Currency Wars: Rhetoric and Reality

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Abstract

The concept of 'currency wars' has come into popular use in recent years. This article examines various meanings of the phrase and its historical antecedents. It goes on to discuss why currency wars have become the focus of attention and the economic policy weapons that may be used to conduct such wars. It draws attention to the collateral economic damage that may be caused by unleashing these weapons both for the individual countries that use them and for the world economy. The article concludes that while there may have been occasional currency battles or skirmishes, the empirical evidence does not support the claim that there is widespread currency warfare. However, currency misalignment does exist and correcting it would help induce the international adjustment needed to reduce the global economic imbalances that threaten international financial stability. The problem is to find effective institutional arrangements for encouraging this to happen. Current proposals under discussion that envisage an enhanced role for the IMF and the G20 seem unlikely to be very successful.

Introduction

The recent rhetoric surrounding the claim that the world is involved in a 'currency war' conjures up images of the economic disruptions generated by the competitive devaluations and increasing trade barriers that characterized global economic policy during the Great Depression of the 1930s. But are we really in the midst of contemporary currency warfare?

Much of the currency war rhetoric may instead reflect an attempt by governments to blame the policies adopted by foreigners for the global failure to reduce economic imbalances, and to rebuff criticisms of their own policies. Thus, China's criticisms that US policies have resulted in dollar depreciation and losses on foreign held dollar securities can be seen in substantial part as a reaction to US criticisms of China's policy directed towards holding down the value of its own currency, the renmimbi. While the possibility that such disagreements may escalate into serious retaliatory actions and a full blown currency war cannot be completely ruled out, it seems more likely that the greater threat to international financial stability comes from a continuing failure to achieve significant international adjustment.

Problems of insufficient adjustment are not new to the world economy. They became an important feature of the Bretton Woods international monetary system, were a significant element in the sequence of currency crises experienced in the 1990s and early 2000s, and have been seen in the recent trials and tribulations in the Eurozone.

In an article in this journal published in 2008 (Bird and Willett, 2008), we examined why it was that during the 1990s and early 2000s countries frequently seemed reluctant to devalue their exchange rates even where there were clear indications that currencies were overvalued. At the end of that article we also briefly sought to explain the unwillingness of China to allow the value of the renminbi to appreciate. Since 2008, the reluctance to allow currencies to appreciate fully in line with market forces has been observed across a wider array of countries. But this does not necessarily mean that a currency war has broken out.

If foreign exchange and international financial markets operated as efficiently as many economic models imply, there would be a strong presumption that efforts to limit market forces would have distorting effects and would represent aggressive competitive behaviour. However, the observed volatility of international capital flows suggests that such markets are not always efficient. Countries can be legitimately concerned about large and sudden inflows of financial capital that lead to rapid currency appreciation. In these circumstances, exchange market intervention and measures to discourage capital inflows cannot automatically be taken as signs of economic aggression.

A stronger case could be made against intervention designed to force down a currency's value in the absence of balance of payments deficits and evidence of overvaluation but, unlike the 1930s, there seems to be little to suggest that this is a common occurrence in the contemporary world economy.

In this article we seek to clarify the issues associated with the concept of a 'currency war' as well as the extent to which the world is currently experiencing one or is realistically threatened by one. Section 2 discusses the semantics of the concept of a currency war. Section 3 examines why countries may be tempted to engage in currency warfare. Section 4 analyses the policy 'weapons' that might be used in such a war and the collateral economic damage that may be caused for the countries using them. Section 5 discusses the global implications of a currency war. Section 6 draws on the available empirical evidence to assess the extent to which the world is experiencing a currency war. Section 7 investigates institutional ways of reducing the threat of a future currency war. The final section then offers a few remarks that put the issue of currency wars in the broader context of contemporary international monetary reform.

2. What is a 'currency war'?

The term 'currency wars' was coined by Guido Mantega, Brazil's finance minister. The phrase is one of those colourful ones that the media latch on to. But like many similar journalistically popular phrases, it lacks precision and can mean different things to different people. ‘War’ implies conflict or a series of battles. ‘Currency’ implies an attempt by the relevant authorities to influence the exchange rate. Currency wars involve using a series of policy weapons in an aggressive or defensive and retaliatory way to gain or retain a competitive advantage aimed at keeping imports lower and exports higher than they would otherwise be. A currency war could therefore involve the use of competitive devaluation (as in the 1930s) or the use of monetary policy to drive down the value of a currency, or intervention in foreign exchange markets to prevent the value of a currency from appreciating, or the use of capital controls to prevent or moderate capital inflows that would otherwise also lead to exchange rate appreciation.

In many respects the idea of a currency war is merely a novel and even flamboyant way of describing phenomena that are quite familiar in the context of the history of the international monetary system. Article IV Section 1, subsection iii of the IMF’s Articles of Agreement relating to the Obligations Regarding Exchange Arrangements specifically states that members of the Fund should:

“avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members.”

In this sense, members of the IMF have therefore already signed a ‘peace treaty’ to say that they will not engage in a currency war. It is perhaps therefore simply that the idea of a ‘currency war’ is more eye catching and provocative than the more mundane notion of ‘currency manipulation’. Or has the treaty been broken?

Having enthusiastically adopted the concept of currency war, the economic media has suggested that a significant number of countries are involved in it. Brazil, China, India, Indonesia, Israel, Japan, Korea, Malaysia, the Philippines, Singapore, South Africa, Switzerland, Taiwan and Thailand have been accused of intervening to prevent the values of their currencies from appreciating, while the United States has been accused of designing lax monetary policy, in the form of quantitative easing, with the purpose (or at least the consequence) of driving down the value of the dollar.

But does it follow that measures to prevent currency appreciation or to provoke depreciation are necessarily acts of economic aggression? Does their widespread use provide clear evidence that a currency war has broken out? The answers depend on the relationship between the contemporary real effective exchange rate and the fundamental equilibrium one. Measures to prevent a currency that is already overvalued relative to its fundamental equilibrium rate from becoming yet more overvalued hardly seem to provide evidence of economically warlike behaviour. Efforts to minimise the adjustment costs imposed by large capital inflows that are judged to be temporary would not seem to be aggressive in nature, although the operational problem is in identifying whether or not the flows are indeed temporary. In contrast, measures to prevent an undervalued currency from moving closer to its fundamental equilibrium rate are much more economically hostile. The difficulty, of course, lies in unambiguously measuring fundamental equilibrium exchange rates. This means that there is an element of ambiguity in determining whether or not countries have embarked on a currency war. We return to this issue in more detail later.

A further question is whether the unilateral use of measures designed to avoid currency appreciation or promote depreciation can be classified as a currency war. Warfare implies retaliatory action.

3. Why might countries embark on a currency war, and why now?

As noted above, there could be both aggressive and defensive motivations for resorting to using the economic weapons normally associated with currency warfare. However, in either case their use reflects the belief that the exchange rate matters and that it is not something that may be benignly neglected. In the current global economic environment many countries are basing (or attempting to base) their economic growth strategies on foreign demand. Export led growth has a number of attractions; not the least of which is that it does not come up against the balance of payments constraint often encountered by domestic consumption led growth.

Until 2008 China had experienced a lengthy period of export led growth while economic growth in the US had been led by consumption. This resulted in global economic imbalances that were sustained by China effectively lending to the US to finance its current account deficit. In 2008/09 the situation changed as a result of the global financial crisis. The US could no longer rely on consumers to drive US growth. The recession made them less willing to spend and, in any case, the idea of generating growth by overleveraging had fallen into disrepute. Moreover, the large US budget deficit limited the amount of feasible fiscal stimulus. For economic growth in the US to continue, a different engine needed to be found. A potential engine is foreign demand based on the relatively rapid economic growth in emerging economies. Hence, while officially favouring a strong dollar, the US has adopted a decreasingly benign attitude to the value of the dollar and to policies elsewhere in the world that may affect currency values world wide. The global competition for foreign demand means that countries will be anxious to avoid seeing their currencies appreciate substantially in value, in spite of the fact that this makes their imports cheaper in domestic currency terms.

Accelerating inflation in a number of countries will help mitigate concerns about appreciating currencies but so far the effects of this counter balance have been comparatively weak.

Measures that are seen as being aggressive in the battle for foreign demand may stimulate retaliatory actions and, in principle, this could spark off a full blown currency war. This was the danger that Mr. Mantega probably had in mind when he used the phrase.

4. What are the weapons used and do they cause domestic collateral damage?

In an attempt to prevent currency appreciation, governments may contemplate using a number of economic policy weapons. The first involves intervening in foreign exchange markets, where they will buy foreign exchange and sell domestic currency. There are, however, dangers associated with this strategy which are generally well understood. The related monetary growth will tend to be inflationary and, as a result, the real exchange rate may still appreciate. In the short run, governments may be able to sterilize the monetary effects of their intervention by issuing bonds. But sterilization is not without its own problems. Bond markets may be thin and, in any case, selling bonds will tend to raise interest rates. In conjunction with an expectation that the value of the currency may eventually rise, this will encourage further capital inflows that put yet more upward pressure on the value of the currency. Through sterilization, governments may also end up in a situation where they are paying a higher rate of interest on their liabilities (the debt they issue) than on their assets (the international reserves they accumulate). This imposes fiscal costs. Because of the monetary and fiscal collateral damage caused, intervention in the foreign exchange market is generally not viewed as a sustainable long term policy. As in many areas of economics, timing will be important in deciding whether it is sensible to embark on heavy intervention in the foreign exchange market. It will be more appealing where the trade effects from manipulating the nominal exchange rate are believed to be large and to materialise reasonably quickly, and the adverse monetary and fiscal consequences are believed to be relatively small and more relevant, if at all, in the long run. In fact, the reality is generally presumed to be the other way around. This may be expected to make governments think twice about embarking on a currency war based on intervention in the foreign exchange market.

There will also be collateral economic damage associated with using capital controls (defined here to include other measures to retard capital inflows, such as taxes) which are the other weapon favoured in an attempt to moderate exchange rate appreciation.

The debate about capital controls is complicated but in essence it hinges on how effective they are in influencing international capital movements and whether their costs exceed their benefits. One concern is that in an attempt to offset the excesses of extreme capital volatility, the advantages of financial globalization will be sacrificed. The opposition to using capital controls (even that from the IMF) has diminished as capital movements have shown a pattern of frequent surges and sudden stops and as capital account crises have become a more common feature of the world economy. But even their advocates tend not to see them as a long term option. Once more, the collateral damage from their quasi-permanent use is generally seen as being too severe.

Intervention in the foreign exchange market designed to bring about exchange rate depreciation rather than prevent appreciation may, in principle, also feature as part of a currency war. But here again, and for similar reasons, collateral economic damage is likely to be a problem. The evidence provides no recent examples of countries following such a course of action. Instead, a different economic weapon may be used; quantitative easing or expansionary monetary policy. As noted in the introduction, Brazil and China have accused the US of following such a strategy.

Given the large size of the US domestic economy relative to its export sector, there seems little doubt that in fact, and as it has been presented by the Federal Reserve, the primary goal in pursuing quantitative easing has been to try to stimulate domestic demand. To the extent that it is successful, the resulting increase in the demand for imports would largely counter the effects of a depreciating dollar on the exports of other countries. However, the concern by other countries is that rather than having this effect, quantitative easing will in practice lead to capital outflows and dollar depreciation. This would tend to stimulate US exports at the expense of growth abroad.

Faced with an unsustainable US current account deficit, a modest degree of dollar depreciation may be appropriate as part of an overall strategy to reduce global imbalances. In section 6 below, we briefly discuss some of the evidence on the degree of dollar misalignment.

What should be concluded from the above analysis? The policy weapons that would normally be used during a currency war can cause significant collateral economic damage. Bearing in mind that victory is not assured, this argues that currency wars will themselves tend to be less widespread than some commentators have claimed.

5. Would a currency war threaten global economic destruction?

Just as they have some adverse implications for aspects of national economic performance and policy, and for political relations between countries, currency wars also have adverse global economic implications. As noted earlier, the pursuit of beggar-thy-neighbour policies in the 1930s, of which competitive exchange rate policy was one element, contributed to the downward spiral in world economic performance, and turned out to be a battle in which there were no real victors.

To what extent would a contemporary currency war threaten future global economic stability and growth? As mentioned earlier, intervening in the foreign exchange market to moderate exchange rate appreciation, (with the related consequence of accumulating international reserves), may not be an aggressive act of currency war if the purpose is merely to offset the macroeconomically destabilising domestic effects of temporary surges of capital. Actions designed to avoid large deviations from fundamental equilibrium exchange rates are unlikely to have significantly adverse global consequences. There has, however, been considerable disagreement about the motivations behind the large reserve accumulations in a number of countries where these have been associated with current account balance of payments surpluses. In as much as the accumulations have been driven by the desire to obtain adequate precautionary balances that reduce the likelihood of crises and limit the damage done by any that may still occur, the surpluses should be temporary and again severe global economic disruption seems unlikely. However, most calculations suggest that in many cases contemporary reserve accumulations have gone well beyond this level, implying that they are instead the by-product of a continuing strategy of export led growth. Moreover, even where intervention to prevent currency appreciation is in response to large and relatively sudden capital inflows, there is the problem that, should the inflows continue for an extended period of time, the consequences appear little different from those of a country targeting a long term current account surplus. Competition for foreign demand does endanger international financial stability, and in this case the issue of global economic imbalances needs to be revisited.

Their outward manifestation is the large balance of payments surpluses in some parts of the world and the equivalent deficits elsewhere, but these imbalances themselves reflect underlying macroeconomic disequilibria between aggregate demand and aggregate supply across countries. The issue then becomes whether these imbalances are sustainable and, if not, whether they can be reduced in the presence of misaligned currency values.

Sustainability largely depends upon whether both deficit and surplus countries are content with the status quo and whether they are prepared to play their part in maintaining it. This in turn depends on whether deficit countries are prepared to build up external indebtedness and to rely on consumption led growth, and on whether surplus countries are prepared to play the role of global creditors to the extent required, and to make the necessary sacrifices in terms of their own levels of domestic consumption. If these conditions are fulfilled, and private financial markets have confidence in the durability of the implicit arrangements, then there is at least an uneasy truce in a potential currency war. Countries with undervalued exchange rates, in effect, accept the global financing obligations that come with them.

Things become more dangerous when a truce of this kind breaks down, with deficit countries endeavouring to reduce their deficits by taking measures to depreciate their currencies and surplus countries resisting the erosion of their competitiveness and their surpluses by seeking to prevent their currencies from appreciating. Given the zero sum nature of the global balance of payments, the objectives of deficit and surplus countries will now be in conflict. Not everyone can win a currency war although it is possible for all to lose because of the collateral damage. It is in the very nature of exchange rates that if the value of currency A falls relative to that of currency B, then the value of currency B will have risen relative to the value of currency A.

Note that for a currency crisis to erupt it is not necessary for the official truce to break down. Fears that it may can be quite enough to lead to large shifts in the expectations of rational risk-averse investors with consequent large reversals in private capital flows. Large reversals of this kind may not only apply to emerging economies.

The challenge on the global currency front is to arrange things in such a way that currency values comply with 'fundamental equilibria'. But what does this mean? It does not mean that all countries have to be in a situation where their overall current accounts balance, and it certainly does not mean that all bilateral trade flows should be in balance. But it does mean that current account disequilibria have to be matched by offsetting capital account flows that are deemed to be sustainable. If this condition is not fulfilled, and countries battle to defend exchange rates that are not at their equilibrium levels, other macroeconomic policies will be affected. In principle, this could mean that a currency war might mutate into a war involving monetary and fiscal policy aimed at deflating aggregate domestic demand, although this seems unlikely in current economic circumstances.

However, a country with a balance of payments current account deficit that it no longer wishes (or is able) to sustain via capital inflows, may be forced to pursue tighter monetary and fiscal policy if it finds it difficult to achieve adjustment via the exchange rate. Such countries may then also have to abandon their pursuit of 'internal balance' in the form of economic growth and a low level of unemployment in order to try and move towards 'external balance' in the form of a sustainable balance of payments. Surplus countries may retaliate by tightening their own domestic economic policies. The fall out would be a declining global rate of economic growth and a rising global rate of unemployment. 'Global economic destruction' may be taking it too far, but certainly the global effects of a currency war could be unpalatable.

At the same time, it is important not to lose sight of the broader picture. A currency war reflects the underlying problem that there is global disagreement about the appropriate distribution of balance of payments deficits and surpluses and about the pattern and type of economic growth. Dealing with a currency war is only one part of dealing with the more fundamental issue relating to the international co-ordination of macroeconomic policy.

6. How widespread are actual currency hostilities?

In this section we draw heavily on work done at the Peterson Institute for International Economics by William Cline and John Williamson (Cline and Williamson, 2010a, 2010b). They calculate fundamental equilibrium exchange rates by estimating the values that currencies would need to have in order to generate sustainable current account balance of payments surpluses and deficits. In doing so, they make a series of assumptions about the degrees of imbalance that are sustainable, the factors driving payments imbalances and the impact of exchange rate changes on trade flows. They then compare existing exchange rates with the fundamental equilibrium ones that they have estimated. On this basis they reach conclusions about whether currencies are undervalued, overvalued or close to their equilibrium values.

They then argue that countries can only be legitimately accused of ‘manipulating’ their currencies (and engaging in currency warfare) if they are pursuing policies that are motivated to create or maintain currency misalignment. Thus, countries that are seeking to prevent exchange rate appreciation cannot be seen as being engaged in a currency war if their exchange rates are already overvalued. The analysis undertaken by Cline and Williamson leads them to conclude that of the countries that have been reported as having intervened to prevent currency appreciation only China, Hong Kong, Malaysia, Singapore, Switzerland and Taiwan have been manipulating their currencies. In contrast, they conclude that Argentina, Indonesia, Israel, Korea and the Philippines have exchange rates close to their fundamental equilibrium rates, and that Brazil, India, Japan, South Africa, Thailand and Turkey have overvalued currencies. They go on to argue that the United States, along with Canada, Mexico, Sweden, and the UK have currency values close to their fundamental equilibrium levels and that these countries have not sought to drive them down by intervention. The same applies to Australia, Chile, Colombia, the

Czech Republic, the euro zone, Hungary, New Zealand and Poland, in spite of the fact that their currencies have been overvalued.

As noted earlier, there are alternative ways of estimating equilibrium exchange rates, but it is not clear that these would lead to substantially different conclusions from the ones reached by Cline and Williamson. If so, it would appear that things have not reached the stage where there is a world-wide currency war.

7. Institutional arrangements for dealing with currency wars

But how can those countries that have been identified as manipulating their currencies be encouraged to desist from so doing, and how can the international monetary system be designed to minimise the chance of a future outbreak of currency war?

These questions are hardly new ones for international monetary economics. After all, in the aftermath of competitive devaluations in the 1930s, the Bretton Woods system was introduced precisely with the aim of avoiding them. Countries were required to peg the values of their currencies and only alter them, with the prior permission of the IMF, when they became fundamentally misaligned. Beyond this, the idea was that countries that were reluctant to revalue would be pressured to do so because they would be exposed to a 'scarce currency clause'. Their surpluses would have the effect of making their currencies scarce in the IMF, and in these circumstances other member countries would be permitted to use commercial policy in order to reduce imports from the countries in surplus. At the Bretton Woods conference, and as part of his plan for international monetary reform, Keynes had even suggested taxing the reserve accumulations of surplus countries beyond a certain point.

While the requirement for the IMF to give its permission for countries to change their parities was commonly violated in practice, the system was extremely successful in helping to avoid the competitive devaluations that had been a feature of the 1930s.

However, a milder but still serious problem emerged as both surplus and deficit countries failed to adjust their parities in a timely manner.

Although things move on, this basic problem remains. Macroeconomic disequilibria are likely to arise across the global economy. Altering the structure of exchange rates can help to reduce these disequilibria to manageable proportions. If exchange rates are not used in this way then other methods of adjustment need to be used, or the world has to find some way of living with the disequilibria, and this implies that countries with current account surpluses have to be prepared to help finance those with the related deficits. The zero sum nature of the global balance of payments suggests that a cooperative solution is globally preferable to an approach based on conflict which, in the long run, is likely to be ineffective and self-defeating. But the problem is how to organize a cooperative solution. This is a vastly easier question to ask than to answer. Indeed, up until now it has defied solution.

The Bretton Woods system broke down because exchange rates were insufficiently flexible and the alternative adjustment mechanism based on the management of aggregate demand did not work well enough. The system that replaced it, based on greater freedom of choice with regards exchange rate policy incorporating the considerable use of flexible exchange rates, has been unable to avoid episodes of currency misalignment and the development of serious macroeconomic imbalances. Multilateral consultations undertaken by the IMF in the mid 2000s with the aim of reducing global economic imbalances were ineffective (Bird and Willett, 2007), and at present the G20 is struggling to design an approach based on indicative guidelines with respect to balance of payments targets.

The technical issues are not analytically insurmountable. It is a matter of exercising moral suasion or creating a set of incentives that nudge governments towards a globally desirable set of policies. In general terms the options have been well rehearsed. The politics involved are much less straightforward. It is simply very difficult to put effective pressure on countries to pursue policies that they do not perceive as being in their own short run best interests. This is hard enough when they are running current account deficits, but it becomes still harder when they are running surpluses and when their assistance is needed to finance the deficits elsewhere in the world economy. Any institution that is trying to exert such pressure, whether it is the IMF or the G20, is not in a strong bargaining position and will be struggling to find an effective combination of 'carrots and sticks' that can be used to induce the policy changes that are globally desirable. This is not to say that efforts to exert moral suasion by the international community are not worth pursuing, but it is to recognise that the success of such efforts is likely to be limited.

In the absence of more effective forms of global governance, it is unwise to place too much reliance on there being a satisfactory outcome to this dilemma. Instead, and as casual observation of the evidence suggests, it may be easier, and therefore perhaps wiser, to focus on developing mechanisms for providing countries with more reliable means of securing external finance as and when needed. This implies that the international community needs to focus as much on reforms to the global reserve system and the structure of official lending facilities as it does on measures to improve international policy co-ordination.

Some of the above points are nicely illustrated by recent developments in the international monetary system, where proposals have been put forward to establish a code of conduct for managing international capital movements. In itself such a code could be in the interests of both capital exporting and importing countries, but gaining agreement on it will not be easy. This is reflected by the following statement by Guido Mantega on behalf of the constituency of countries he represents at the IMF (comprising Brazil, Colombia, Dominican Republic, Ecuador, Guyana, Haiti, Panama, Suriname and Trinidad and Tobago). It is worth quoting from his statement at some length.

> "…we consider some recent proposals for a possible policy framework on managing capital inflows unnecessary and lacking in evenhandedness. Insufficient consideration is given to 'push' factors or to the policies of

> major advanced economies that have produced large and often disruptive financial flows. We are concerned with recent calls by some advanced countries to establish codes of conduct or policy frameworks…Ironically, some of the countries that are responsible for the deepest crisis since the Great Depression, and have yet to solve their own problems, are eager to prescribe codes of conduct to the rest of the world, including to countries that are overburdened by the spillover effects of the policies adopted by them. We oppose any guidelines, frameworks or 'codes of conduct' that attempt to constrain, directly or indirectly, policy responses of countries facing surges in volatile capital inflows. Governments must have flexibility and discretion to adopt policies that they consider appropriate, including macroeconomic, prudential measures and capital controls….Brazil, for one, is doing and will continue to do whatever it thinks is necessary and adequate to its circumstances to face the challenges arising from large and volatile capital flows." (Extracts from a statement made by Mr. Guido Mantega, Minister of Finance of Brazil, International Monetary and Financial Committee, IMF, Washington DC, April 16, 2011).

Whatever the merits and demerits of Mr. Mantega's arguments, his statement shows that gaining international agreement over policy reform to constrain the use of weapons associated with currency warfare will not be easy.

8. Concluding remarks

It has become fashionable to claim that the world has seen the outbreak of a currency war with a large number of countries intervening in foreign exchange markets or setting up controls over capital inflows in order to prevent their currencies from appreciating while other countries are using monetary policy to force down the values of their currencies. The motivation behind such actions is to defend current account balance of payments surpluses or reduce deficits, or more generally to gain international competitiveness and strengthen balance of payments performance. Given the zero sum nature of the global balance of payments, not all countries can simultaneously win a currency war and the attempt to do so can cause significant collateral economic damage for individual economies and the world economy.

In general we conclude that, although there may have been occasional skirmishes or border incidents, the world economy is in fact some way short of a full scale currency war, and that the inflammatory language favoured by some politicians and by the media has been overblown.

However, the prevalence of international capital volatility and the analysis of fundamental equilibrium exchange rates also suggests that it is not uncommon for exchange rates to be misaligned. Correcting currency misalignment represents an important component in reducing global macroeconomic imbalances. The challenge is to find an effective institutional mechanism for doing this.

In the case of countries that can be identified as having used aggressive policies aimed at influencing the values of their currencies, what are the options? Negotiation is one; but what if negotiation is not backed up by a credible threat of force? In global monetary terms there is as yet no practical equivalent to the United Nations General Assembly that can decide to impose economic sanctions or can ultimately condone co-ordinated international action against the aggressor. The IMF's scarce currency clause has never been invoked, and its policies on currency manipulation have been largely ineffective. Co-ordination between the IMF and the World Trade Organization could offer a potential route for reform in terms of imposing trade sanctions against currency manipulators, but the WTO is likely to be preoccupied with trying to reach some sort of conclusion to the Doha Round. The G20 is a long way from being able to perform such a role, although the main constraints upon it doing so arise from the political problems in implementing reforms and not from the economic ones in designing them. For as long as this is the case, the world economy will probably have to rely rather more on measures that assist those countries that are adversely affected by the outbreak of occasional currency battles than on reforms that effectively eliminate the chance of them occurring.

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