# DOLLARS VERSUS THE EURO: WILL DOLLAR BE THE DOMINANT CURRENCY IN TEN YEARS' TIME? 

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#### Abstract

The purpose of this article is to figure out which between the euro and the US dollar is more likely to be the dominant currency in ten years' time. There are a lot of criteria to take into consideration so as to answer this question. Leaning on relevant literature, we found three main reasons why the US dollar should remain the leading international currency. First, in asymmetrical shock situation, it seems that the American economy is better prepared to react than the Eurozone due to the mobility of the workforce from state to state and to the absence of diverging and specific individual interests present in the European Union. The on-going crisis in many EU nations is a result of the many economic differences in these nations. Second, the US economy is present in international business for a longer time compared to the euro which has been introduced in 1999. This longevity linked with a first-class reputation allows the USA to make more seignoriage benefits than the Eurozone does and to allow many developing countries to favor the US dollar utilization over their own currency. On the other hand, the euro cannot be used outside Europe. Third, by looking at both shares of reserve currencies, US dollar is still the unavoidable reserve currency and China as well as other big trading partners seems not likely to get rid of their USD dollars due to their own interests.

At the same time, we gathered two main arguments in favor of the euro. First, the US dollar current value compared to other international currencies shows that it is not as strong as it used to. We think that further US economy downfall in the future would lead to US dollar depreciation which in turn might lead to the US dollar to be gradually replaced by euros in foreign currency reserves and also as a trading currency (although at present time that is almost seems impossible). Second, although the current crisis is not handled well by the European Central Bank (ECB), but given its severity, we believe that they will find a solution (even it is means that some nations may need to exit Euro in the short run). Hence in the long run, there is hope the Euro will play an important role as an international currency.

Taking all these arguments into account, we think that the US dollar should remain a strong international currency but at the same time, the euro, which is taking advantage of a gradual decrease in the confidence of the US dollar should be more and more challenging this position. But in ten years' time, we think that the US dollar will still be the dominant player in


the global market with Euro is a distant second. The on-going crisis in Europe will not let Euro to play the dominant role in the near future.

## INTRODUCTION

In the current tougher business environment, international trade is getting more and more present and therefore important, due to a fast growing globalization. The use of international currencies has become unavoidable and this, for many purposes, ranging from hedging to transaction costs.

This paper will focus on two currencies, the euro and the US dollar and try to figure out whether one of those will be the dominant currency in ten years' time. To do so, we will first look at both currencies' past information and explain their most important characteristics. Secondly, we will compare these two currencies, leaning on recent relevant articles, explain their advantages and drawbacks and imagine a couple of scenarios which might take place in the following years. Finally, we will try to make a prevision about the role of both currencies in the future world of international trade.

## LITERATURE REVIEW

After the euro zone creation in 1999, the role of central banks, the advantages and drawbacks of a single currency systems and comparisons between the US and the European case have interested many researchers. Alesina and Barro (2001) explained the dollarization phenomenon and highlighted that the current globalization is the main reason why multi-country currency unions are and will become more and more important in the future international economy. This article was followed by many interesting papers focusing on monetary unions, such as Salvatore (2002) who focused on the benefits and costs of the euro and compared the strengths and weaknesses of single currency systems. He highlighted the crucial function of the ECB on the functioning of the euro monetary system. One year later, Cooper and Kempf (2003) leaned on a complex quantitative model to identify that reduced transactions costs and lower inflation were that most relevant benefits from monetary unions. By solely comparing the currencies in terms of their role as reserve currencies, Chinn and Frankel (2005) said that the euro might increase its share of foreign reserve currency and eventually go beyond the share of the dollar as a reserve currency if the U.K. were to adopt the euro and if the depreciation trend of the dollar would last. Finally, Dominguez (2006) said that it is commonly agreed to say that the US economy can overpass important crisis due to the longevity of the US dollar. However, the euro aptitude to go through an important crisis has still to be proved.

## EURO VERSUS DOLLAR

Most of the non-expert people believe that every country has its own currency. Historically, it was relatively correct. But nowadays, partly due to the explosion of the international trade, several strong monetary unions have emerged and the number of currencies is decreasing. Indeed, many countries use other country's currency as their official currency. This transition process from a local currency to a foreign country's currency has first taken place in US dollar and is therefore named dollarization. This term can also be applied to other currencies than the US dollar. We will assume in this paper that this term is applied to one country's utilization of another country's currency. According to Alesina and Barro (2001), globalization as well as the increasing number of independent countries explain why the world is not in a "one-country/one-currency model" anymore and has shift toward multi-country currency unions.

To refer to several dominant currencies being used by more than one country; the members of the EU use the euro, the members of the African Financial Community form the franc zone, seven Caribbean countries form the Eastern Caribbean Currency Area, the US dollar is also used by Panama as well as several other smaller countries and the British Pound is used in almost a dozen different countries. In this regard, why choosing euros and US dollars as candidates for the future dominant currency?

Among these currency unions, one currency has historically always been the dominant currency in international trading and is still considered as the dominant currency in the market place; the US dollar. Another has emerged about ten years ago and is a serious challenger; the euro. This is why the euro versus US dollar trade-off is currently very relevant. The question arising from the latter is which from the euro or the US dollar currencies is the more likely to be the future dominant currency in ten years' time.

The overall population of the Euro Zone has reached 500 million, which is significantly larger than the one of the US with about 305 million; while the American gross domestic product per capita is thereabouts one and a half times that of the European Union. United stated has 50 federal stated whereas the Euro Zone has recently expanded to 22 countries. Let's have a closer look at both zones under study.

The euro is the official currency of the European Union and it is the unique currency commonly used by sixteen countries which together represent the euro zone. Euros are also used by several other countries such as Kosovo or Montenegro in the eastern part of Europe even if it is not their official currency.

The first euros have been introduced and used in 1999. Since then, the Euro has become an important currency in international trade, being the second currency in the world in terms of transactions, behind the US dollar and the first currency in term of quantity of bills in circulation with 610 billion euros.

The Central Bank of Europe is the bank in charge of the euro currency. Its major mission is to maintain the prices within the euro zone stable and therefore to preserve the buying power
of the euro. Nevertheless, the real governance power comes from the Euro system at least until all European Union countries have introduced the euro. Indeed, the Euro system is a sub-set of the ECB which governs the policy decisions, such as monetary policy. And, because the Eurosystem applies only to the EU area countries, in reality, this is the Euro system which carries out the central bank functions for the euro area (www.ecb.int).

On the other hand, US dollar is the national currency of the United States. US dollars are also used as an official currency in nine territories such as El Salvador and the Marshall Islands. Created in 1913, the Federal Reserve System is the pivotal banking structure of the United States. Similarly to the ECB, the Federal Reserve's main purposes are to maintain the stability of the financial system, stabilize prices, chasten long run interest rates and guarantee the safety of the nation's banking. In other words, its most important task is to keep the economy healthy through the proper application of monetary policy.

It is also interesting to know that another independent entity, the United States Department of Treasury is responsible for printing and minting all dollar bills and coins. This is a unique characteristic in central banking systems around the world.

It should be noted that even though this paper focuses on the US dollar versus euro as a future dominant currency question. However, one should be aware that plenty of other currencies are used in financial markets and are strong reserve or investment currencies. They could therefore be the successor of the US Dollar as the world dominant currency in ten years' time. However, having looked at other strong economies, we think that Japan has too much volatility in term of the currency itself, India and China have not a good enough banking infrastructure and finally the Great British Pound, the Australian dollar and the Swiss franc cannot lean on a powerful enough economy to pretend to challenge the dollar as the leading international currency.

## ANALYSIS OF THE COMPARISON

Knowing the basics of both currencies and why we will exclusively keep focused on those, let's have a look at the reasons why these two currencies are so unavoidable in the international market by analyzing the two structures. We will first compare these two currencies and figure out whether some differences might be decisive factors towards the adoption of one or another currency.

As highlighted by Cooper and Kempf (2003), both the euro and the US dollar zones share commonly agreed advantages of having a common currency among several countries. First, the use of either the euro or the US dollar as a common currency eliminates the need to exchange currencies between the different countries that share the same currency. This obviously reduces the transaction costs in foreign commerce. Second, it is a mean to moderate the volatility among these countries because fluctuations which previously occurred between each currency no longer take place thanks to the unique currency. Indeed, only fluctuations between the common
currencies can be observed. Third, it reduces the cost of borrowing in other international financial markets. And finally, the unique central bank influence usually helps to sustain a lower inflation.

By looking at the most interesting problems found in the recent literature that may be caused by the presence of a unique currency in the Euro zone or in the US, we can notice several important distinctions between the American and the European case. We will use these reasons to assess the likelihood that the Euro will surpass the dollar as the international leading currency in ten years' time.

According to Salvatore (2002), a unique currency system is successful in the United States because if one of its states suffers from a shock that only hit this particular state, a rapid shift of the workforce would take place from this state toward other US states that would be able to provide better employment possibilities at that time. This is an automatic regulatory mechanism that is not available in Europe or at least not available to the same extent. Indeed, mostly due to the difference across borders in terms of language, immigration laws, and housing markets, the mobility of the labor factor is not optimal in Europe and slightly reduces this regulatory mechanism.

A second important difference might also be observed in an asymmetric shock situation. Indeed, if one single country within the Euro zone suffers from a shock while the others remain unaffected, this country will be very likely to care first about its own interests and to disregard the Euro zone policies. This might cause serious damages to the entire Euro zone situation. According to Dominguez (2006), it is very probable that a country suffering from an asymmetric shock would want to take care about its own interests, letting the ECB on the sidelines. Clearly, if the Slovakia was about to suffer from an important economic crisis, it would not have a significant impact on the euro economy taken as a whole. But one can imagine the effect of such a shock if Germany or France was this specific country, which is not an impossible scenario. In the United States, this kind of problem is very unlikely to happen as far as the fifty states belong to the same country.

Third, one obvious point to look at is the amount of each currency held in reserve by banks worldwide. According to Dominguez (2006) who exclusively focused on this aspect, the role of the euro as a reserve currency is still evolving and the euro may become the leading international reserve currency. But by looking at the second trimester official statistics on the currency composition of foreign currency reserves, even ten years after the introduction of the euro, we can see that the Euro represents $17.2 \%$ of the foreign reserves whereas the share of the US dollar represents $80 \%$ (https://www.imf.org/external/np/sta/cofer/eng/cofer.pdf). Looking at these data shows that the dollar clearly remains the most used currency for all the non-American central banks in term of reserve currency. The euro is still far behind and seems to be mostly used in Europe's bordering countries. In addition, according to Dominguez (2006), the part of the foreign exchange trading taking place in euros has not augmented if we compare it to the share of all the currencies that were used before EU taken as a whole. Regarding these
arguments, the US dollar should remain the unavoidable reserve currency in the marketplace for a while.

Finally, the number of years since the euro has been introduced compared to the ones spent by the US dollar is one of the most evident differences between the two currencies. The US dollar longevity, linked with its notoriety has in our view, three main impacts.

First, it clearly shows that the American system is able to go through important economic downturns. Speaking about the euro, Dominguez (2006) said three years ago that the true test of the power of the ECB and the durability of the euro still had to take place. The question was therefore to know whether the ECB would be successful as the US Federal Reserve to tranquilize and stabilize financial markets so as to preserve the euro zone economy if facing severe financial market instability. This question was unclear in recent times. In fact some may argue that ECB is not capable of handling periods of economic downturn, the euro zone structure and the ability of the ECB to calm down the market seems insufficient compared to the US. Or we can at least say that this ability is currently being tested by the tough conditions of the global economy. However, as far as the downturn was a global phenomenon, the euro zone is not the only economy that has been hit by the crisis, although the current crisis seems to suggest that the Euro zone is having a hard time calming down the global market.

As explained by Salvatore (2002), a second difference coming from the US dollar longer utilization is the difference of seigniorage benefits from the use of the unique currency as an international currency. Indeed, seigniorage which is the discount earned coming from the issuing of currency, the difference between the face value of national notes or metal coins and the cost of providing them, is a well-known advantage for the dollar but seems to be applied to the euro in a smallest proportion due to the difference between the two currencies in term of popularity. However, this difference is not quantitatively comparable due to the lack of statistics in this domain.

Finally, the fact that the US dollar is a strong international currency for a long time has led many countries, mostly developing countries to favor the US dollar utilization over their own currency. Whereas the euro can almost only be used within Europe, the US dollar has the good advantage to be usable around the world. Indeed, hundred dollar bills are especially appreciated and can even provide more advantageous exchange rates than the spot exchange rate.

## DISCUSSION

Having compared the main factors that can be analyzed from the past and the present situation in both currency systems, let's try to look in the future by looking at different scenarios which might take place in a few years' time.

In recent times there were many discussions about the current weakness of the US dollar against the currencies of the US trading partners, especially after the 2008 crisis. For example, on the October $22^{\text {nd }} 2009$, Robert Zoellick, the president of the World Bank points out that looking
forward; there will progressively be more other alternatives to the dollar. But it is also said that for now, there is no "attractive alternative" to dollar.

To assess the likelihood that the euro is actually this attractive alternative and will be the dominant currency in ten years' time, we will try to generalize a study conducted by Chinn and Frankel (2005), in which two interesting scenarios under which the euro could surpass the dollar as an international reserve currency have been identified. The question on which they focused in not exactly the same as the one we are trying to solve. Indeed, they exclusively looked at the two currencies use as reserve currencies. We can however use their work and more precisely the two scenarios that have been drawn in their research as starting points of our expectations of the future leading international currency.

The first scenario depends mostly on the United Kingdom. Indeed, according to Chinn and Frankel, the dollar as a reserve currency could be seriously endangered by the euro if the UK and enough other European countries join the euro zone so that the countries belonging to the Euro zone taken as a whole become larger than the American economy. Indeed, the British Pound is a strong international currency which could not be negligible and whose influence could significantly empower the Euro as an international currency. In our opinion, this interesting idea can be applied more broadly. Indeed, we think that as far as the UK have both a strong investment and reserve currency, it is very likely that the adoption of the Euro by the UK would empower the Euro as an international currency as a whole.

It is very hard to assess the likelihood that the UK will join the euro currency. This question was very relevant a couple of years ago when in 2003, Gordon Brown who was the Chancellor at that time, said that he was in favor of joining the currency "when it is in the UK's national interest" (http://news.bbc.co.uk/2/hi/business/ 2975790.stm ). He based his ideas on five economic criteria that should be fulfilled to join the Euro. However, six years later, in 2009, nothing has changed. Will the UK remain a monetary outlier, like Switzerland? According to some analysis, mostly due to the appreciation of the euro against US dollar, the UK should join the euro, (www.telegraph.co.uk/news/worldnews/europe/eu/5506385/Britain-will-obviously-join-euro). But given current crisis in EU, we believe that it is not likely to happen.

The second scenario under study depends on the confidence in the value of the US dollar. According to multiple sources, if the confidence in the value of the dollar falls, which might come from a plenty of causes, there is a flight to the euro as an alternative. And once again, this flight to the euro might not only be observed in term of reserve currency. Indeed, banks, individual investors and companies are all more likely to rely on a trustworthy and strong currency. Let's look at the dollar historic exchange rates to consider the idea of US dollar depreciation. Compared to the euro, the US dollar exchange rate has evolved. When the euro was introduced in 1999, one euro was worth one US dollar. After more than two years of depreciation against the dollar mostly due to the uncertainty about its policy, the euro has constantly been appreciating from 2002 until recently. The spot exchange rate is 1.49365 USD/EUR, the $13^{\text {th }}$ of November 2009. From the American perspective, we can therefore clearly see a depreciation of
the US dollar compared to the euro. But to look at it from another perspective, let's take an independent currency as an index. The Swiss Franc (CHF) is a strong international currency which is known to be stable and which can be used to see whether the depreciation of the dollar compared to the euro is due to the euro good performance or to the US dollar bad performance. For instance the CHF/EUR exchange rate was around 1.6 CHF/EUR in 1999 and is around 1.5 CHF/EUR today. Compare to the Swiss franc, we will note that there is a slight depreciation of the euro during this 10 year period. If we look the CHF/USD exchange rate during the same period, we can also see an appreciation of the Swiss franc but significantly higher than the appreciation of the Swiss franc against the euro. Indeed, in 1999 the CHF/USD exchange rate was around 1.6 CHF/USD. In late 2009, the two currencies tie with the CHF/USD spot rate of 1.01 CHF/USD.

Knowing that the US dollar depreciated compared to a stable international currency, what does this mean? Regarding the basic principles of economics and international trade, to have a weak currency compared to another has obviously two major effects. Indeed, on the one hand, it is an interesting opportunity for the exportation side of the balance of payment, and on the other hand, it prevents importations to occur because the price of foreign goods had become unaffordable due to the weakness of the currency compared to the foreign country. As Kevin Giddis, managing director of fixed income at Morgan Keegan said, the prices are sustained by foreign countries 'demand, that profit from the current low dollar exchange rate (http://money.cnn.com/2009/10/13/markets/bondcenter/bonds/index.htm).

Therefore, it seems that the USA has an incentive to keep a low dollar or at least not have a too strong dollar even if the level of trust from the investors might suffer from such an exchange rate.

The third scenario that we imagined precisely comes back to the reserve currency argumentation and is somewhat linked to the second scenario. Currencies can quickly and easily be exchanged. Therefore, a scenario which may happen in a more or less short term horizon is the following. If heavy holders of US dollars decide to do get rid of US dollars because they don't trust the US dollar anymore, or because they found a more interesting alternative, it will obviously weaken the US dollar value and may lead other heavy users to do the same. This could be the starting point of a vicious circle leading the US dollar to lose its international influence.

The most important user of US dollars as reserve currencies is China. Indeed, it is well known that China buys US dollars to support the dollar as far as the American are the Chinese most important trading partner with almost thirty percent of the Chinese exports going to the United States. If the US dollar would dramatically decrease, the price American citizen wouldn't have enough purchasing power to buy Chinese imported products or at least, the former unbeatable Chinese prices would not be unbeatable anymore. This would therefore considerably reduce the Chinese exportation. It seems therefore that the Chinese are not very likely to sell their US dollars for other currencies.

According to the Chinese Central Bank chief Zhou Xiaochuan, one should shift from global finance to a reliance on a new international reserve currency rather than the dollar or any other national unit. The purpose is to avoid the periodic crisis that have characterized recent decades. This is another interesting option that has not been taken into account in this article; a made-up currency.

## IMPLICATIONS AND LIMITATIONS

The purpose of this article is to figure out whether one or the other of the US dollar and the euro will be the dominant currency in ten years' time. But regarding the different scenarios discussed above, there are a lot of criteria to take into consideration so as to know which of the two currencies would be the future international leading currency. It is obviously not possible to precisely predict what will happen in the future. The second main limitation of this article is that most of its essence is based on the past literature. No study or model has been created. Third, we decided to stay apart from other important currencies which were therefore not included in the discussion.

However, this paper gives several indicators and hints about the likelihood that one or the other currency would be the dominant international currency in ten years' time. Indeed, we gathered much useful and interesting information which may help people to understand the future role of both the US dollar and the euro as international currencies. More precisely, this article gives a good idea of the reasons why monetary unions exist, and precisely why the ECB has been created. This article is also useful to be aware of the different scenarios that may take place in international markets in the following years.

The main differences between the European and the American case as well as the three scenarios under study could be used for further research to more accurately analyze each of these differences and assess quantitatively the likelihood of each scenario to effectively take place. A model which could take all these suggestions into consideration could be a good prediction of the future leading international currency.

## SUMMARY AND CONCLUSION

Regarding the different scenarios discussed above, there are a lot of criteria to take into consideration so as to know which of the two currencies will be the future international leading currency. Let's first sum-up the arguments developed in this article in favor of the USD as the leading currency to have a better understanding of the US dollar future likely role before doing the same in favor of the euro.

First, in asymmetrical shock situation, it seems that the American economy is better prepared to react due to two main factors. The mobility of the workforce from state to state allows the US to lean on an important automatic regulatory mechanism. And the 50 states are
united and should not care about their own interest first as European countries might do in an asymmetrical shock situation.

Second, the US economy is present in international business for plenty of years compared to the euro which has been introduced in 1999. This longevity linked with a good reputation allows the USA to make more seignoriage benefits than the Eurozone does and to have a currency that is used around the world, especially in developing countries.

Finally, by looking at both shares of reserve currencies, US dollar is still the unavoidable reserve currency and China as well as other big trading partners seem not likely to get rid of their USD dollars due to their own interests.

Let's look at the arguments in favor of the Euro as the leading currency. In our opinion, the appreciation of the euro against the USD is the first very good sign for the European economy and for the euro reputation, but recent crisis in EU seems to negate that argument somewhat. But once this crisis is over, and with further US dollar depreciation might lead the US dollar to be gradually replaced by euros in foreign currency reserves. A better reputation can also lead to higher seignoriage benefits for the ECB.

In addition, although the current crisis is not handled well by the ECB but given its severity of the problem, they seem to be doing their best. With their plans to change some policies in the EU treaty, they may be able to handle them better in the future, which is a good sign for the future of the euro as an international currency.

Finally, the adoption of the euro by the UK could strengthen the Euro as the international leading currency forevermore. This is not very likely to happen, but we can however not exclude this scenario.

Having balanced both the arguments for the USD and the ones for the euro, we think that the US dollar will remain as the future international leading currency. We believe that the US dollar should remain a strong international currency although the Euro will take advantage of a gradual decrease in the confidence of the US dollar in the long run. But this is not likely to happen in ten years' time.

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