characterised by considerable inertia. The experience with the euro so far during the first decade of its existence confirms this picture. First, the introduction of the euro in 1999 did not trigger any major shifts in the use of international currencies, and the euro basically inherited the international role of its predecessor currencies, which in some respects was surprising. Second, during its first 10 years, the euro's international role was not subject to any wide swings and recorded only gradual changes. Third, available evidence so far shows that, even during the height of the global financial turmoil in late 2008, the relative importance of the euro and the US dollar in international financial markets did not change much when viewed against the extreme volatility that characterised many of these markets.

Historical evidence suggests that changes in the use of international currencies tend to be associated with large structural breaks in societal, political and economic forces. At least at this point in time, the ongoing financial crisis does not compare to the type of serial shock events that precipitated the decline in the international currency status of, for instance, the Dutch guilder in the late 18th century or sterling in the early 20th century. In that sense, it does not presage any fundamental turnaround in the use of the US dollar that would play out to the advantage of the euro in its role as runner-up in the international currency environment. Still, at the margin, the current crisis may alter some of the preconditions for currency internationalisation. Changes in the relative roles of bank lending versus direct market funding could have an impact on the structure of markets in the major financial centres, and on the international use of the respective currencies. The ambitious fiscal expansion programmes across the globe may trigger important sectoral shifts in global financing requirements, with an increasing issuance of government paper denominated in specific currencies. The impact of the crisis on the pace of euro area financial market integration may also affect the growth path of the euro's international attractiveness.

Where the financial crisis seems to have more pervasive effects, at least in the short term, is on the international role of emerging market currencies. Over the past 10 years, many of these currencies have started to develop some use outside the borders of their respective jurisdictions, in tandem with the increasing trade and financial weight of the emerging market economies and their growing importance in the global economy. This steady progression in the internationalisation of emerging market economies and their currencies is likely to be brought to a temporary halt on account of the negative fallout from the industrialised economies' economic downturn on both their domestic real and financial economies. At the same time, developments such as the growing financial losses on account of currency mismatches in combination with domestic currency depreciation or increasing "home bias" tendencies may sow the seeds for a more consolidated international use of these currencies.

All in all, it is definitely too soon to draw firm conclusions from the fallout of the ongoing financial crisis on the international use of currencies. For the euro, still in its infancy as a currency and, by implication, as an international currency when viewed in a historical perspective, as well as for other well established international currencies, the coming years will prove a challenging financial market environment and possibly a defining moment in their further international use.

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