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ECONOMIC AND MONETARY AFFAIRS

How to Avoid Currency Wars

NOTE

Abstract

The stability of the global economy is at risk because policy makers ignore cooperative solutions to the imbalances and tensions that have emerged with the integration of China into the world economy. The paper presents evidence that the Chinese yuan is not undervalued and that there is no evidence that the Fed will generate inflation by its QE2 program. However, there is an increased risk of financial bubbles being created in emerging economies

A strong appreciation of the yuan would destroy the world's most important growth pole, while the US economy needs more flexibility to adjust. The paper proposes a constructive role for the euro and recommends a shift in China's pegging policy to a basket mainly containing euros and yen and deeper monetary cooperation between Europe and Asia.

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AUTHOR

Stefan COLLIGNON
Professor, S. Anna School of Advanced Studies, Pisa
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RESPONSIBLE ADMINISTRATOR

Doris KOLASSA
Policy Department Economic and Scientific Policies
European Parliament
B-1047 Brussels
E-mail: poldep-economy-science@europarl.europa.eu

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ABOUT THE EDITOR

To contact the Policy Department or to subscribe to its monthly newsletter please write to: poldep-esc@europarl.europa.eu

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Contents

Introduction

Trade and currency wars are in the air**.** After the severe global financial crisis, governments started to coordinate their actions worldwide in the G20, but this cooperation seems to have run out of steam. They have stimulated the economy by pursuing very accommodating fiscal and monetary policies, including unconventional methods of quantitative easing. These policies have prevented the world from falling into a deep and prolonged economic recession. However, returning to satisfactory growth and reducing the high post-crisis levels of unemployment has become increasingly more difficult. In particular, economies with flexible labour markets like the United States, where the unemployment rate has more than doubled, find it difficult to reduce unemployment again. This has led to demands for trade protection from the US Congress, but in Europe similar voices can be heard. A number of measures have been discussed: a new version of the Plaza Accords focussing on fiscal and exchange rate policies, restriction on access to the US treasury market for surplus countries, exchange rate market intervention by the US.[1] So far government have abstained from these strong protectionist measures, but in view of the United States' economic problems and the political dissatisfaction expressed by the recent Congressional elections, the Federal Reserve System, backed by the Obama administration, has embarked on a new program of Quantitative Easing (called QE2). This policy will pump liquidity into the economy and hopefully stimulate effective demand and economic growth. Yet, it has been met by an outcry against the United States. It is seen as a hostile act by many emerging and industrialised economies. At the recent G20 meeting in Korea, the United States were confronted with massive criticism and some observers have spoken of a "G19 against 1" rather than a G20 meeting. The Brazilian Finance Minister has already warned that the world is drifting into a currency war.[2] Given these confrontations, the stability of the world economy is at risk because policy makers do not seek solutions that serve the interests of all parties.

The front against the United States is a surprising reversal of political alliances. For several years, China had been the main target of criticism by leaders of the most important economies of the world. Especially American and European policy makers have accused China of manipulating its currency and keeping it artificially "weak". By this they meant that the Chinese's currency was unreasonably competitive and undervalued and they have asked China frequently to revalue its currency. European policy makers like Commission President Jacques Barroso, Euro Group Chairman Jean-Claude Junker, and ECB President Jacques Trichet have supported the American demands for a revaluation of the yuan. However, in recent month, other countries like Japan, South Korea, Brazil and Taiwan have also tried to resist the appreciation of their currencies by intervening in the foreign exchange market. Because many emerging economies have pegged their currencies unilaterally to the US dollar, American authorities cannot directly change these exchange rates, and in this context *Quantitative Easing* is seen as an attempt to lower the value of the US dollar. Unrestrained non-cooperative behaviour by governments and monetary authorities could throw the world economy into economic chaos, which in many ways would resemble the monetary and economic disorder with competitive devaluations and beggar-your-neighbourhood policies that led to the rise of fascism and Hitler in the 1930s. Unless a new policy regime is found to stabilize monetary and currency relations amongst major economies, there is indeed a danger that competitive devaluations may further destabilise the global economy. Many observers believe that these risks are increased by the global imbalances in current accounts and reserve holdings, although the evidence is more complex than generally acknowledged.[3] I will argue that appreciating the Chinese yuan or abstaining from stimulating the US economy is no solution to the dilemmas of the global economy.

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[1] See Yiping Huang, *Is a currency war unavoidable? US monetary policy will fail to cut its huge current account deficits and will create bubbles in emerging economies.* China Daily, 19 November 2010, page 8.
[2] See: http://www.bbc.co.uk/news/business-11424864.
[3] For an in-depth analysis of global imbalances, see Collignon et alt. 2010.

The difficulties of the US economy are correlated with the emergence of China as a major player in the world economy. China's rapid growth follows a well-tested model, which has already successfully produced miracles for Europe and Japan in the 1950s and 1960s and in East Asia in the 1980s and 90s. It consists in pegging the exchange rate to the US dollar at a competitive rate. The peg has two advantages: first, it helps integrating an emerging economy into the world market, which is dominated by the US dollar as the world's reserve currency. Second, it minimises volatility, which lowers uncertainty about future returns for investors. A competitive fixed exchange rate peg encourages therefore investment and growth. China's peg to the USD has been key to its emergence as the world's largest growth pole, but it has also created the symbiotic relationship between China and the US, whereby Americans borrow from China in order to finance the cheap imports of consumer goods. Many observers believe that this imbalance is caused by the undervalued exchange rate between the Chinese yuan and the US dollar. The IMF (2010) has supported this view by declaring the Chinese Currency "significantly undervalued" without giving much evidence, however. More recently, US authorities have attributed the unequal recovery with "unbalanced growth and trade" to currency distortions and have argued that the situation is unsustainable.[4] These charges do not take into account the fact that China and Asia are the most important growth pole in the world and that it is the demand from Asia that has pulled industrialised countries back from the brink of lasting depression after 2008. Chinese authorities have rightly resisted demands for the appreciation of their currency, claiming that it is not overvalued. The opposing views between US/Europe and China have created a climate of stalemate and the FED's new program of QE2 can be seen as an attempt to stimulate the US economy when Americans cannot expect support from other G20 Member States, especially from China although European governments have not shown much willingness to cooperate with the Americans either.

Critics in Europe believe that QE2 amounts to printing money and will generate inflation, while emerging market economies, especially China, fear that the excess liquidity will appreciate their currencies and generate financial bubbles. If QE2 is the American answer to lack of monetary cooperation from China, the issue of Chinese exchange rate policy is crucial for the management of the world economy and the question of how to deal with China is of prime concern for the USA and Europe. However, the problem cannot be resolved by pushing China to adapt policies that destroy its growth model. If the world wants to avoid a currency war, it needs to find a cooperative solution that will restore balanced growth and reduce unemployment in developed and emerging economies.

This paper will first look at the facts about the Chinese exchange rate policies, then discuss the potential consequences of QE2 for the world economy, and conclude on policy suggestions that assign a constructive role to the Euro Area.

1. Is the Chinese yuan undervalued?

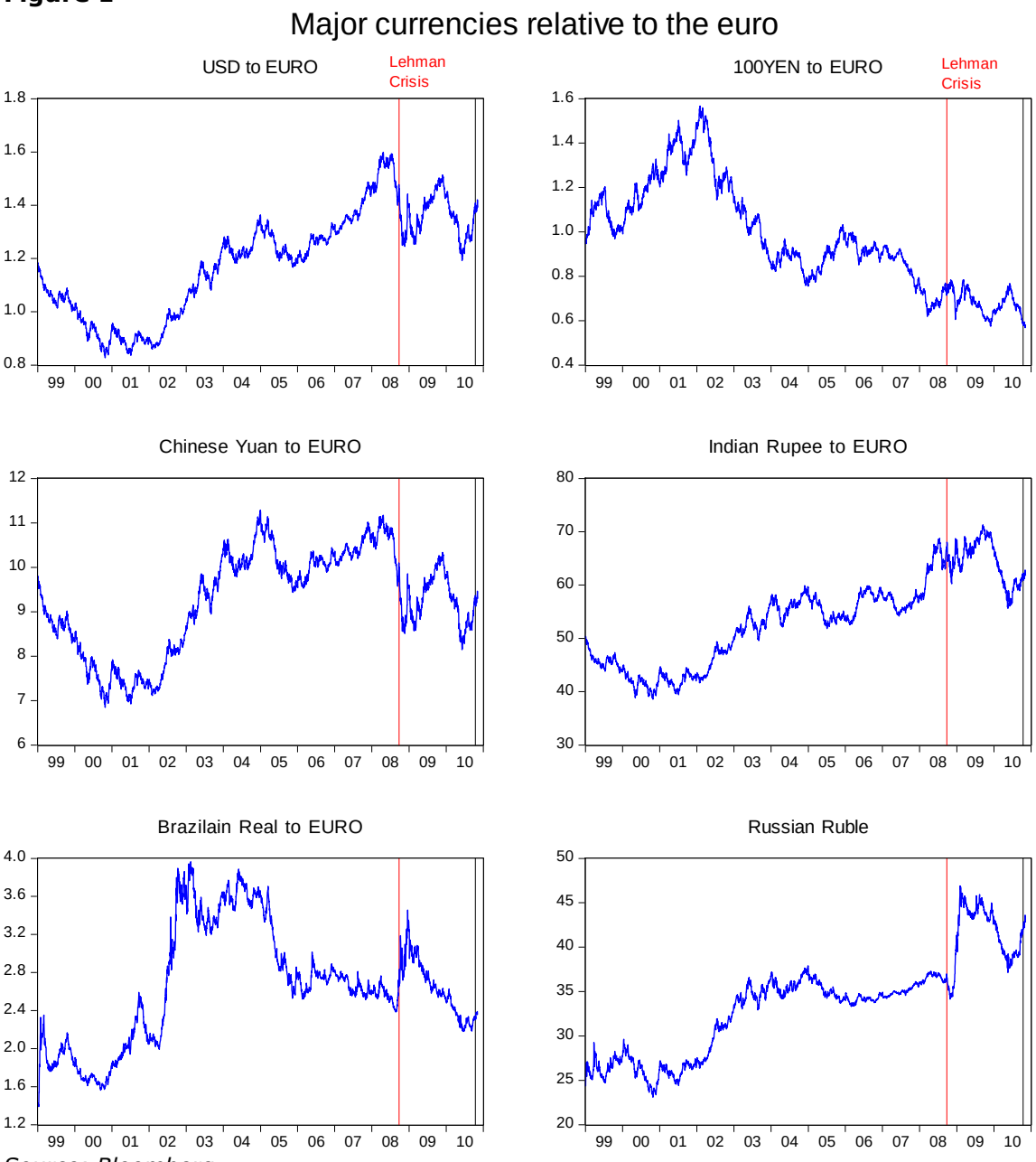
What does it mean that a currency is strong or weak or undervalued? There is a lot of confusion around these concepts. The weakness or strength of a currency describes the tendency of *change* in the exchange rate, under- or overvaluation its *level*. A currency is strong when it appreciates, weak when it depreciates. It is undervalued when the level of the exchange rate yields a comparative advantage relative to other economies. Thus, a currency can be strong and undervalued, like the Chinese yuan, or strong and overvalued like the Brazilian real. Or it can be overvalued and weak, as it is probably the case for the USD. We will now first look at nominal exchange rates and their movements, then at real exchange rates and finally at unit labour costs as a measure for the undervaluation of the Chinese currency.

Nominal exchange rates

[44] See the declarations by Ben Bernanke in Frankfurt. New York Times, 19. November 2010.

Figure 1 shows the *nominal exchange* rates relative to the euro for some of the largest economies in the world. A rise in the chart indicates that the euro becomes more expensive; hence the euro appreciates and the other currency depreciates. We notice that since 2002, the USD, the Indian Rupee and the Russian Rouble all had a clear tendency to depreciate relative to the euro, while the Chinese yuan was slightly more stable and the Japanese yen and the Brazilian real both appreciated. After the Lehman crisis in September 2008 (the first vertical line in the chart), the dollar and the Chinese yuan suddenly appreciated, while most other currencies lost in value. The Greek crisis in early 2010 did not seem to have caused a trend change in the long term development of the euro's external value (the second vertical line indicates 10 May 2010, when the European Financial Stability Facility was created). Given these long term trends and the responses to the Lehman crisis, there is little evidence that any country has "artificially weakened" its exchange rate. It is true, however, that most emerging countries have accumulated foreign exchange reserves and this indicates that they have resisted excessive appreciation of their currency (see Collignon et. alt. 2010).

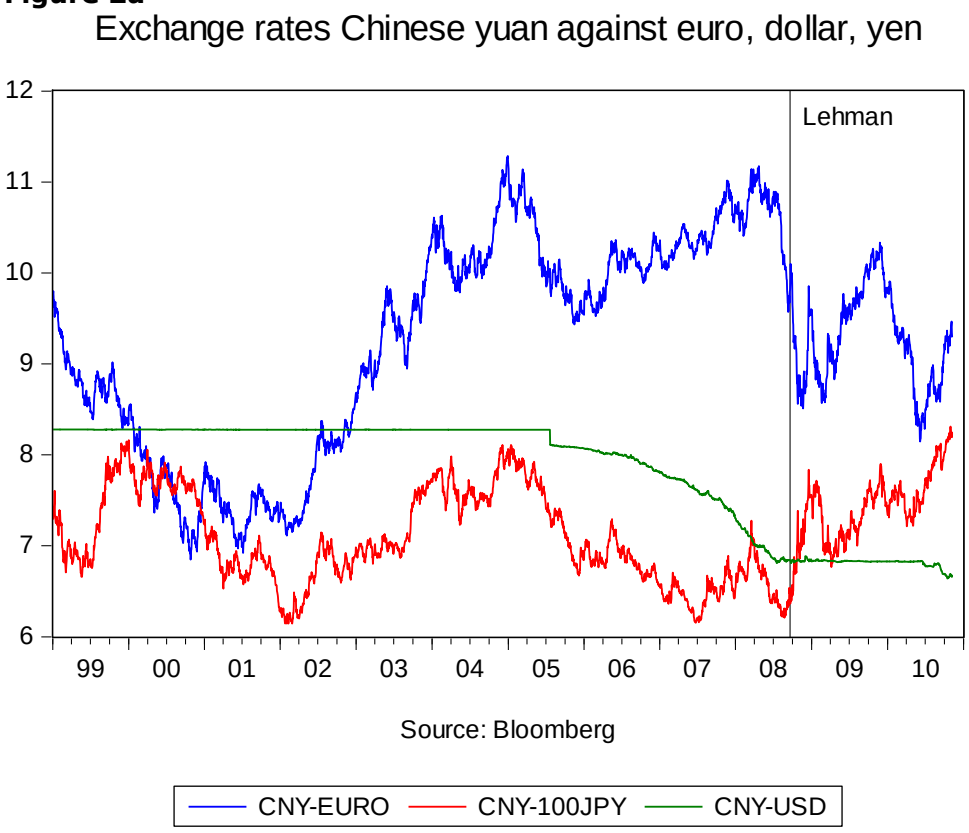
Figure 1



Source: Bloomberg

Figure 2a shows the nominal exchange rate of the Chinese yuan relative to the euro, the USD and Japanese yen.[5] The yuan was fixed to the USD from early 1995 until July 2007 and again after the collapse of Lehman in September 2008 until July 2010. Given Chinese peg to the dollar, the volatility and weakness of the Chinese currency relative to the euro and yen was essentially caused by the dollar-euro and dollar-yen exchange rates since 2000. The implication is, of course, that would China change its pegging policy, the volatility against the dollar would increase and if Chinese authorities targeted euro and yen, these exchange rates would become more stable.

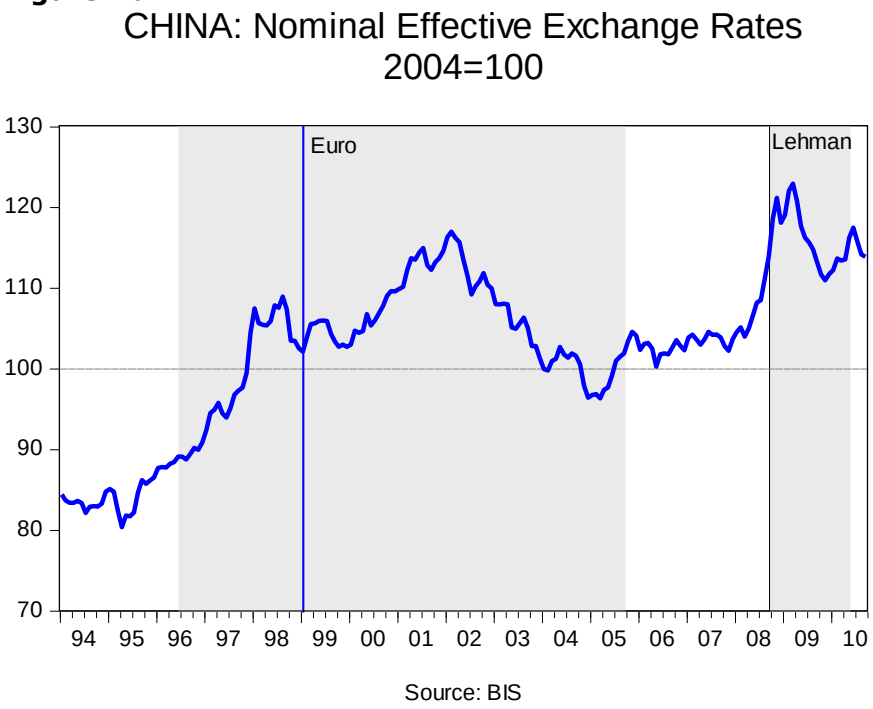
Figure 2a



If we look, however, at a basket of 58 economies See Figure 2b, the Chinese nominal effective exchange rate has had a long run tendency to appreciate. During the fixed dollar-peg the ups and down of the NEER reflect the movements of the USD against the Euro, first appreciating and then depreciating. This reflects the mirror correlation between the world's most important two currencies. Interestingly, during the years of the USD appreciation (September 2005 to September 2008), the effective exchange rate remained stable, which indicates that the Chinese authorities must have conducted their exchange rate policies with the objective of minimising the volatility between the two major currencies.

[5] For the Japanese yen, the rate is for 100 yen in order to keep the scales comparable.

Figure 2b

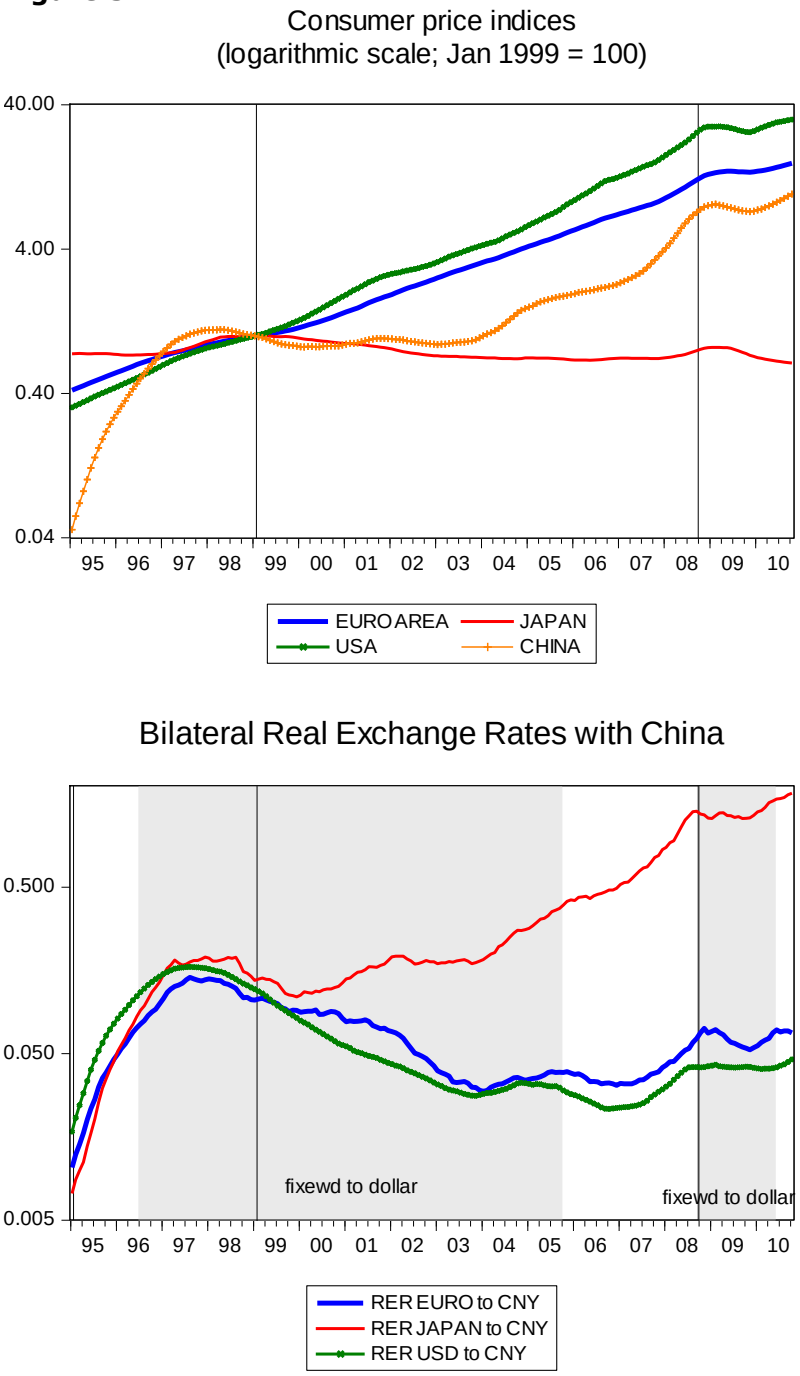


Real exchange rates

Next we will look at real exchange rates. The accusation that the Chinese currency is undervalued or even "manipulated" to give competitive advantages to the Chinese economy implies that there is an equilibrium exchange rate at which it would be neither over- nor under-valued. Defining such an equilibrium rate is notoriously difficult. Simple text book economics assume purchasing power parity (ppp) whereby a basket of goods in one country should have the same value if expressed in the currency of another country. However, it is well-known that purchasing power parity only applies to tradable goods and even then it maybe not fully applicable for economies with widely diverging levels of development. Calculating purchasing power parity for China is complicated by the fact that the Chinese economy is changing very rapidly in its fundamental structure. For this reason, it is difficult to estimate the *absolute levels* of purchasing power. Nevertheless, the calculation of real exchange rate indices can help to show the dynamic evolution of relative purchasing power. Because these calculations are using necessarily price indices, they cannot measure differences in competitiveness *levels*. Hence, these real exchange rate measures do not indicate whether a currency is under- or overvalued in absolute terms.

Figure 3 shows the bilateral real exchange rate between the Chinese yuan and the US dollar, the Euro and the Japanese yen. The first part of the figure shows the evolution of consumer price indices as a measure of accumulated inflation. They are indexed on January 1999, when European Monetary Union started. The logarithmic scale allows reading the steepness of the curves as indicators for inflation. It is clear that the price level in Japan has had a tendency not only to stagnate but even to fall, while inflation in the USA was higher than in Europe and China after 1999. China went through a period of high inflation in the 1990s, but then stabilized its price level until 2003, after which Chinese and American inflation rates seem to move in a fairly similar range. The Euro Area's price level stands between the low Chinese and Japanese and the higher American price levels. Hence, without changes in the exchange rates, America would have appreciated in real terms relative to the three other economies. Japan would have depreciated most, and Chinese price levels would have remained below the US and the Euro Area, but above Japan.

Figure 3

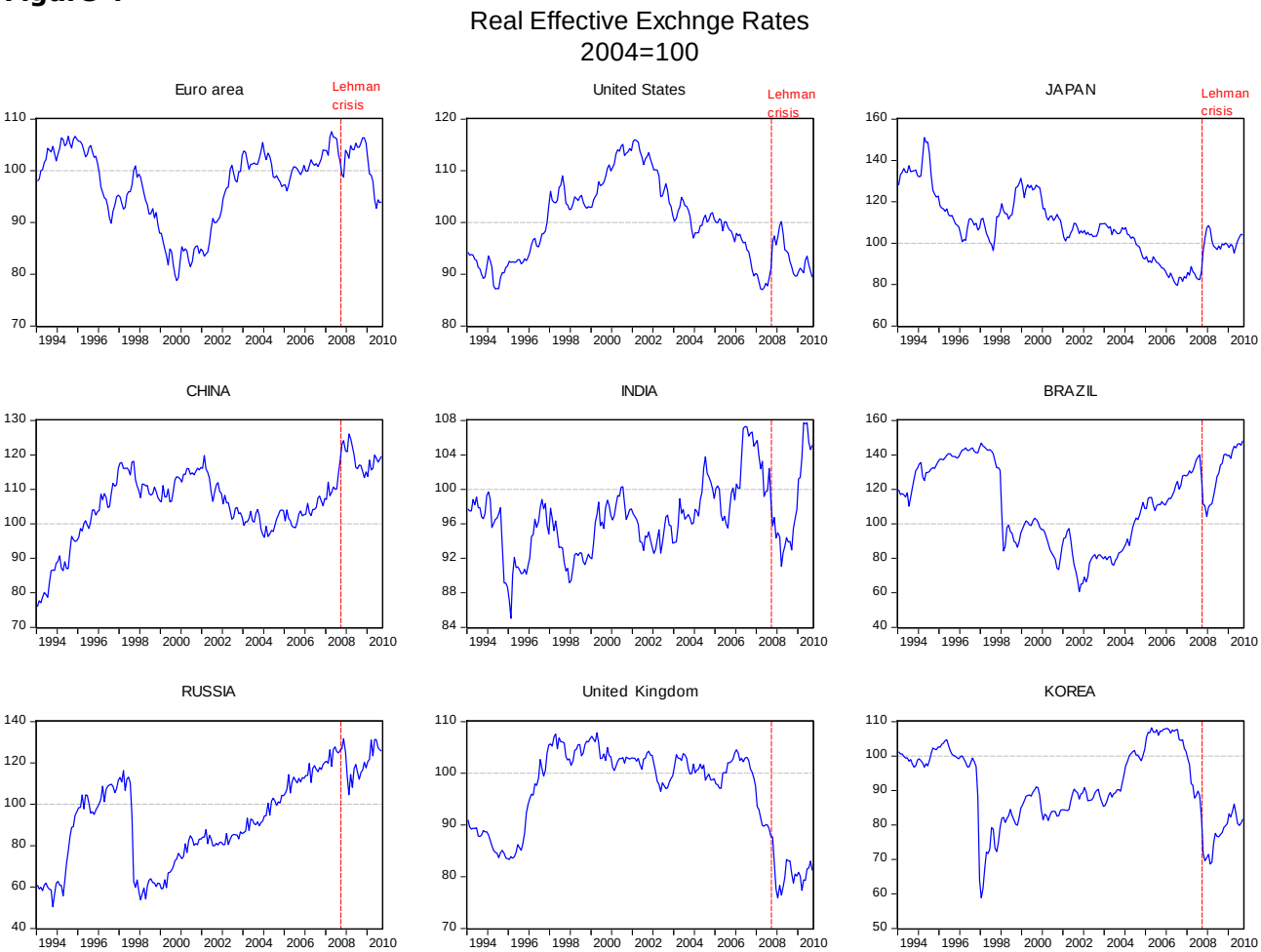


The second part of Figure 3 derives the *bilateral real exchange rates*, namely the relative price indices adjusted by the exchange rate. Between 2000 and 2008, China appreciated in real terms against Japan, but depreciated against the euro and dollar. Thereafter, during the crisis years 2008 and 2009 the real exchange rate was stable. However, the recent acceleration of Chinese inflation has now started to appreciate China's real exchange rate. Yet, the long run tendency of the Chinese currency to depreciate relative to the euro and the dollar is mainly due to the fact that over the last decade China kept its inflation low and that the nominal appreciation between the Chinese yuan and the European or American currencies has not compensated for the higher inflation rates in Europe and the United States. China's competitiveness has been the prize it won for price stability.

Figure 4 shows the *real effective exchange rates* relative to a basket of a country's 24 main trading partners as calculated by the BIS. The index is 100 for 2004. We find that from 2000 to 2008 the Euro Area, India, Russia, Brazil and Korea had a long run tendency to appreciate in real terms, while the US and Japan tended to depreciate relative to their main trade partners. The United Kingdom kept stable high levels of real exchange rates until the global financial crisis broke out. China depreciated from 2001 to 2004 and thereafter appreciated again. Hence, there is no evidence for "artificial weakening" of the currency.

The Global Financial Crisis had the effect of appreciating the US, Japan's, and China's currencies in real terms, later also the euro, mainly because of nominal exchange rate movements (see Figure 1). In all the other major economies, the real effective exchange rate depreciated, sometimes dramatically. However, after the initial shock, a tendency to appreciate has resumed in emerging economies during 2010, mainly due to capital inflows and nominal appreciations. Brazil, India and Russia are close to their highest real exchange level since the mid-1990. No wonder, they are concerned about other currencies depreciating.

Figure 4



Source: BIS

Unit labour cost levels

The real exchange movements discussed so far are based on price indices, which cannot measure differences in the levels of relative prices. Using them, it is therefore not possible to pass a judgement about the over- or undervaluation of a currency. A different approach to comparing competitive exchange rate *levels* uses unit labour costs (ULC). This has the advantage that one does not make assumptions about consumer behaviour in countries

with different development levels. Unit labour costs are an important indicator of competitiveness, as they represent the total cost of labour relative to output. Unit labour costs are determined by the amount of nominal wages relative to productivity. This means that a country with high productivity can have high nominal wages without having a competitive disadvantage relative to the labour costs of other countries with lower productivity, provided nominal wages reflect productivity levels correctly. Hence, countries with high productivity can have high nominal wages, but if productivity is low, wages levels must also be low.

The conditions of cost competitiveness *with respect to labour* would imply that unit labour costs across regions or countries are equal. I will call this level *parity*. It is then argued that an economy is undervalued when unit labour costs are lower than this one-to-one relationship. However, this is not correct. In a capitalist market economy, labour is hired by firms which combine labour with capital in order to maximize the return of capital. The equilibrium position in a perfectly competitive economy is therefore characterized by the equality of the returns on capital in different sectors and economies. The correct way of assessing whether a currency is undervalued must therefore consider whether the level of the exchange rates allows a particular economy to reap excess returns on capital over its competitors. In this case the undervaluation would attract capital inflows, which ultimately will compete away the excess returns until equilibrium is re-established. This is why these excess returns are sometimes called *quasi-rents* or *windfall profits*. The adjustment mechanism, which would eliminate these quasi-rents, may operate through high rates of investments, or through inflation or rapidly increasing wages as the labour market dries up. This concept of quasi-rents is the most meaningful way for establishing whether a currency is overvalued or not and I will use it to assess whether the Chinese currency is undervalued.

Calculating equilibrium exchange rates or equilibrium unit labour cost levels for China is seriously hampered by the reliability of data. The estimates presented here are based on China's Statistical Yearbook and have been discussed with Chinese scholars. They provide the best information we can obtain for the time being.

The problem with the Chinese economy is that it is in rapid transition from an underdeveloped rural economy to a modern industrial economy. There are large movements of labour from the rural to the urban economy, where wages and productivity are higher than in agriculture. However, the urban economy can only absorb this high labour supply by being able to produce competitive goods for the world market. Dooley, Folkerts-Landau and Garber (2007: 107) have modeled a transitory disequilibrium strategy for China, which imposes the critical constraint that once the periphery has caught up with the centre, the capital stock accumulated in the periphery should be capable of producing goods that are internationally competitive when combined with domestic labour paid at the world real wage rate. If this constraint is met, currency undervaluations by the periphery can be beneficial for the world economy, even if they generate temporary, although persistent, imbalances.

Statistics for labour compensation in China are distorted by the inclusion of operating surplus of farmers into total labour compensation and for this reason we will focus on the unit labour cost levels of the manufacturing sector, the non-agricultural sector and the secondary sector of the Chinese economy. We take them as a proxy for the assessment of exchange rate levels that would be compatible with the international economy.

Figure 5

Unit Labour Costs in China relative to Euro Area

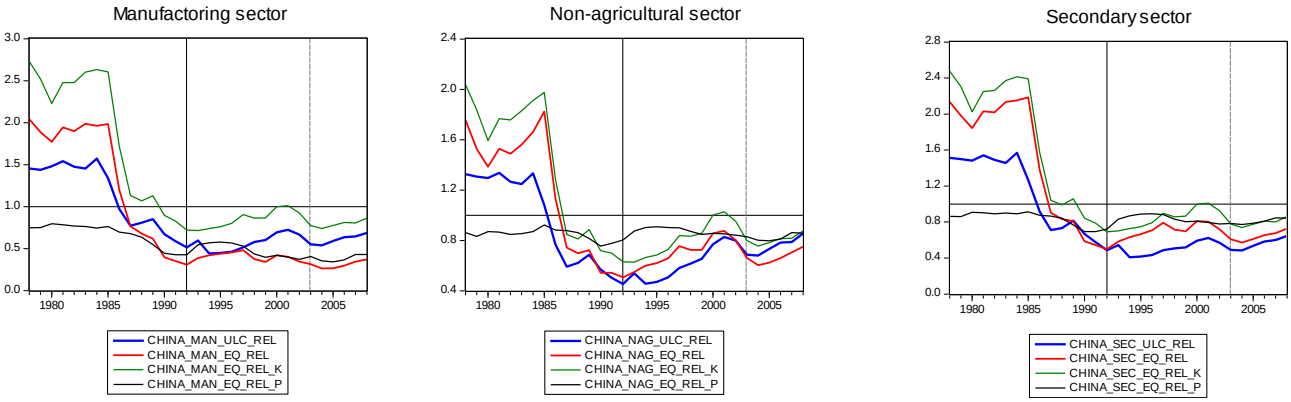


Figure 5 shows our calculations of the unit labour costs in China for the manufacturing sector, the non agricultural sector, and the secondary sector of the Chinese economy. Each graph contains five lines. The flat black line at the level of 1 indicates the *parity level* of unit labour costs between China and the European Union. At that level, labour compensation between China and the Euro Area per unit of output would be identical. The tick blue line indicates the *actual* evolution of Chinese unit labour cost relative to the Euro Area. The tick red line is the *equilibrium* exchange rate based on the assumption that the rates of return on capital between China and the Euro Area are identical. For analytic purposes we have calculated two more hypothetical equilibrium rates. The thin green line indicates what the equilibrium unit labour cost would have been had the Euro Area and China had the same level of *capital productivity*. The thin black line, finally, indicates the hypothetical unit labour cost equilibrium level, had China realised the same rate of *inflation* as measured by the GDP deflator the Euro Area. In other words, it measures the price and demand effect on profits.

The results for the post-1992 period are remarkable. All three graphs show a massive devaluation in 1986. However, this is a purely formal measure given that economic reforms in China in 1986 adjusted the totally unrealistic official exchange rate to the market driven shadow exchange rate. It is only from 1992 onwards that the unit labour cost levels and the exchange regime are truly comparable with industrialized economies like the Euro Area. From the late 1980 on, unit labour costs are clearly lower than in the European Union. Most remarkable is the fact that, regardless of the chosen indicator, equilibrium unit labour costs in China are between half or a quarter of parity with the Euro Area.

In the manufacturing sector unit labour costs are actually higher than the equilibrium level which indicates that the return on capital in the manufacturing sector is lower in China than in the Euro Area. Hence, quasi-rents are negative. This is mainly due to the fact that capital productivity is lower in China than in Europe, because the thin green line is higher than the blue line. This means that if Chinese productivity were at the same level as the EU, the equilibrium rate would be higher: in the early 2000s, it did already come close to parity. From this graph one has to conclude that Chinese unit labour costs in the manufacturing sector are overvalued. However, if we take the non-agricultural sector, which includes the secondary and tertiary sectors, or if we look at the secondary sector alone, the picture changes. In the non-agricultural sector, China has gone through an undervaluation period (positive quasi-rents) between 1992 and 2003, but after 2003 unit labour costs were higher than the equilibrium level. However, this is different in the secondary sector, where actual unit labour costs have always remained below the equilibrium level.

Assessing the overall picture of the three charts puts some doubts on the thesis that the Chinese currency is undervalued. It is overvalued in the manufacturing sector, undervalued in the secondary sector and not far from equilibrium in the non-agricultural sector, which is the most reasonable proxy for comparing the level of unit labour costs with the Euro Area. As a consequence, it is hardly justifiable to accuse China of unfair currency manipulations. The debate on China's exchange rate policies must be based on facts and not on prejudices.

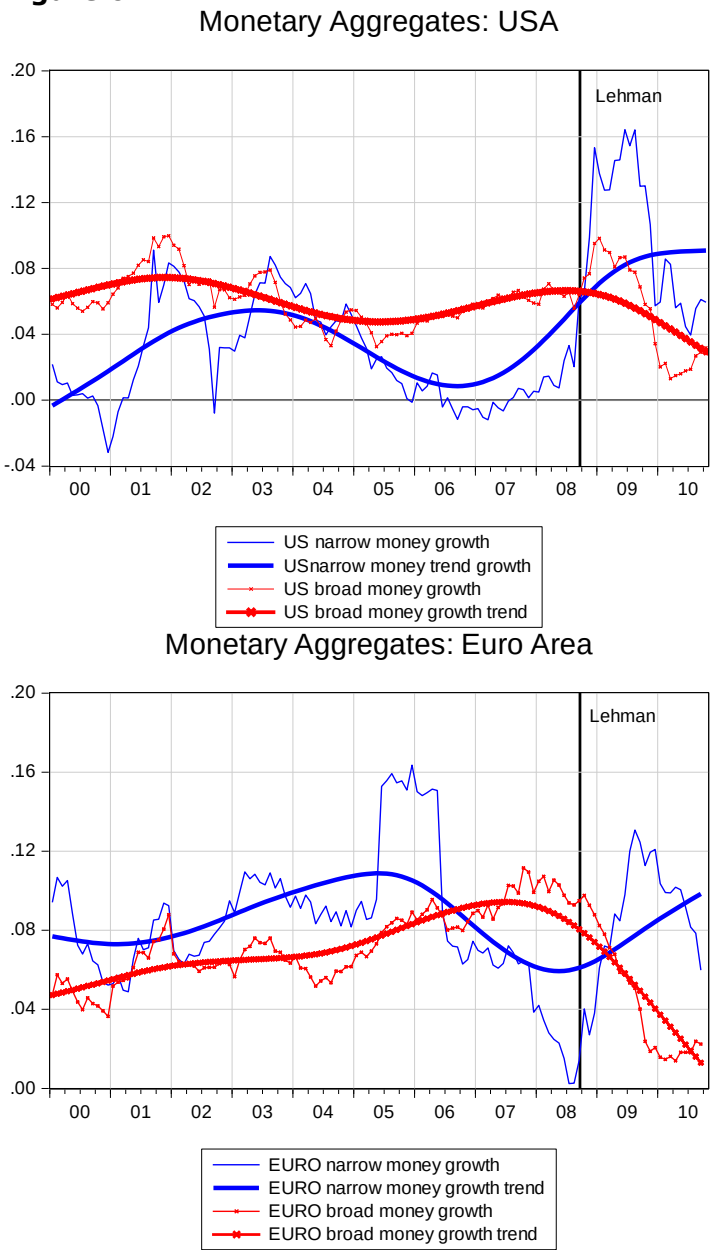
2. Monetary Easing in the United States

In the United States, the Federal Reserve System has embarked on a second program of monetary easing, also called QE2. This policy consists in large scale purchases of long term government bonds by the Federal Reserve System with the purpose of bringing down long term interest rates. Given that interest rates at the short end are already extremely low, it is hoped that lowering the long end would stimulate demand and investment and revive the real estate market, which has not yet recuperated from the disastrous effects of the Lehmann Brothers bankruptcy.

There may be a second channel through which monetary easing could stimulate economy. This effect is generated when the central bank buys governments' bonds. An influential school of economists has argued that under the strict assumption of so-called *Ricardian Equivalence,* governments cannot stimulate the economy by fiscal policies, because when they issue government bonds in order to finance the deficit, these bonds are bought by households, who will reduce their consumption and therefore increase savings by an equivalent amount. Ricardian Equivalence has been criticised by many economists on empirical grounds. However, from a theoretical point, the whole logic of the argument breaks down when the central bank buys government debt, because the government owns the central bank. In this case, the government effectively pays the debt service to itself, and this effect relieves consumers from the burden of having to foresee the future tax burden. This policy works because banks prefer to hold liquid cash rather than risky interest-bearing bonds. Of course, the policy is not limitless. When the creation of base money by a fiscal expansion exceeds the financial system's liquidity preference, quantitative easing will generate inflationary pressures, but certainly not before. Hence, monetary easing – which means the Fed buys government bonds - can have stimulating effects for the economy.

The announcement of QE2 has encountered a lot of criticism, not only in Europe but also in Asia. The European critique focuses on the potential inflationary dangers of excessive monetary creation. This argument is derived from monetary quantity theory, whereby the rate of money supply expansion in excess of the economy's growth potential will generate inflation in the long run. However, the experience of the last ten to fifteen years, if not longer, has shown that the old quantitative argument no longer applies. Money supply has increased by far more than what is ordinarily thought to be compatible with price stability. A good example is the European Central Bank's experience with the monetary reference value, which is derived from quantity theory. The target for broad money has been at 4.5% for nearly a decade, but before the financial crisis the broad money supply of M3 used to exceed this target continuously without pushing inflation up. Furthermore, during the financial crisis – 2008/2009 – narrow money, i.e. the money created by the Central Bank, has significantly increased in the Euro Area, while broad money, which is considered to be responsible for price developments, has remained stagnant. From a quantity theory point of view this should indicate price stability. Figure 6 shows the growth rates of broad and narrow money in the USA and in the Euro Area; the growth trend rate for narrow money is now much higher than the trend growth for broad money. This proves the high liquidity preference by banks in a highly uncertain environment, but it is far from clear that American quantitative easing will generate higher inflation in the USA.

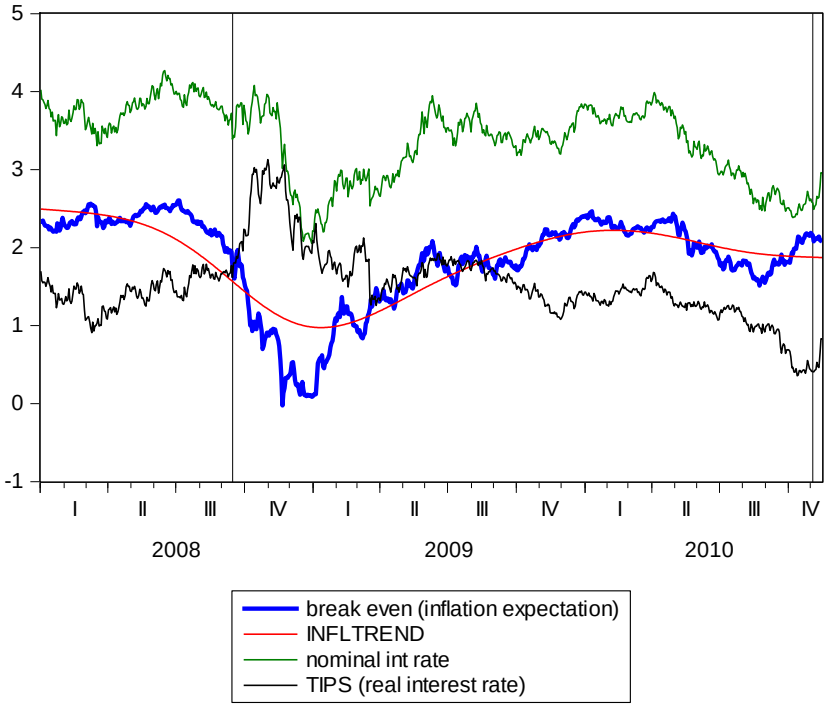
Figure 6



The persistence of *low inflation expectation* is also evidenced by the breakeven inflation rate derived from inflation-indexed TIPS government bonds in the US. Figure 7 gives an indication of inflation expectations in the US bond market. Breakeven inflation is calculated by taking the difference between the nominal interest rate for 10 year government bonds and the inflation-indexed TIPS bonds. The figure shows that inflation expectations fell dramatically after the collapse of Lehmann Brothers and returned a year later to a level close to, but below, the 2008 level. Inflation expectation has again fallen in the second and third quarter of 2010 and only started to rise in September. However, the announcement of QE2 on the 3rd of November did not seem to have a direct effect on the inflation expectations, which have been stable for several weeks. This confirms that financial markets do not expect monetary easing in the United States to generate inflation. The open question remains then, whether the additional liquidity will spill over into productive lending to the US economy, or if American banks will use these funds to inundate the rest of the world with hot money.

Figure 7

Inflation expectation derived from TIPS



Clearly, the additional liquidity has to go somewhere. According to standard economic theory, banks will push money out of their system and increase lending to the real sector if liquidity creation exceeds their need to hold reserves. The question is, however, whether this lending will really raise investment in the American economy. Two other scenarios are possible. If the money remains in the domestic market but does not get invested, it will increase the prices for financial assets and start a new financial bubble. Alternatively, American banks may lend this short term money to emerging economies and finance so-called carry trades.[6] Such capital inflows could generate a huge financial bubble in emerging market economies similar to what happened prior to the Asian crisis. Yet, why would liquidity creation generate asset bubbles rather than inflation? The answer brings us back to China.

There are good reasons to assume that inflation will not increase in the future, because wage costs are under control. This phenomenon has also been called the Great Moderation. The Great Moderation came about since China has integrated into the world market and added 25% of the world labour supply to the pool of available work force in the global economy. The quasi "unlimited supply of labour"[7] has anchored wages and prices for consumer goods in the globalized market. Given the structural transformation of the Chinese economy, this low inflation environment is likely to continue for another 7 to 10 years. During this period the recurrence of financial bubbles is highly likely, but once the Chinese labour market is tightening up will there be a return to global inflation and tight money. In the meantime, policy makers should worry more about bubbles than about inflation.

[6] Carry trades are financial transactions where a borrower borrows in one currency at a very low interests rates and converts it into another currency when she expects high returns either from attractive returns on capital in the foreign currency or because the currency is expected to appreciate.

[7] This is the title of a paper for which Sir Arthur Lewis obtained the Nobel Prize in 1979. See Lewis, 1954. The paper is frequently discussed among Chinese economists.

The high likelihood of recurring financial bubbles is of major concern for emerging economies. Given the openness and flexibility of the American financial markets, there is no guaranty that the liquidity generated by the Federal Reserve System and pumped into the banking system will actually be used to increase lending to the productive sector of the American economy. Instead, there is a high likelihood that a significant share of these funds will immediately be used for carry trade with emerging economies. If this were to occur at a massive scale, emerging markets could be pushed into a financial bubble, similar to what has occurred prior to the Asian crisis. This is why public authorities, banks and intellectuals all over Asia are highly critical of QE2 program. Governments may resist the capital inflows by imposing capital controls. However, this does not solve the problem, as the liquidity will then be directed to other parts of the world. If Asia had recourse to capital controls and the American economy would not absorb the additional liquidity created by the Fed, QE2 could lead to a significant appreciation of the Euro and fuel a bubble in the Euro Area, because the appreciation of the euro would subsequently attract additional capital funds. Given Europe's fragile economic governance, such a development could be highly dangerous for the sustainability of the euro.

There are two ways to deal with the potentially detrimental effects of QE2. The first best solution would be coordinated policy interventions by all major central banks in the world, namely Federal Reserve, ECB, Bank of Japan and Bank of China. However, it is unlikely that such concerted policy action will take place. If it is impossible to improve the management of the world economy, the second best solution would be more flexibility for US dollar exchange rates. Volatile exchange rates operate like a wedge that deters investment and capital flows (see Collignon, 2006 for evidence). This is detrimental to foreign direct investment and the development of trade and for this reason most emerging economies have pegged their exchange rate to the US dollar. The currency peg provides them with stability and low volatility, and it keeps interest rates at a low level. However, in the present situation, it may be advantageous to increase the volatility of the US dollar so that the American economy becomes financially more autonomous during the period of quantitative easing and structural adjustment to the post global financial crisis situation. More volatile USD rates would reduce the incentives for carry trades and lower the flow of capital from the United States to emerging economies. Especially for China this would be desirable. At the same time it would allow the USA to return to sustained growth.

However, this poses a new dilemma for emerging economies. As discussed above, the rapid growth in China and elsewhere in Asia has been dependent on fixing exchange rates at a competitive level to the dollar in order to facilitate the integration of emerging economies into the large world market. If authorities would simply let their currencies float against the USD, they would deprive themselves of this engine of growth and development. They need an alternative.

Hence, a fundamental restructuring of monetary global relations is required and I have made a proposal to the European Parliament in March 2010 how this could be achieved. Because the proposal is now of significantly higher urgency that it was a year ago, I will summarize the proposal here again.

3. Restructuring the international monetary system

Given the difficulties and external imbalances of the US economy, greater exchange rate flexibility would support the necessary adjustment. In this respect, American authorities have a valid point. Flexibility may translate into a temporarily weaker US dollar, until the adjustment process is completed; it may also imply higher volatility in exchange rates with the rest of the world, which would help to redirect the QE2 effects into domestic borrowing. However, the adjustment must not destroy the most dynamic growth pole in the world, on which millions of jobs depend in Europe and in the United States. It is also not acceptable that Europe bears all the burden of adjustment in the world economy. Here are the essential features of an alternative policy for avoiding currency wars:

1. Asia will remain a net exporter for years to come, and America can no longer assume the role of consumer of last resort in the world. Hence, the European Union must take up some, but not all, of the global demand for products from Asia. The same is true for Japan, which has persistently absorbed less than it has produced at home. With this in mind, the three main players could agree on a target for each of their economies to run a current account deficit of 1.5 % for the Euro Area. These targets would redistribute the American deficit, but they would hardly generate additional demand for Asian products. This must come from growth in the three advanced industrial economies and from the rest of the world.

2. The redistribution of current account deficits requires a change in relative prices, i.e. in exchange rates, and domestic policies that stimulate demand in Europe and Japan. The dollar has to depreciate relative to Asian currencies; the euro and yen need to appreciate. However, as we have discussed, exchange rate stability, i.e. low volatility, can support the redirection of trade and investment by reducing uncertainty. Free floating would terminate not only China's but all of Asia's economic miracles. Asia needs stability and America needs flexibility. This situation gives a role to the Euro Area as the global stabiliser.

3. Several options for how this may be achieved may be considered:

   First, East Asian countries may simply re-peg from the dollar to the euro. This would generate monetary stability between Asia and Europe and give the US economy the necessary flexibility to adjust its current account deficit. However, Japan must be part of the new monetary arrangement, because it is a major supplier of foreign direct investment into Japan.

   A second option consists in pegging to a basket. The Chinese yuan and other East Asian currencies would fix their exchange rates to a basket that contains large portions of Japanese yen and euros and, initially, only a small portion of USD. Simultaneously, the European Central Bank and the Bank of Japan would establish close cooperation with the purpose of minimizing volatility between their two currencies. This would stabilize the conditions for Japanese FDI into East Asia and the trade relations with Europe. Hence, the detrimental effect of a euro appreciation would be compensated by lower volatility of exchange rates between the euro and Asian currencies. The Japanese and European economy together represent a viable and attractive alternative to the symbiotic relation with the USA.

4. Monetary authorities in East Asian countries will gradually increase reserve holdings in euro and yen. Liquidity requirements for market interventions will increase demand for the anchor currencies. Prudent reserve management requires keeping reserves in the pegged currency, and if the yuan were pegged to a basket of euro and yen, reserves denominated to these currencies will increase. Over time, this could lead to a more balanced system of reserve currencies than the present dollar based system, because it offers diversification benefits at the world scale. No doubt,

some reserve diversification is already happening today, with the role of the US dollar diminishing, but neither the euro nor the yen have increased their shares (see Collignon et alt, 2010). On the other hand, an increased international role for their currencies would deepen financial markets in the Euro Area and in Japan and structurally lower long term interest rates. This would stimulate economic growth in the anchor countries and this is especially useful when the currency appreciation might dampen export demand.

5. Strategic pegging to a basket should not be confused with the choice of the best reserve currency. Many observers believe that the dominance of the US dollar as the internationally accepted reserve asset has contributed to the financial crisis, because the domestically determined excess liquidity in the United States has swamped the rest of the world. The contradiction between a reserve currency country's national interests and its international obligations is well known and the Chinese central bank governor Zhou Xiaohuan (2009) has suggested actively promoting the use of the SDR in international trade, commodities pricing, investment and corporate book-keeping. Nevertheless, using SDRs today as the reference for exchange pegging is not recommendable. The composition of SDRs, even if expanded as proposed by Zhou, would not allow China the competitive exchange rate strategy, which has been the basis of its success. However, as the catch-up growth process advances in China and Asia, the basket could be gradually broadened to include other currencies, until it will effectively coincide with a reformed version of SDRs.

6. Finally, monetary cooperation between the Euro Area and Asia must find an institutional framework. Organizing monetary cooperation with Asia goes beyond purely bilateral or regional relations. One must hope that the President of the Euro Group will seize the opportunity, and the European Parliament should encourage him to do so.

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