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The euro's global role

Euro will share in dollar's exorbitant privilege

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Summary and introduction

Charles de Gaulle famously complained that the US had an "exorbitant privilege" due to the dollar's dominance. The euro is the first currency to offer a serious challenge to the position of the dollar.

Through examining the different uses of an international currency one can see if the euro really offers a viable alternative to the dollar. This background paper examines the current use and potential of the euro in international trade, the foreign exchange market, the asset markets, as a parallel currency, as an anchor for FX regimes and in official currency reserves. Looking at several dimensions allows one to grasp that, contrary to popular belief, global currencies are not necessarily competing in a winner-take-all game. Only in certain cases, namely commodity pricing and foreign exchange markets, are network effects so significant that they dictate one dominant currency. Here it will be difficult for the euro to supplant the dollar.

Other dimensions, however, favour the euro through two channels. The trading power of the euro gives it an advantage in the invoicing of international trade outside of commodities. It also means that the euro will play an important role in the increasing use of basket currency pegs by central banks.

Now that the euro securities markets come close to matching those of the dollar in size and liquidity, diversification favours a stronger role for the euro. Both private investors and central banks will increasingly put part of their holdings into euro assets.

Due to these factors the euro will play a more important role as a second global currency that comes close to the correspondingly diminished role of the dollar. Supplanting the dollar in its current dominant role, however, will be much more difficult. The euro might be able to overtake the dollar if the euro-zone grows significantly by the addition of the UK, Denmark, Sweden and the Eastern European countries. Another scenario is that the US allows the dollar to weaken and worries about the current account escalate. Should the dollar end up in full retreat it will probably be because of mistakes in US policy rather than the appeal of the euro.

The chance that the common currency will fully displace the dollar is small. However, it is likely that the euro will be able to take a significant share of the spoils of the "exorbitant privilege."

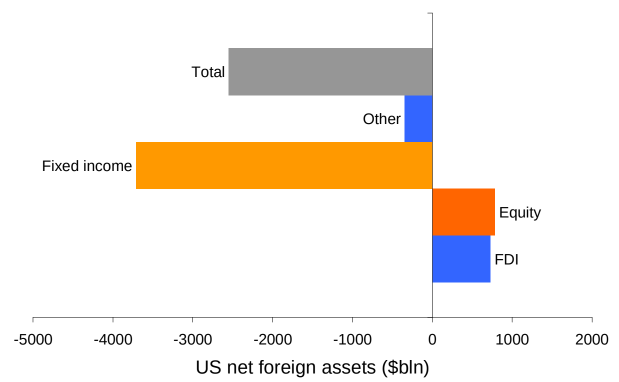
The pros and cons of a global currency

Hosting a global currency complicates monetary policy. The benefits, however, justify the headaches.

The advantages of a global currency . . .

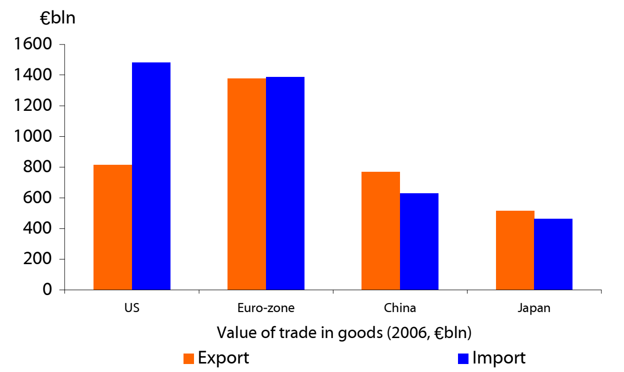
A major advantage[1] that American businesses enjoy is that they can trade in their own currency, thus reducing the transaction costs and risks involved in foreign exchange. Furthermore, hosting the global currency

Chart 1: Leveraging the "exorbitant privilege"



Source: Bureau of Economic Analysis

Chart 2: Euro-zone is trading giant



Source: EcoWin

gives America's financial sector a comparative advantage. This also allows the US to exercise some control over international payments, a power that it has used to, for example, fight terrorism.

US borrowers have a particular advantage not only because borrowing in dollars avoids the risk of exchange rate fluctuations but also because this borrowing tends to be cheaper. The international use of the dollar implies an increased demand for it and thus lower interest rates than domestic fundamentals would otherwise dictate. Not only that, but particularly foreign central banks choose to buy relatively safe and consequently low return assets such as government bonds. This has favourable consequences for net foreign assets, because inflows tend to be biased towards safer assets that have a lower return. Chart 1 shows that the US has a net liability in fixed income but net assets in high return equity and foreign direct investment. Estimates indicate that because of this the US earns over 1% more on its foreign assets than it pays on its foreign debts[2].

. . . outweigh the disadvantages

Having a global currency, however, does complicate US monetary policy because a significant part of money demand is determined outside the US. This is especially true if, unlike the Federal Reserve, policy focuses on monetary measures. This may explain why the Bundesbank, which targeted money growth, didn't want to encourage the international role of the Deutschmark.

The international role of the dollar may also complicate foreign policy. Other countries resent that the US has the power to interfere in their finances.

On balance the advantages appear to outweigh the disadvantages. The US government may have somewhat more complicated monetary and foreign policy, but it also gains power and cheaper funding. Furthermore, it should be willing to take on these challenges in order to bring its citizens the reduced costs and risks associated with doing international business in their own currency. Given the above advantages that the US enjoys, *Europe should be happy to see the international role of the euro grow*.

Trade will drive use of the euro

The euro-zone is a bigger exporter than the US. This could help to increase the international use of the euro. Nevertheless, the dollar's position in trading commodities will be difficult to supplant unless the dollar is undermined by inept US economic or foreign policy.

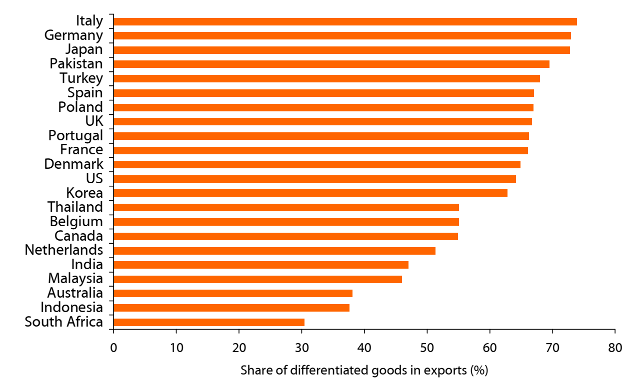
History's trading currencies

International trade is at the heart of a global currency. The last three main international currencies – the Dutch guilder (17th and 18th century), the British pound (19th and early 20th century) and the US dollar (late 20th century)[3] – all belonged to leading commercial nations.

History also suggests that trade is more important than overall economic power in the makings of a global currency. Between 1860 and 1914 almost two thirds of the world's trade is estimated to have been invoiced in sterling[4]. The US economy was larger than that of the UK by 1872, but US exports only intermittently outsized those of the UK after the First World War and only on a permanent basis after the Second World War[5].

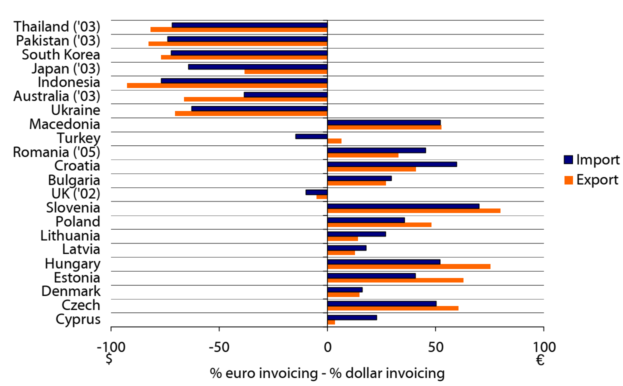
The War dramatically accelerated the switch to the dollar by its reshuffling of economic and political power. The dollar became the logical choice as an anchor for the new global foreign exchange regime under the Bretton Woods agreement. This led to an institutionalisation of the international role of the dollar,

Chart 3: Euro-zone exporters enjoy market power



Source: Kamps (2006)

Chart 4: Invoicing in euros mostly in Europe



Source: Kamps (2006), own calculations

which was exactly the position that frustrated de Gaulle. This system insured the dominance of the dollar in all aspects because other currencies were pegged to it. It was not until the system collapsed in the 1970s that there was much room for any other currency to pose a challenge to the dollar.

Trade volume and standardisation determine invoicing

It is the market power of exporters, both collectively and as individuals, that decides if they can afford themselves the convenience of invoicing in their own currency[6]. Collective market power refers to the total market share of all the exporters from one currency area. The greater this share the more exporters will price in their own currency. Individual market power refers to the nature of the goods exported. The greater the difference between the exporter's own product and the substitutes offered by its competitors, the greater its market power and the less concerned the exporter need be about the currency others are invoicing in.

This means that the higher the share of world exports from a country or group of countries with a particular currency and the more differentiated these exports, the more likely they will be invoiced in this currency. The mirror image of this is that if a country imports from many different smaller exporting countries, it is more likely that this trade will be conducted in the currency of the destination country.

Highly standardised products (i.e. not differentiated), like commodities, are commonly invoiced in one global vehicle currency regardless of the currencies of the countries involved. Such products are often traded on exchanges or with reference prices so that it is convenient to use one currency for listing prices.

Euro-zone has strong market share

Exports from EMU countries outstrip those of the US, China and Japan by more than half (see chart 2). Furthermore, the major European countries have relatively differentiated exports (see chart 3). This suggests that exports from the euro-zone are more likely to be invoiced in euros.

Together the EMU countries import a little less than the US and substantially more than China or Japan. This in itself implies that both US and EMU are likely to see their imports priced in their own currency.

Considering the euro-zone's trading power, the euro should have a strong role in the pricing of international trade. At present, this is only true for European trade, as chart 4 shows.

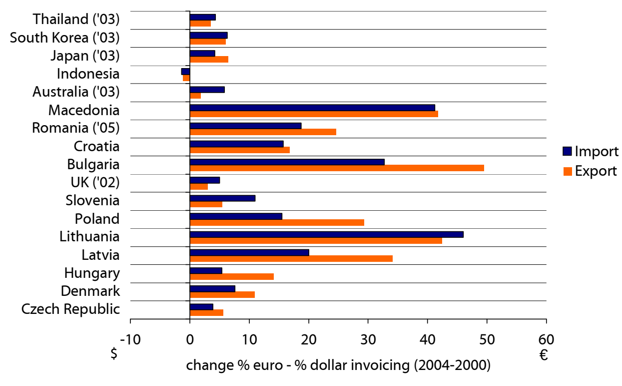
The dollar continues to dominate in Asia. Furthermore, while the euro hardly plays a role in Asian trade the dollar is used in an important portion of European trade.

The most important factor, however, is the dollar's role as a vehicle currency for commodity trade. Even for highly developed European countries a large portion of trade is conducted in standardised goods (see chart 6) and these are still overwhelmingly priced and traded in dollars.

Bigger role for the euro, except in commodity trade

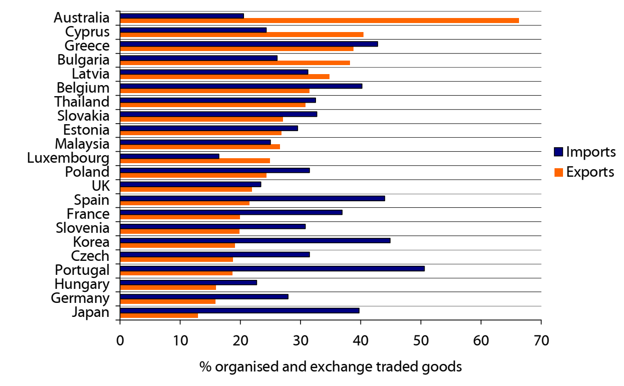
The euro-area's large share of world trade and its strength in differentiated products suggests an important role for invoicing in euros. This is already the case around Europe, but further away the euro is underused compared to its share in world trade. The data show that use of the euro has grown in practically all markets since its birth (see chart 5), so it appears the euro has yet to realise its full potential.

Chart 5: Euro has made progress as invoice currency



Source: Kamps (2006), own calculations

Chart 6: Commodities trades still favour the dollar



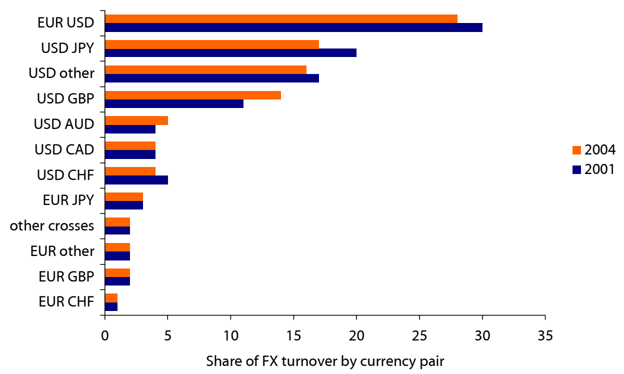
Source: Goldberg and Tille (2006)

The euro's global role

An expansion of the euro-zone would help to widen the international role of the euro even further. The entrance of the UK would give the biggest boost to invoicing in euros. The country itself still invoices more in dollars than in euros and it represents 12% of the exports outside of the EU-25. It is, however, possibly the least likely country to join. Sweden and Denmark together constitute 6% of EU-25 exports, but they are also hesitant to join the EMU. The Eastern European countries are more likely to enter the EMU within ten years, but Poland, Hungary, the Czech Republic and Slovakia (the Visegrad Four) together, only add up to a little under 4% of EU-25 exports. Their extra-EU exports, however, are growing at twice the pace of that of the EU-25 as a whole. As a result, if they were to join the EMU it might help to boost future export share.

Trade in exchange traded and reference priced goods is one area where the euro will have a much tougher time gaining ground. Here the convenience of a common standard means that there are strong disincentives to switch to another currency. Only if there are clear disadvantages in pricing in dollars will traders be inclined to move to the euro. There are two plausible (but not necessarily probable) scenarios in which this might happen. One is if the dollar were to become increasingly volatile due to concerns about the persistent current account deficit and net external debt. A second is more geopolitical. Countries with damaged relationships with the United States (like oil exporters Venezuela and Iran) find pricing their exports in dollars distasteful. Furthermore, US financial sanctions can make the settlement of dollars, which is still dominated by US banks, difficult. Should the US wish to preserve the status of the dollar it would be wise to reduce the current account deficit and limit the use of its financial system as a weapon.

Chart 7: Euro rarely traded except against dollar



Source: BIS

Dollar to remain dominant in FX trade

The dollar is the hub of the foreign exchange market. The importance of pooling liquidity means this is unlikely to change.

The euro plays a minor role in the FX market

When exchanging one currency into another it is still conventional to trade through the dollar. When for instance, selling Swedish krona for Thai baht, the typical route will be to sell krona against the dollar and then sell dollars against the baht. The dominance of this practice is borne out vividly by the data on foreign exchange turnover. The Bank for International Settelements (BIS) surveys the foreign exchange markets every three years[7]. There we see that direct trade between the euro and currencies other than the dollar are relatively rare. The largest is trade between euro and Japanese yen, and this represents only 3% of the total turnover on the FX market (see chart 7).

Market structure suggests dollar will retain dominance

The euro will have a tough time gaining ground against the dollar in the foreign exchange market. Transacting quickly at low costs is the main concern in FX markets. This favours pooling liquidity in one currency. That way spreads can remain tight because market makers can benefit from more frequent buying and selling, allowing them to minimize the risk of holding currency on their own books and to realise economies of scale. Furthermore, under these conditions clients can sell or buy large amounts without tipping off the market because their orders can hide inside the overall order flow[8].

One dominant currency that forms the hub for the foreign exchange markets, in the form of the dollar, is likely to remain the norm. The importance of one standard is probably even more important than for the trade in standardized goods mentioned above.

The euro may assume an important role in some specific exchange rates close to home. Here transactions involving euros may be so much more common than those with the dollar that trading twice instead of directly would only increase costs. The Deutschmark played a similar regional role for the currencies that later merged into the euro. *It is unlikely that the euro will become more than a regional hub in the foreign exchange market.*

Security markets have welcomed the euro

The euro has quickly taken up an important place in the global financial markets, particularly the international bond market where it rivals the dollar. The euro markets are large and liquid. Although, this has yet to be fully reflected in investors' portfolios, the rationale of diversification will help the euro over time.

Liquidity and the need to diversify favour the euro

While reducing transaction costs is paramount in the foreign exchange markets, considerations are broader in securities markets like equities and bonds. Standard portfolio theory dictates diversifying holdings. This in itself means that one dominant currency in the international asset markets is less likely.

Another consideration is liquidity. It is thus important that the introduction of the euro helped to enhance the liquidity of European financial markets. The merger of 13 currencies allowed issuers to reach a much broader market by issuing in one common currency. As a result the European financial markets, particularly in fixed income, are large and approach the liquidity of those of the US[9] (more on this in the section on official reserves). This is an area where China lags substantially behind the euro-zone and the US, which will inhibit the potential of the yuan as an international currency for some time to come.

The euro's position is particularly strong in the international bond market. When looking at the narrow definition of international bonds, namely those bonds issued by parties outside of the home country of the currency, then the euro represents 31% of outstanding bonds compared to 44% for the dollar[10]. The broader definition includes all issuance directed at the international market, including in the domestic currency. Here the euro has gained ground quickly and has now overtaken the dollar with 47% versus 36% respectively (see chart 8).

Dollar still more popular with investors . . . for now

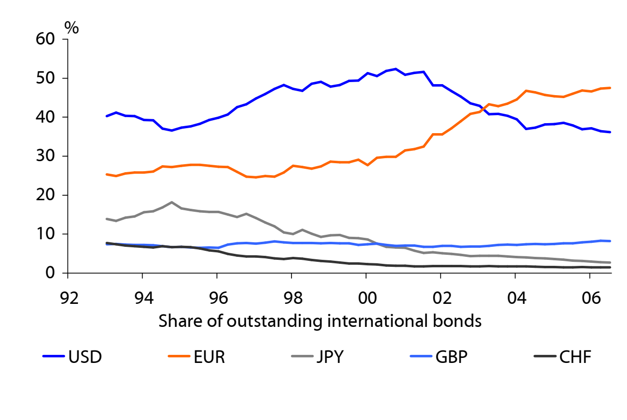
Looking beyond international bonds, however, the position of the euro is weaker. If we examine total holdings of debt securities internationally we notice that the euro is at a clear disadvantage in most countries (see chart 9). Only in some, mostly European, countries does the euro perform relatively well. The euro's overall position (see "weighted average" in chart 9) is strengthened by the fact that the relatively wealthy countries on the list hold more euros than the poorer countries.

The stronger position of the dollar, particularly in developing countries, is probably partly a reflection of the dollar as a parallel currency. Its use as an anchor for exchange rate pegs may also play a role, because this reduces the exchange rate risk for those from these countries investing in dollars. As we discuss below, the euro is likely to make progress as an anchor currency in basket pegs, which may also make it more attractive as a store of value in these countries.

Naturally return is also an important consideration for investors. In the long term the demographic slowdown of the euro-zone economy will probably limit growth and hence the return on capital. Although Europe has some potential to increase its growth rate through structural reforms and possibly immigration, it seems fair to say that the US will probably have the advantage. On the other hand the large US current account deficit and potential weakness of the dollar could be seen as equally important disadvantages.

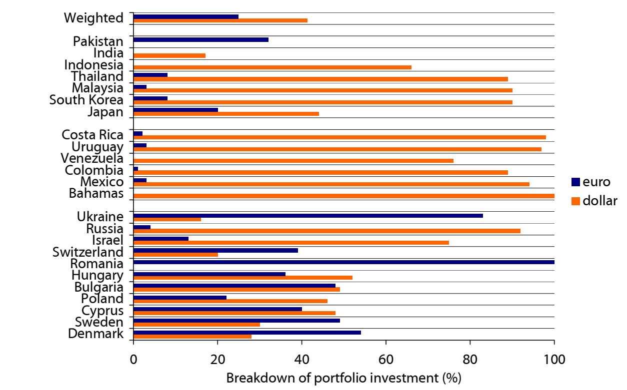
The euro has brought with it large financial markets that approach those of the US in terms of liquidity. This suggests that investors should start to hold a larger part of their portfolios in euros, simply due to diversification. *The euro's share of international investment may still lag that of the dollar, but it should be able to close a large part of the gap.*

Chart 8: Euro first in international bonds



Source: BIS

Chart 9: Investors still prefer the dollar



Source: ECB (2007)

Euro's use as parallel currency to grow slowly

International currencies not only play a role in trade and financial markets but can also be used within countries, parallel to the domestic currency. This typically happens when the local currency suffers from high inflation, so that the parallel currency becomes a better store of value. Additionally the currency could "creep" into use if there is a high intensity of transactions with a country using the international currency.

The US Treasury Department has detailed estimates of the value of cash held by foreigners. At the end of 2005 around $450 bn worth of banknotes were thought to be in circulation, no less than 60% of the total outstanding.

The ECB has a more difficult time making similar estimations because of the short history of the currency, but it is expected to be at least €60 bn and probably closer to €100 bn, roughly 10-15% of the total outstanding[11]. Although it is difficult to estimate where these bills are being used, most evidence points to countries close to the euro-zone[12].

Another way to measure the prevalence of the euro as a parallel currency is to look at local bank assets and liabilities denominated in euros. Here the euro's position is stronger than in banknotes with it representing almost 30% for both assets and liabilities while the dollar is just under half (see chart 10). Furthermore, the euro has made some gains over the last few years.

The euro represents a viable alternative to the dollar as a parallel currency. Particularly in Eastern Europe, as EMU-entry approaches, and in other countries nearby the euro-zone, the use of the euro may grow. Parallel currencies may not be a growth market, however. With lower inflation thanks to improved monetary policy in emerging economies the need to resort to parallel currencies may have diminished. Indeed, the growth of foreign denominated bank holdings has lagged global growth. *Parallel currencies may become less important in general and this will make it difficult for the euro to increase its role in this regard.*

Baskets pegs offer opportunities for the euro

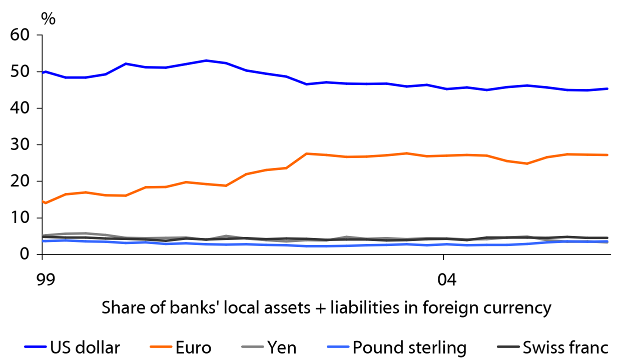
The dollar is the currency most used as an anchor, but the euro is not far behind. Furthermore, the euro's role is likely to increase as more countries opt for a peg to a basket of currencies.

Dollar and euro both popular anchor currencies

Exchange rate regimes of various sorts are common, usually inspired by trade and monetary policy considerations. Countries with strong trade flows in a particular currency can benefit from a peg that limits the risk and cost of foreign exchange transactions. A fixed exchange rate can also help to stabilise export competitiveness. Furthermore, by committing to a target rate the central bank is latching onto the, hopefully superior, monetary policy of another country, and thus importing lower inflation. Due to these considerations small open economies and developing countries tend to have fixed or managed exchange rate regimes.

The dollar is the most popular currency to link to. Important reasons for this are its dominant role in commodity trading and the position of the US as the world's largest importer. US monetary policy has also been effective in keeping inflation low, also making it a

Chart 10: Foreign banks using more euros locally



Source: ECB (2007)

Table 1: Exchange rate regimes involving the euro

European Union	
ERM II	Denmark, Estonia, Latvia, Lithuania, Cyprus, Malta, Slovakia
Pegs to euro	Hungary, Bulgaria
Managed float	Czech Republic , Romania
Candidate countries	
Eurorisation	Montenegro
Pegs or managed float	Bosnia & Herzegovina, Croatia, Macedonia, Serbia
Others	
Eurorisation	Kosovo, European microstates, French territorial communities
Pegs to euro	French territories CFA Franc zone, Cape Verde, Comoros,
Pegs to basket	China, Israel, Seychelles,Russia, Botswana, Morocco, Tunisia, Vanuatu, Kuwait, Libya

Source: ECB (2007) + updates

good currency to anchor monetary policy on.

The euro also is a relatively popular currency to peg to (see table 1). Its strong trading position, particularly around Europe is one reason. Another reason is that the ECB has been at least as good as the Fed in maintaining price stability. Institutional factors also play a role. Pegging to the euro is a requirement for joining the EMU-zone. Furthermore, many of the countries that link to the euro are current or former colonies of euro-zone countries.

Weak dollar has encouraged basket pegs

Increasingly popular is pegging to a basket of currencies. China and Russia are notable adopters. The former has been opaque about the weights, but it is widely suspected that the dollar plays a dominant role. The euro represents almost half of the Russian currency basket, however.

Although pegging to a basket means surrendering the benefits of stable exchange rates in at least one currency, it does allow for more stability in competitiveness and imported inflation because the basket is typically a reflection of all trading partners. A basket can also take into account financial relationships, like foreign investment position, such as the one set up in May by Kuwait[13]. Basically a basket allows the country to diversify risks.

The euro has a good chance to increase its use as an anchor currency thanks to the trend of basket pegs. Its strong presence in global trade means it will have a place in practically any basket.

The trend of pegging to baskets has not only been inspired by a general desire to diversify risks, but also by the recent unsatisfactory experience with the dollar. The weakening trend of the US currency has translated into imported inflationary pressure and the swings in US interest rates have complicated monetary policy. It has also resulted in a massive build up of foreign reserves (see table 2) as countries linked to the dollar have had to issue their own currency and buy dollars to keep their own currencies from appreciating[14]. This also adds to inflationary risk because it implies growth in the monetary base. Apart from economically motivated frustrations, political motives may also play a role in the move away from the dollar. The US has become increasingly unpopular internationally and some countries may not want the dollar to play too prominent a role in their exchange rate regimes.

Further growth in the use of basket currencies appears likely, especially if the dollar continues to weaken and the US remains internationally unpopular. *The importance of the euro-zone in international trade insures a place for the euro in the growing number of basket pegs*.

Euro and dollar to split official reserves

The term "reserve currency" has taken on a broader meaning than simply that of the currency that central banks prefer to store value in. This is because the reserve composition of central banks is a reflection of the overall use of international currencies. There have been practical reasons for favouring the dollar. However, the importance of the euro in international trade, the increased use of basket pegs and the growing use of standard portfolio investment practices at central banks suggest a growing role for the euro that could come close to matching that of the dollar.

Practical considerations favour concentrating reserves

Central banks hold reserves for practical reasons. They need to be able to use these reserves in an emergency shortage of foreign currency. This means that the currencies used in a country's trade and in which its

Table 2: Reserves outstanding and measures of adequacy

	Reserves outstanding		Reserves / Imports		Reserves / broad money		Reserves / short-term debt	
	2000	2006	2000	2006	2000	2006	2000	2006
China	166	1066	9	16	10	24	8	13
Japan	347	875	11	18	6	15	2	2
Taiwan	107	266	9	16	19	34	8	8
Russia	24	295	6	20	44	77	2	5
Korea	96	238	7	9	29	38	2	2
Other Asia	325	647	6	7	27	30	2	2
Latin America	136	271	5	7	23	25	1	2
Middle East	75	178	9	8	25	30	2	2
Eastern Europe	69	181	5	4	39	36	2	1
Industrial economies	344	334	1	1	3	2	0	0

Source: BIS, 77th Annual Report (2007)

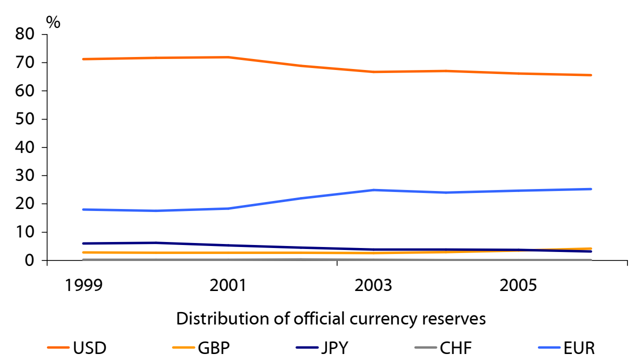
foreign debt is denominated will deserve a place in its reserves. More commonly, reserves will be needed to intervene in foreign exchange markets in order to manage the exchange rate regime. Clearly the currency or currencies (in the case of a basket) of the exchange rate link will represent a substantial portion of reserves. Additionally, for intervention purposes, it would be useful to have reserves in the currency which the foreign exchange market commonly uses. Finally, the liquidity of the assets in which reserves are stored is particularly important because this determines if large amounts can be quickly made available.

Apart from practical concerns, central banks also like their reserves to earn a decent return for a modest level of risk. The latter suggests managing reserves like any asset manager would, by weighing risk against return in a well diversified portfolio. So while practical matters may favour concentrating in one or a small set of currencies, normal portfolio management favours spreading reserves over more currencies.

The euro already the second reserve currency

One recent paper by economists at the ECB and London Business School calculates the optimal currency distribution of reserves for Brazil, Russia, India and China using standard portfolio theory[15]. They were able to match their optimal portfolio with the actual distributions only by first incorporating the practical matters discussed above. They confirm earlier research that indicates that the choice of anchor currency is the most important element in this regard. Second, they need to assume that the dollar is the reference or base currency to match its high share. Their results confirm the importance of the dollar, particularly as the unit of account in measuring reserve performance. Interestingly, however, the euro was used more in practice than the model would suggest, indicating that it has to some extent already taken on a role as a second global currency.

Chart 11: Euro second reserve currency



Source: IMF

IMF data on the composition of currency reserves show that the euro is indeed the undisputed second reserve currency and that it has been gaining ground (see chart 11). About two thirds of reserves are still held in dollars, however, compared to only a quarter for the euro. Unfortunately the IMF data don't have figures for China, which has amassed large reserves, most probably substantially in dollars.

Diversification and basket currencies to help the euro

Two trends, the growing use of basket currencies and the ascendancy of "normal" portfolio management, suggest that the position of the euro will improve. The rationale for more use of baskets and a corresponding growing role for the euro are discussed above. Considering the importance of the exchange regime for reserve composition it is clear that this should be reflected in a higher share of reserves for the euro.

The rapid increase in the size of reserves is an important factor in the second trend[16]. Central banks now have more than enough foreign money to meet their practical needs (see table 2). As a result the excess can be invested as a normal portfolio with more attention for diversification as a result. Consequently, some reserves will be moved from dollars to euros and other currencies.

A complicating factor is that diversifying reserves is not without market impact. Central banks trying to maintain a fixed exchange rate will have to take into account the indirect consequences of selling dollars, i.e. weakening the dollar whereas the central bank's goal may be to keep the dollar strong vs. the local currency. The resulting depreciation of the dollar also means undermining the value of the remainder of the central bank's dollar holdings. Should the market get a whiff of large reserve holders, particularly China, switching to euros, this could see a major decline in the value of the American currency. Large reserve holders will obviously be very careful and secretive in any diversifying they do. It is also no wonder that they are reticent to publish the composition of their reserves or even participate in the aforementioned IMF survey. Small reserve holders, on the other hand, will be more eager to switch to euros and thus potentially front run any pressure on the dollar caused by diversification by larger players.

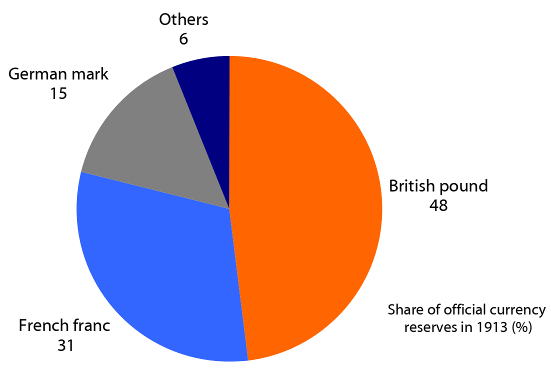
The tendency to diversify more into euros must also be weighed against the potential return of euro assets. Here the discussion about the disadvantage of European demographics versus the potential weakness of the dollar mentioned above in the section on the euro's role in the asset markets, is also relevant.

More important to central banks, however, are liquidity and creditworthiness. The euro can offer large and liquid financial markets, particularly in deposits, government bonds and products with high creditworthiness such as asset backed securities. The euro-zone's deposit markets are larger than that of the US. So are the euro-zone's government bonds markets, but the average rating is slightly lower (AA+ vs. AAA) and the market is more fragmented. The euro-zone's main weakness is its less developed asset-backed markets. Nevertheless, the euro-zone's financial markets approach those of the US in terms of liquidity and thus this should not stand in the way of diversification of central bank reserves[17].

The euro should gain at the expense of the dollar a more prominent role as a reserve currency. The euro-zone's larger share of world trade and corresponding importance in future basket exchange rate regimes alone suggest the euro can eventually overtake the dollar. The strong position of the dollar in markets where network effects favour concentration in a standard currency, namely commodities and foreign exchange, is the main reason why the dollar will, neverthless, be difficult to displace. As mentioned above in the section on the trade role of the euro, the common currency would probably not be able to displace the dollar in such markets unless one (or both) of two things happens. The euro-zone could expand significantly, particularly with the addition of the UK. Alternatively, the dollar could continue to weaken and suffer from worries about its persistent current account deficit.[18]

Assuming the scenarios above do not take place, the euro will still be able to approach the dollar in importance as a reserve currency, even if it probably won't overtake it. The common perception that there can only be one global currency to rule them all isn't borne out by history[19]. At the beginning of the twentieth century the British pound shared its place with the French Franc and the German Mark (see chart 12). *Even without dominating the dollar in the standardised markets the euro should be able to claim a major place next to the dollar with a share of reserves that comes close (perhaps 35% - 45% for the euro and 45%-55% for the dollar) over the next ten to twenty years*.

Chart 12: Fragmented reserves early last century



Source: Rabobank Research, Reuters

Conclusions

This background paper examines the international role of the euro across several dimensions.

Trade: euro should make gains as an invoice currency

The euro is already commonly used in pricing trade around Europe. The euro-zone is the largest trading block in the world, suggesting a greater role for the euro in trade for other parts of the world as well. Indeed, a trend in this direction is evident in the data. Commodities, however, will probably continue to be priced in dollars due to strong network effects, unless US economic policy seriously undermines the dollar.

Foreign exchange: dollar to remain FX hub

The dollar is the hub of the foreign exchange market. Because of the importance of pooling liquidity, this is unlikely to change except in European trade where currency pairs with the euro may become more popular.

Securities markets: more diversification to euros

The European financial markets have grown significantly and now approach those of the US in terms of liquidity. This makes it more likely that international investors will diversify more into euro assets.

Parallel currency: limited potential for the euro

The euro is used outside of the euro-zone as a parallel currency. Its use appears to be mostly regional, however. There are indications that the need to resort to parallel currencies is decreasing due to better monetary policy in emerging economies. The potential for the euro in this regard thus appears limited.

Anchor currency: baskets are opportunity for the euro

The dollar is more popular as an anchor currency, but the euro also has a significant number of currencies that are pegged to it. Pegging to a currency basket instead of just the dollar is becoming increasingly popular, in part because of recent weakness of the dollar. The euro's share of world trade guarantees it a place in these baskets.

Official reserves: euro to take a bigger slice of the pie

The euro is the world's second reserve currency, but lags far behind the dollar, even after making some gains since its inception. The increasingly popular practice of pegging to a basket of currencies, however, suggests more reserves will be held in euros. Furthermore, the massive increase in reserves means that central banks have an incentive to diversify their holdings, which will benefit the common currency. The euro should thus be able to match the dollar's share of reserves, or at least come close. This suggests a move over the next ten to twenty years to a split of 35%-45% for the euro and 45%-55% for the dollar. More will be difficult to achieve unless the euro-zone grows dramatically through the addition of the UK or the dollar weakens consistently.

Trade and diversification favour the euro

Unless the dollar falls into crisis, it is difficult to see the euro wrestling from the dollar its dominant position in commodity trading and the foreign exchange markets because here network effects dominate. Other areas will see the euro gaining ground, however. The strength of the euro-zone as a trading block indicates a stronger role for the euro in invoicing and as a prominent member in the growing number of basket pegs. The size and liquidity of euro-zone financial markets mean that a larger portion of investor holdings and central bank reserves will be diversified into euros.

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Endnotes

[1]This list of advantages and disadvantages is an adjusted version of the one presented in Chinn and Frankel (2005)
[2] Chinn and Frankel (2005) use this figure, referring to Cline.
[3] A prominent more ancient example is the Athenian "owl".
[4] Eichengreen (2005)
[5] Chinn and Frankel (2005)
[6] Golberg and Tille (2006) do empirical research on the invoicing practices of 24 countries, Kamps (2006) has a wider sample of 42 countries while Bacchetta and van Wincoop (2005) examine these issues in a theoretical model
[7] Unfortunately the next BIS survey will not be available until later in the year, so the latest data is from 2004. However, data from the Continuous Linked Settlement system, presented by ECB (2007), confirm that the current share of euro transactions is about the same as in 2004.
[8] Lyons and Moore (2005) demonstrate the importance of informational considerations in the structure of foreign exchange markets.
[9] Galati and Wooldridge (2006) compare the liquidity of the euro and dollar financial markets.
[10] ECB (2007)
[11] ECB (2007) and www.ECB.int
[12] ECB (2007)
[13] Daniels, Toumanoff and van der Ruhr (2001) employ a theoretical model to argue that a currency basket can only be optimal if it takes financial relationships into account.
[14] High commodity prices have also played a role.
[15] Papaionnou, Portes, Siourounis (2006) use a dynamic mean-variance optimization model.
[16] See the Bank of International Settlements 77th annual report (2007) for a discussion of the trends in "Reserve accumulation and reserve management practices."
[17] Analysis in this paragraph largely based on research presented in Galati and Wooldridge (2006).
[18] Chinn and Frankel (2005) use an empirical model to calculate that if these conditions are met the euro could overtake the dollars share of reserves after 2020.
[19] Eichengreen (2005) examines the decline of the pound in detail and concludes that there is no reason why the dollar should not share its position as global currency as the pound did in the early twentieth century.