WILL THE EURO OVERTAKE THE DOLLAR AS DOMINANT CURRENCY?

Guillermo de la Dehesa
Chairman of the CEPR: Centre for Economic Policy Research.
Chairman of the OBCE: Spanish ECB Watcher.

SUMMARY

Very few currencies have been able to become leading or dominant international currencies in world’s history.

Those currencies which have been able to become leading international currencies tend to become monopolist due to the centripetal forces derived from the existence of economies of scale, economies of scope and network externalities in their use.

But these centripetal forces tend to be counterbalanced by the opposing centrifugal forces derived from the need by investors to diversify their holdings of assets through negative correlation of major currencies, so that the leading currency is always followed by a second competitive currency.

The share of the euro in the international markets is, on average, still much smaller than that of the dollar, with minor exceptions. But the rate of growth of its share is high enough to may be able to displace the dollar in a few decades.

The euro share in world financial markets could receive a major boost if the UK would adopt the euro as its currency, given that London is a leading financial market in the world both in euros and in dollars. In any case, the Euro Area is expanding every year with new members and potential candidates that will join in the future which is not the case with the dollar.

In the medium term, the high risks of inflation in the US can accelerate the diversification away from the dollar and into the euro by central banks and sovereign wealth funds.

Nevertheless, the Euro Area is still a very fragmented banking and capital market which makes it more difficult to exploit the economies of scale, of scope and the network externalities in full

Finally, the fact that the EU and the Euro Area are only a union of national states and not a federal state will make it much more difficult to overtake the dollar and maintain a dominant international role.
Lessons to be learned from historical evidence

Historical empirical evidence has shown that very few currencies have been able to become dominant in world’s history. The Dutch guilder was the dominant currency during the XVII and XVIII centuries even when Spain and France were the dominant political and military powers and only after the First Industrial Revolution the English pound was able to displace the guilder as the dominant currency. The pound was able to keep this hegemonic position during the “gold standard” until the Second World War, although the US had overtaken Great Britain in terms of total GDP at the end of the XIX century, had achieved a higher volume of trade after the First World War and the dollar was the only currency convertible into gold at a fixed price in the twenties. The US dollar took the leading position just after the Second World War until today. There are a few important lessons to be learned from this historical experience:

The first lesson is that the displacement of the dominant currency by the challenging one takes a long time to materialize. Usually, the incumbent currency tends to coexist with the challenging currency for many decades before it is displaced to second place. The guilder and the pound did so for almost a century before the second overtook the first and the pound and the dollar coexisted as the two major currencies for more than five decades before the dollar took the lead. The Deutsche mark and the yen have been coexisting with the dollar as secondary currencies for some decades as well until the creation of the euro ten years ago which has become the new challenger.

The second lesson is that only those countries that are more open and more active in the international trade of goods, services and capital and which have developed large trade and financial centres are able to get its own currency to a dominant position, independently of which country was the political and military power at that moment. Spain became the biggest military power in the world for more than a century, invading parts of France, Italy and the Low Countries and conquering large parts of America. But, at the same time, Holland was the largest trade and financial power, Amsterdam was the world’s financial centre and the guilder was the dominant currency. The US was the dominant military power many years before its currency became hegemonic, because England was still the dominant economic and financial power and London the world’s trade and financial centre.

The third lesson is that, although in every country the currency is used because it has the full guaranty of the State that issues it, in the international markets this guaranty is not a sufficient condition to make it of preferred use. Private economic agents are the ones that, in the last instance, decide which currency to use for their international transactions. There are a number of requisites that these agents demand for deciding which currency to use. The first one is that it is issued by a strong, open and competitive economy that takes itself a large share of the world’s trade and financial transactions. The second one is that the country that issues that currency has a very large and efficient financial system well developed and regulated, very deep and liquid that allows economic agents to finance their transactions at very competitive costs and at high speed. Large volumes and low transaction costs are the two key drivers for private economic agents to prefer a foreign currency to their own
national one and a different financial market than their own national one to transact.

The fourth lesson is that the same dominance of a currency in the world markets tends to create the necessary conditions for other currency or currencies to emerge as its competitors. In a world of multiple currencies and free multilateral trade, those agents that engage in international transactions between countries have the problem of coordinating the purchases and sales of the currencies they need. As the purchase of a currency by an agent is not easily compensated by the simultaneous sale of another currency by another agent, the financial intermediaries must make their clients wait or need to hold large inventories of different currencies. Nevertheless, when the volume of transactions in one currency is very large, the waiting time or the inventory volumes are very low, reducing the costs of the transaction. The larger the use of a currency the larger is its liquidity, the lower are its bid and ask spreads and the more attractive it becomes until it ends up in achieving a kind of natural monopoly.

That is, the currencies, which are able to reach a high level of international use, tend to become monopolists through the work of the centripetal forces derived from the work of economies of scale and agglomeration effects due to economies of scope and network externalities in currency markets. International currencies derived their value from their use by citizens and companies of other countries. Thus, there is a strong bias in favour of using increasingly the currency that it is being mostly used until now. Therefore, the value of a dominant currency depends more on its past performance that on its intrinsic value given that its value is based on its relative level of use. It works in a similar way to international languages which also show large network externalities. Today, the dominant language in the world is English, not because it is intrinsically superior to others, but because it is the most used as a second language and the more it is used, the more tends to be used by others. One person that speaks English as a second language tends to interact with a larger number of other people and to have access to more information and knowledge than others that do not. In the end, he or she improves their potential more than with other languages.

However, fortunately for other leading currencies, it becomes increasingly difficult for the dominant currency to maintain such a monopoly position since these centripetal forces are increasingly counterbalanced by the opposing centrifugal forces that emerge as a consequence of the portfolio diversification of financial assets, which tend to reduce the risk of the concentration by investors on one single currency by diversifying their allocations into other currencies. These centrifugal forces are very powerful given that currencies offer much larger diversification opportunities than any other financial instrument such as fixed income or equities. The average price of all currencies, by definition, does not show any trend and therefore diversifying tends to reduce the covariance and the risk of a portfolio.

This diversification outcome is even stronger between the two leading currencies today, given that when the euro goes up the dollar goes down and vice-versa. The more global are the financial markets the more fixed income securities and equities prices tend to evolve in the same direction given the increasing interconnection and contagion of the different financial markets, as it
has happened in the recent credit crisis. Therefore, currency diversification becomes increasingly necessary to reduce portfolio risk. This is a main reason why the euro is becoming a growing challenger to the dollar in a very short period of time, mainly in terms of the asset allocation by portfolio managers and the yen keeps being still a third choice, in spite of the dollar dominance.

Finally, for a currency to achieve a leading or dominant position it needs not only to be strong but also to have a very well proven record of stability. This is a very important distinction. Naturally, the optimum for a dominant currency is to achieve both features, but in reality this is not always the case, sometimes one currency can be very stable but loosing value versus another currency that is more volatile. However, in the long run, investors tend to prime stability versus temporary strength, because by definition they are, on average, risk averse. Importers and exporters of goods and services and long term savers and financial investors tend to give much more importance to the currency stability because the large majority of them are not short term speculators and do not want any exchange risk. Only the more opportunistic investors prime short-term value versus long-term stability.

The real proof for a dominant currency is when there is a large financial crisis and risk aversion is at its highest. Then, not always the true dominant currency is able to reach the status of “safe heaven”. In times of financial stress, volatility and risk aversion, investors tend, on the one hand, to unwind trades and return home and, on the other hand, to look for a safe heaven. If the country of issuance of the dominant currency is very large, then the homeward-bound effect makes its currency to appreciate versus other currencies in riskier times, but it does not mean that it has achieved the status of safe heaven, which results when a currency strengthens by attracting investors which had not a prior national attachment with that currency. This has been traditionally the case of the Swiss franc and, in some cases, gold or commodities have become safe heavens.

Relative weight of the euro as an international currency

The best way to measure the role of the euro as an international currency is through its relative presence in three international different markets: the international liability management market, the international asset management market and the foreign exchange market. The underlying concept, based on a portfolio balance framework, is that the international weight of a currency is determined by the balance between the demand for assets and the supply of liabilities, denominated in that currency.

1) In the international liability market, the supply of euro-denominated securities in the international markets shows a very large surge in its issuance since the introduction of the euro.

However, its relative weight in the fixed income markets is still far more important than in the equity markets. The reason for this asymmetry is the persistence of national, structural and institutional impediments to achieve a pan-European equity-trading framework. It is true that European equity markets
are increasingly pricing company stocks on the basis of pan-European economic factors, taking into account the industrial sector effects more than the pure national ones, but still the “home exchange bias” remains the rule for most European shares. As a consequence of this very slow process of integration of the European equity markets, the Euro Area equity markets remain smaller than the US and the UK counterparts, even taking into consideration the relative size of their economies. At the same time, trading activity is thinner and transaction costs are higher both in trading and post-trade settlement.

Therefore, it is taking more time than the expected to reach a relative size big enough to compete with the US market. At the end of 2006, the market capitalization of the US equity market was $13.9 trillion (39.2% of the world’s total and 112% of the US GDP) and that of the Euro Area (EA) one was only $5.3 trillion (18% of the world total and 53% of the EA GDP), while the UK alone reached $2.7 trillion (7.7% of the world total and 116% of the UK GDP). If the UK would join the Euro the Euro Area volume would jump up much closer to the US. Although the gap between the two has increased in absolute terms it has narrowed in relative terms, given that the rate of growth of the Euro Area equity market has been much faster, although coming from a much lower figure.

On the contrary, fixed income or debt securities markets have been much faster in realizing the greater potential gains of introducing a single currency. The elimination of the exchange rate risk and the convergence of the yield curves within the Euro Area have reduced the importance of economic factors that had previously led to the segmentation of the European bond markets. Therefore, borrowers can now tap on a very large and expanded investor base with a single issue making the euro an attractive alternative to the dollar as a currency of denomination for debt, and as a consequence, the bond issuance has soared. Euro Area borrowers, both public and private have accounted for most of the increase in issuance volumes, but the biggest shift has been the increasing share of the private sector borrowers.

The total stock of international debt securities outstanding can be measured in three different ways: First, measured in a “narrow” sense (that is, excluding home currency issuance) the euro denominated debt securities share of the total has been growing from 20% at the start of EMU in 1998 to 33.8% in mid 2005, but since then, it has decline to 31.4% at the end of 2006, out of a total of $7.9 trillion. By contrast, the dollar share of the total has been steadily decreasing from 49% at the start of EMU in 1998 to 41% in 2005, but it has increased again up to 44.1% at the end of 2006, out of a total of $18.4 trillion. Second, measured in “broad” terms (that is, including home country issuance) the relative percentages at the end of 2006 were 47% in euros and 36.3% in dollars. Third, measured in “global” terms (that is, including domestic issuance) the percentages are 27.8% in euros and 42.2% in dollars out of a total of $68 trillion.

Finally, in terms of annual flows, the net issue of global debt securities by currency, in 2006, was 55.0% in dollars and 22.0% in euros, out of a total of $1.75 trillion. In terms of short-term international debt securities, the net issuance was, in 2006, 36% in euros and 38% in dollars both declining 1 percentage point over 2005, given the rise of net issuance by emerging country currencies. In terms of long-term debt securities, the net issuance in 2006 was 28% in euros, losing 7 percentage points, and 48% in dollars, gaining 8
percentage points over 2005. The stock of outstanding bonds and notes by currency has shown, at the end of 2006, a total of $2.27 trillion in euros and $3.2 trillion in dollars. Financial institutions represented 67% of the total in euros and 50% of the total in dollars. By contrast, the sovereign and public share was 12% in the case of the euros and 29% in the case of the dollars.

Another interesting finding is that, by breaking the shares by region, the non Euro Area EU countries (UK, DK and Sweden) represent 42%, North America represents 22% and the offshore centers 11% of the total bond and notes outstanding denominated in euros, while the shares of the Euro Area, Non Euro Area EU countries and offshore centers in the total outstanding in dollars are, respectively, 24%, 18% and 20%.

The euro bond market is still far from reaching its full potential. There are several reasons for it: the legacy of its national origins still presents some obstacles for full integration and for further deepening; there is no central debt agency for government bonds and, hence, no co-ordination of the new issuance schedule; the lack of single benchmark yield curve in the euro bond market is symptomatic of these factors because no single borrower can provide the necessary volume and liquidity across the maturity spectrum in order to fulfill this role. While swaps have provided some proxy reference for a yield curve, it remains an imperfect one because of the less than perfect link between the swaps market, which is based on corporate issues and the futures market, which is based on government issues.

2) In the international asset management market, the currency diversification has notably increased. Investors inside the Euro Area have been keen buyers of foreign securities denominated in euros, especially bonds, but euro denominated assets have been less successful with non Euro Area based investors until 2005 but the trend has changed dramatically since then. Japanese asset managers have been much more attracted initially by euro denominated assets, but later, the fall of the relative value of the euro discouraged them. On the contrary, investors in the Euro Area have been large buyers of dollar denominated US securities. Although bonds have been the major instruments of non-European attraction, the surge in euro equities purchases by foreigners has been increasing.

The breakdown by currency of the funds under management in the US, Canada and in the non Euro Area European countries (UK, DK, Sweden, Switzerland, Norway, Monaco and Liechtenstein) has shown, at the end of 2006, a euro share of 0.7% in the first two countries and of 27.8% in the rest of Europe, while the US dollar share was of 97.1% in the first two and of 14.4% in the rest of Europe. It is very interesting to see that at the end of 1999, the euro share was only 0.2% in the first two countries and that the dollar share was 26.8% in the European non Euro Area, thus the euro has had an increase in both areas although in total it is still much lower than the dollar.

In other regions, the euro is dominant in non Euro Area EU countries where the average euro shares of total portfolios are around 50% with the exception of Poland (only 22%) and Romania (100%) and in Switzerland (39%). By contrast, the dollar is dominant in non Japan Asia, where its average share is more than 80%, with the exception of India (17%), in Japan, with 44% (versus
only 20% in euros) in Latin America, where it has an average share of 95%, and finally, in Russia, where its share is 92% (versus only 4% the euro one).

As for the share of the euro in the stock of outstanding international loan markets, at the end of 2006, the euro share of loans was 19.8%, down 1.5 percentage points from 2005, but the share of the euro in the loans made by Euro Area banks to non-bank borrowers outside the Euro Area was 36% of the total, mainly to non Euro Area Europe. By contrast the share of the euro in the loans made to Euro Area borrowers stood at 54% while that of the dollar was 28%. The share of the euro in the international deposit markets was, at the end of 2006, 21.6% of the total, down 3 percentage points from 2005. The largest share of deposits was held by residents in the UK (47% of the total), followed by residents in offshore financial centers (17%) and by US residents (9%). The dollar share of international deposits was more than 60%. The euro share of deposits held by OPEC countries is 18% versus a dollar share of 77%. In Russia, by contrast, the euro share is 40% and the dollar share 51%.

In the foreign exchange markets, at the end of 2006 and using the continuous linked settlement system, CSL, the euro share was just below 40% while the dollar share was just above 90%, being the sum of currency percentage shares 200% as both currencies involved in a settlement of foreign exchange trade are counted individually. According to the BIS, in 2007, the share of the euro in the total foreign exchange turnover, based on daily averages in April, has gone down from 37.2% in 2004 to 37.0% in 2007. The same has happened to the dollar, which has come down from 88.7 in 2004 to 86.3% in 2007, while other European, Asian and Latin American currencies have gone up in share.

The euro is also widely used in the invoicing and settlement of international trade in goods and services. Regarding extra-EU exports of goods by EU member states, the share of the euro, at the end of 2005, was 49.7% being the dollar share 44.0%, but in imports of goods, the dollar share was 55.7% and the euro share only 35.2%, given the larger weight of energy in the imports content. In the case of exports and imports of good and services by EU member countries not belonging to the Euro Area and candidate countries, the euro share is also remarkably high. Its average was, in 2005, above 62.5% in exports and 63% in imports.

3) The share of the euro in the total foreign currency reserves is not easy to know, given that around 46% of foreign exchange reserves held by developing and emerging countries cannot be allocated according to its currency composition and another 46% of the global reserve accumulation in the last three years is not known. The IMF Official Foreign Exchange Reserves (COFER) data remain the only official source. The latest data published by the IMF are those of 2007 and show that the euro share in developed countries has increased, since 2005, because of its appreciation versus the dollar during that two year period but it has not grow in the developing countries. In all, the euro share of foreign currency reserves was, at the end of 2007, 19% in the developed countries and 28% in the developing countries, while the US dollar share was 67% in developed countries and 60% in the developing countries.

Given that the latter have shown an increasingly larger share of total foreign currency reserves and today they account for 72% of the total, the euro
share has not improved much in the last few years. The 2005 shares were almost the same as in 2007 for developing countries and higher for the dollar in the case of developed countries with 73% of the total, so that it can be said that there has been a small change in the composition of international reserves of developed countries in favour of the euro. Globally and at current exchange rates and taking into account only the disclosed reserves, the euro share is close to 26% and the dollar share is around 65%. Just as a reminder, in 1998, the share of the present Euro Area currencies was the following: DM 12.2%, French Franc 1.4% Netherlands guilder 0.4% and ECU 5%, that is, 19% in total, so that means that the euro has gained 7 percentage points of share since then, mainly due to its exchange rate appreciation.

Nevertheless, by not knowing the currency composition of very large foreign currency reserve holdings, these shares are only partial and not as relevant as they were only five years ago. Of the total reserves, 50% are disclosed, 24% are not disclosed and another 26% are held by sovereign wealth funds (SWF) which are only estimated because they are not exactly known. It is also important to look at the euro share in central bank deposits held at BIS reporting banks, show that the euro is increasing its share getting close to 30% coming from only 22% in 2004, while the dollar has come down from 65% five years ago to only 57% at the end of 2006.

Finally, it is also important to show the euro share in the large banknotes holdings circulating outside the Euro Area and its comparison with that of the dollar, that is, the use of the euro as a “parallel currency” in third countries. According to the FED and the ECB calculations, the euro has overtaken the dollar after 2004 as a percentage of domestic GDP by going up from 5.6% in 2003 to more than 7% in 2006, while the dollar fell from 6% in 2003 to only 5.7% in 2006. The ratio of US dollar banknotes in circulation to euro banknotes in circulation has come down from 1.3 in 2003 to 1.0 in 2006 at PPP exchange rates and to 0.9, at current exchange rates. The main reason is that the denomination of the euro banknotes (200 and 500 euros) is much larger than that of the dollar ones (100 dollars). In any case, I think that, as Europeans, we should not be proud of the rapid and increasing use of large euro banknotes because they are mostly used for irregular or illegal activities, both in the Euro Area and abroad.

The Future of the Euro as an international currency

In the last few months, a few papers and articles have tried to prove that the euro will overtake the dollar rather soon. They look at the historical evidence of how the dollar slowly overtook the pound, between 1897 and 1945, find that the same may happen again between the euro and the dollar now, concluding that the first may overtake the second within the next two decades. According to them, the decline of the pound was part of a larger pattern whereby the UK lost its economic pre-eminence: colonies, military power and other trappings of international economy. And now they see the same happening to the US, which might now have embarked as well on a path of imperial over-reach, following the one experienced by the UK. On the one side, they see the euro as a more serious challenger to the dollar than any other
previous currency. On the other side, they see that, as it happened to the UK before, the US dollar is suffering now a 25 year history of trend depreciation of its currency.

Most papers take, as a measure of the international role of the euro, its increasing share in the total foreign exchange reserves held by central banks. Because they believe that similar considerations may apply to the other criteria of international currency status, such as trade invoicing, debt and equity, cash and deposits and foreign exchange transactions denomination. They have chosen foreign currency reserves because of their huge growth increase in recent years in emerging countries and of their need to diversify their large holdings by different currencies. Global foreign exchange reserves have gone up 160% since 2000, due mainly to global imbalances. Today, China has 3 times and Japan 2 times more reserves than those of the Euro Area, whose volume has already been matched by Russia.

Their argument is based, on the one side, on the expected fact that these foreign central banks cannot keep supporting the dollar indefinitely so that they will eventually diversify part of their huge dollar holdings into other alternative currencies. The recent monetary policy followed by the FED, in order to avoid a financial stability crisis is going to cause an increase in inflation that will make it difficult for all the foreign currencies pegged to the dollar to be able to maintain it. One way to keep it would be to peg to a basket of euros and dollars, another way would be to drop the peg altogether. On the other side, on the fact that these countries have now in the euro, for the first time in many years, a real and credible alternative to the dollar, given that it also complies with most of the exclusive characteristics of an international currency: stability, reliability and increasing network externalities. Moreover, the Euro Area total GDP is now similar to that of the US but growing faster due to new and future EU members finally adopting the euro and the UK adoption of the euro will give a huge bust to the Euro Area, given that it will bring London as the largest euro financial centre in the world.

There are two question marks in this argument. The first is that by diversifying away from the dollar they may provoke an appreciation of their own currencies which are pegged to it, but they think that the end result may not affect their currency on a trade-weighted basis but only on nominal terms. The second is that if they diversify by selling dollars and buying euros the may provoke a large fall in the dollar and a loss in value of their dollar denominated stock of reserves. Nevertheless, they see this issue inevitable since their decisions to sell tend to be individual and not collective and coordinated, so that it may be less negative for those central banks to follow the herd than to be the last one. The main reason is that the network externalities which have helped the dollar to become increasingly used by economic agents may turn now to favour the euro. Therefore, network externalities can turn from developing centripetal forces in favour of the dollar to developing centrifugal forces in favour to the euro.

To become the issuer of the leading and hegemonic international currency brings large benefits but also large responsibilities. The benefits tend to be exorbitant according to these two papers. First, the Euro Area will be able to increase its seignorage in a major way, because it can issue even more billions of large banknotes of 200 and 500 euros than it is issuing at present,
which equal an un-nominated perpetual debt which does not pay any interest. Second, the Euro Area will take over from the dollar its role of a banker of the world in the sense that it will be able accept short-term deposits at low interest rates in return for long-term investments at high average rates of return. That is, it will tend to achieve permanently higher returns on its foreign assets than the return paid for its liabilities, because foreigners are ready to accept lower returns on their euro investments. Third, as a consequence of all that, it will also achieve the privilege of being able to finance large current account deficits for long periods of time as the US has done for so many years.

The attached responsibilities of a dominant international currency are also important. The euro will have to keep being very stable for a long time. It will have to avoid inflation expectations, sometimes at the expense of the Euro Area rate of growth, in order to keep intact its hegemonic status as an international currency. As the recent US experience has shown, the consequences of higher inflation in the Euro Area could tend to be twice negative, since not only will it tend to depreciate the euro, making it difficult for other pegged countries to maintain their pegs, but because a depreciation of the euro will result in even higher inflation in the Euro Area. But symmetrically, if the ECB, in order to keep inflation expectations under control goes too far, it may produce financial crises in other countries or even provoke a deflation in the Euro Area and the rest of the world. Moreover, the Euro Area could not abuse its privileges of issuing the leading international currency or indulge in maintaining long term current account deficits, as the US has done, because it may result in the beginning of the end of the hegemonic status of the euro. Today the US is absorbing three quarters of all net international capital movements, what is an oxymoron for a leading international currency.

Another important responsibility of being a hegemonic international currency is that the Euro Area will need eventually to take as well from the US the role of the world’s political leader and the world’s military gendarme. Unfortunately this is going to be extremely difficult and uncertain because its political governance, based on 27 national governments achieving majority decisions, is totally at odds with a single federal government as that of the US.

I think that the present ECB policy of neutrality with regards to the international role of the euro is the right one. The ECB should try to make the euro the most stable currency by maintaining long-term price stability. That is a task hard enough for the ECB to make the euro attractive as an international currency. The reason is that the international role of the euro is the outcome of a market driven process and not the result of interference by central banks and political authorities. To try to impose to importers and/or exporters of major commodities, such as oil and gas to invoice in euros is going to be perceived by the markets as an intolerable interference by politicians. The private companies engaged in these activities know better than anybody which is the optimal (and workable) currency of use decision for them. So that and they would change the present situation only if they think that it is convenient for their efficiency, competitiveness and for their shareholders returns.

In the meantime, if the Euro Area economic authorities aim at achieving a hegemonic international status for the euro, they should mainly try concentrate on integrating their still segmented banking and capital markets to achieve a larger and more competitive size in order to be able to attract more
issuers and investors from the rest of the world and compete on equal terms with the US financial markets as it has been achieved in its money markets. Unfortunately, until now, the dominant political view in the Euro Area is still shortsighted and short-terminist derived from an old fashion and nationalistic view and understanding of the markets, completely incongruent with an increasingly globalized economy and it is retarding the surge of the euro as an international currency comparable to the weight of the GDP and the trade share of the Euro Area in the world.

In conclusion, I think that unless the Euro Area achieves a political governance system similar to a federal state, it will be very difficult for the euro to maintain a durable hegemonic status as the leading international currency, in the probable case that it is able to achieve that role in the next two decades, given that it is already being by far the best candidate to replace the dollar in that role and given that its rate of catching up with the dollar share in the major international markets is faster and faster every decade.

References


Chinn, Menzie and Frankel, Jeffrey (2005), “Will the Euro eventually Surpass the Dollar as Leading International Reserve Currency?” NBER Working paper 11510, July


