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Conclusions and Recommendations

The Currency Problem

The threat of currency conflict represents a substantial risk to the world economy and to the United States. For most of the first 15 years of the 21st century, a number of countries, mostly but not solely emerging-market economies led by China, intervened excessively in the foreign exchange markets, by an average of more than $600 billion annually to limit the rise of their currencies. This competitive nonappreciation produced substantial undervaluation of their exchange rates, greatly strengthening their competitive positions and generating large current account surpluses despite their rapid growth and its usual association with current account deficits. This manipulation shifted an annual average of $300 billion of production to their own economies from the rest of the world, especially from the United States and Europe but also from a wide range of other countries—what Bhalla (2012) calls "stolen growth." During and after the Great Recession, when macroeconomic policy was unable or unwilling to achieve full employment in the major advanced economies and some others, currency manipulation cost them several million jobs, including more than 1 million in the United States alone.

The currency conflicts of the early 21st century exposed two sources of unsustainability at the heart of the world economy. The first was the sharp rise in current account imbalances, which reached levels far in excess of any previously recorded. The surplus of China rose to almost 10 percent of its GDP, and the surpluses of other manipulators were even larger in cumulative dollar terms. The deficit of the United States escalated to a record 6 percent of GDP, more than twice the level that triggered the large currency adjustment of the Plaza Accord two decades earlier. These imbalances made an important contribution to the onset of the Great Recession and the sluggishness of the recovery from it.

The second was the domestic political unsustainability of the currency misalignments and resulting imbalances, especially in the United States, with its acute risks for the future of international trade. When the Obama administration asked Congress to approve its major trade liberalization initiatives in 2015–16 (first by providing Trade Promotion Authority for two major upcoming negotiations and subsequently by authorizing the megaregional Trans-Pacific Partnership [TPP]), Congress pushed back, in large part because it viewed the currency manipulation of the previous decade as an unfair trade practice that severely hurt the US economy and must be curtailed before further trade expansion should be pursued.

Both presidential candidates, and several other contenders for their parties' nominations, raised similar questions as part of their unprecedented attack on globalization during the campaigns of 2016. Evidence suggests that the "China shock" to the US economy, of which perhaps a third can be attributed to currency manipulation, played a decisive role in the election of Donald Trump (Autor et al. 2017), whose rejection of the TPP and past US trade agreements could presage a sea change in the global trading system. Currency issues once again became a major driver of US trade policy, as they were in the mid-1980s, threatening at a minimum to block new liberalization and possibly leading to backsliding into protectionism, with major systemic consequences.

Considerable progress was made in addressing these misalignments and imbalances over the past decade. The US external deficit was cut in half (though it has begun to rise again and is likely to approach $1 trillion, or nearly 5 percent of GDP, in the next few years). China's exchange rate eventually rose by 35 percent against the dollar at its peak in 2015, and its external surplus declined to about 2 percent of GDP. The G-7, G-20, and TPP countries all agreed to new norms against manipulation. Congress passed legislation that spelled out objective criteria for identifying manipulation and strengthened US resistance to the practice, with the US Treasury placing five economies (China, Germany, Japan, Korea, and Taiwan) on a "monitoring list" in 2016. Manipulation largely subsided into remission in 2015 and 2016, as the exchange rates of many emerging-market economies (including China) weakened as a result of market forces, and the revenues of oil exporters fell sharply along with energy prices.

However, markets could reverse course at any time; former manipulators could resume the practice when upward pressures on their exchange rates return, especially if their economies (and the world economy) are weakening at the time. Further use of expansionary monetary policy by advanced countries, especially when they rely heavily on negative interest rates, could exacerbate the currency conflict.

Whatever happens, it is likely that US trade policy—and thus the global trading system—will be able to regain momentum only with a firm resolution of the currency problem (and a number of others). The domestic political aspect of the issue in the United States is decidedly not in remission. Hence it has become imperative to erect effective deterrents to manipulation to avoid new currency conflicts and their trade policy and financial implications.

These developments reveal two glaring gaps in the global economic architecture: the absence of effective mechanisms to discipline surplus countries in general (and currency manipulators in particular) and the inability to link monetary and trade components into a functioning governance system. Ironically, the international economic order and its institutions were set up at the end of World War II largely to prevent just such beggar-thy-neighbor policies, which had had devastating effects in the 1930s. The system includes clear rules against such policies, especially at the IMF but also in the WTO, but it has failed to address the problem successfully. So have the United States and the other major countries.

At least 20 economies actively manipulated their currencies during the first 15 years of this century, as described in chapter 4. Their excessive intervention in the foreign exchange markets—beyond what was needed to build adequate reserves or, in the case of resource exporters, to save for the future—peaked at more than $1 trillion in 2007, with China alone gaining $250 billion in net exports and the United States losing $235 billion.

In the context of the Great Recession and the weak recovery from it, several million jobs were transferred from deficit to surplus countries, underlining the deflationary bias of current global economic arrangements. Sterilized intervention, at least when large amounts of resources are devoted to it, is clearly effective in achieving its goals. Not all of the intervening economies have global impact, but a number of them, especially members of the G-20, are systemically important.

China was by far the most active manipulator, piling up more than $4 trillion of official holdings (including its sovereign wealth fund) as a result of intervention that averaged $1 billion to $2 billion per *day* for a number of years. Manipulation fully explained its external surpluses, which peaked at 10 percent of GDP in 2007 (see figure 4.3). Several other Asian economies—most notably Hong Kong, Korea, Singapore, and Taiwan—behaved similarly at least some of this time, partly to emulate China and avoid losing competitive position to it.

A number of oil-exporting countries also intervened heavily and accumulated large stocks of foreign exchange. So did a couple of European countries on the fringes of the euro area, most notably Switzerland, which temporarily became the world's largest manipulator in 2012. Japan, which had been an aggressive manipulator in earlier periods, did not intervene after 2004, except in 2011, in response to safe-haven inflows after the Fukushima nuclear tragedy (and orally in late 2012).

Intervention in foreign exchange markets is not necessarily harmful. "Leaning against the wind" to reduce disorderly and reversible movements is fully acceptable. Deficit countries can intervene defensively to resist unjustified strengthening of their currencies. Countries with inadequate levels of reserves can buy foreign currencies to augment their safety nets.

Nor have manipulators necessarily set out primarily to divert economic activity away from other countries. Some have used the exchange rate as a tool, even the primary tool, for managing their monetary policies. Some have seen it as an integral element of development policy. Some, especially smaller countries, have defensively shadowed the currencies of large neighbors to avoid losing competitive position to them. Different agencies within a government may have different motives: The central banks of Switzerland and even China have seen currency policy as a way to preserve financial, and thus economic and price, stability while their economic ministries have been more concerned with mercantilist trade objectives.

It is thus imperative to focus on the impact rather than the intent of countries' policies. Intervention that resists adjustment of underlying surpluses constitutes manipulation, which can raise major economic and political problems. When conducted by large and important countries, notably members of the G-20 steering committee for the world economy, it can threaten international monetary stability and the trading system. We propose a set of new policy responses to help deter manipulation in the future and prevent such problems.

The United States has felt by far the largest impact of currency manipulation. The manipulators intervened largely in dollars, effectively setting the exchange rate between their currencies and the dollar as the United States remained passive in the exchange markets. Foreign manipulation accounted for one-quarter to one-third of the average US external deficit, which peaked at a record 6 percent of its GDP in 2006 and has remained near 3 percent since. During the five years from 2009 through 2013, the United States lost about 1 percent of GDP each year and a million jobs or more as a result of these trade effects.

These distortive currency policies also had highly negative economic effects before the Great Recession. The manipulators invested most of their hundreds of billions of dollars of annual intervention in the United States, contributing to the loose financial conditions that helped create the housing bubble whose collapse brought on the financial crisis and the Great Recession. China's undervalued currency was also the cause of about a third of the accelerated loss of manufacturing production and employment attributed to rising US imports from China between 2001 and 2007 (Autor, Dorn, and Hanson 2016).

The US administration complained continually (but mainly privately) to China (and a few others) throughout this period. China let the renminbi gradually rise (by 35 percent against the dollar and by more than 50 percent on a trade-weighted basis by 2015), cutting its external surplus to as little as 2 percent of its GDP. But China and the other manipulators got away with a great deal of beggar-thy-neighbor activity for more than a decade.

The inadequacy of the global system meant that there was never an effective international response to the problem. The US authorities chose not to respond more forcefully—despite the clear analyses of Bergsten (2005, 2007), Goldstein (2004), Goldstein and Lardy (2008), and others—for several reasons: (1) many Americans gained from the cheaper imports and lower interest rates generated by China's undervalued exchange rate; (2) most large US companies, especially those that had invested in China, did not want to confront the Chinese; (3) the authorities believed, rightly or wrongly, that a more aggressive public stance would be counterproductive in terms of eliciting Chinese cooperation on the exchange rate itself; (4) they feared that doing so would add a major new element of instability to the world economy, especially during the Great Recession and subsequent euro crisis, when Chinese cooperation on broader economic issues was needed; (5) they believed that publicizing China's manipulation would encourage rather than contain protectionism at home; (6) the United States had its own broad foreign policy agenda with China; and (7) the authorities were simply not aware of the heavy price America was paying through the large influx of foreign capital (although Ben Bernanke was already talking about the "global savings glut") and the huge hit to manufacturing employment later identified by Autor, Dorn, and Hanson (2016).

The United States was the largest loser from the recent currency conflict. But manipulation also adversely affected many other countries. The euro area lost $50 billion to $100 billion of annual output and associated employment as a result of manipulation during and after the Great Recession. The enhanced competitive position of the Asian manipulators undermined the weaker economies of the European periphery and helped trigger the euro crisis, the second phase of the global meltdown. The United Kingdom lost $15 billion to $30 billion per year, and there is evidence that its version of the China shock played an important role in the Brexit vote in 2016.[1]

Many emerging markets that compete with the Asian manipulators, such as Mexico and Turkey, took substantial hits as well. Other developing countries, such as Brazil and India, intervened defensively to protect themselves from running even larger external deficits than they already did. Some of these countries complained publicly about manipulation and made occasional approaches to China on it, but virtually all of them limited their policy responses to defensive intervention of their own and offered very little support to the United States, even when it periodically decided to pursue the issue more vigorously.

As a result of the adverse effects on the US economy, the recognition that currency manipulation represented a massively unfair trade practice, and the perceived inadequacy of administration policy, bipartisan congressional efforts to counter the practice escalated steadily. Congressional threats of retaliation in the years just before and immediately after the Great Recession were key in persuading China to let its currency appreciate to at least a degree (while still intervening constantly to limit that appreciation) and thereby ultimately reduce its global surplus. When the administration needed legislative approval for its ambitious program of trade negotiations, via Trade Promotion Authority in 2015, Congress took the opportunity to press for a substantial toughening of US currency policy. The most far-reaching part of that effort, which would have required the inclusion of "enforceable disciplines" in the TPP and all future FTAs, narrowly failed to win voting majorities. Several significant changes were made in the relevant legislation, however, supplementing the traditional judgmental determination of manipulation with objective criteria that can be readily identified and very specific policy options that must be pursued against recalcitrant manipulators. These actions placed substantial pressure on future administrations to adopt more forceful responses to any substantial resumption of manipulation.

Domestic politics have traditionally been a more serious constraint on US trade deficits, and thus currency policy, than the country's ability to finance those deficits internationally. Indeed, the dollar overvaluation that spawns those deficits has been among the most accurate predictors of protectionist trade policies. This political backlash was partly the case in 1971, when President Nixon implemented an across-the-board import

1. Support for Brexit was significantly higher in British localities with industries that faced rising Chinese import competition (I. Colantone and P. Stanig, "Brexit: Data Shows that Globalization Malaise, and Not Immigration, Determined the Vote," *Bocconi Knowledge*, July 12, 2016, www.knowledge.unibocconi.eu/notizia.php?idArt=17195).

surcharge after the House of Representatives passed far-reaching legislation in the first major outbreak of trade protectionism in the postwar period and threatened more. It was wholly the case in 1985, when Secretary of the Treasury James Baker launched the Plaza Accord, in response to a widespread outbreak of protectionism, some by the administration itself but especially in Congress, sponsored by the leadership of both the House and the Senate, that threatened to disrupt the global trading system.

Similar unsustainability loomed on this latest occasion, contributing in a major way to the far-reaching attack on open trade policies and globalization more broadly in the 2016 political campaigns and ultimately to the election of Donald Trump that sealed the demise of the pending new US trade agreements themselves (including the Transatlantic Trade and Investment Partnership [TTIP] as well as the TPP). If the unwillingness of the United States to move forward toward new trade liberalization presages a new backsliding toward protectionism by the traditional leader of the global trading system, as it has in the past, and especially if the United States explicitly repudiates past agreements such as NAFTA, the world economic order is at risk.

The most fundamental political problem is probably the absence of adequate worker retraining programs and domestic safety nets to help people adversely affected by trade (and other forms of economic change). But the currency issue is also an important source of backlash in the United States. The Obama administration was forced to recognize and respond to the currency aggression of other countries, defend its stance with Congress, and try to keep its trade program intact by accepting tougher legislative mandates and negotiating an unprecedented side agreement to the TPP to address macroeconomic and currency issues. These steps did not satisfy the critics, however; pressure for more forceful action increased in 2016 and 2017.

These widespread policies of direct intervention in the foreign exchange markets to maintain competitive nonappreciation of a large number of important currencies went largely into remission in 2015–16. Some countries, including China, experienced problems in their own economies that led them to intervene on the other side of the market—selling dollars to limit depreciation of their currencies. The cumulative and escalating impact of US, including congressional, criticism of manipulation, and the related adoption of new norms on the issue by the G-7 and G-20 may also have begun to generate concern in the offending countries that they would pay a price for resuming those policies. Today only a few smaller economies could be indicted for manipulation; intervention by the largest manipulators of the past, including China and Japan, has disappeared, at least for a while.

Widespread currency manipulation could return in the near future, however. If China's reform efforts falter or its growth rate slides, it might be tempted to return to the export-led model, which relied heavily on currency undervaluation. If Abenomics fails to revive the Japanese economy, Japan might be tempted to do so, especially if the strengthening of the yen that occurred in early 2016 resumes. If India decides to aim for rapid export expansion to boost its growth rate, it could resume its heavy intervention of past years. If any or all of these Asian giants reverted to competitive depreciation, or even competitive nonappreciation, most of the rest of Asia would probably follow.

The North Atlantic countries may be susceptible to such impulses as well. Europe could seek to boost its slow growth by running even larger external surpluses. The United Kingdom already sharply weakened its currency via its Brexit decision. A more aggressive US administration, with greater doubts about globalization than its predecessors and thus less willingness to provide the global public goods of open markets and an overvalued exchange rate, could join the competitive race (especially if its main foreign partners were to go down these routes). If secular stagnation becomes the "new normal" for the world economy, many countries could seek to escape via currency depreciation and stronger trade balances—as they did in the 1930s.

The failure of the global rules and institutions to deal with this issue effectively remains a major source of discontent with the entire system. It thus remains imperative, and indeed urgent, to erect new barriers to currency manipulation, at least by the systemically important countries that affect global outcomes.

The situation is complicated by the adoption of unconventional monetary policy, by the United States and United Kingdom in 2009 and later by Japan (2013) and the euro area (2014), which led to suspicions that the large high-income countries were seeking to stimulate their own economies by weakening their currencies. Each currency in turn did weaken substantially, including against the currencies of emerging-market economies as well as against one another, as they adopted their new monetary stances.

There is a fundamental difference between manipulation of currency markets and unconventional monetary policy, however, as noted in chapter 2. Manipulation works via intervention in *foreign* currencies to directly alter the *external* price of the domestic currency. Unconventional monetary policy, like conventional monetary policy, is implemented via operations in *domestic* financial markets with *domestic* instruments. The former affects exchange rates directly and as its main intent; the latter does so only indirectly and as a byproduct of its basic goal of expanding the domestic economy.

International rules, embedded in the IMF Articles of Agreement, make a clear distinction between domestic and external policies. Countries are allowed free rein to choose domestic policies, even when those policies have spillovers; they face limits on their external policies. Because external policies have greater spillover, this legal distinction makes economic sense; it informs the statements of the G-7 and G-20 that encourage countries to use macroeconomic policy to achieve sustainable growth while promising to avoid using exchange rate policy to gain competitive advantage. But emerging-market and developing countries that feel disadvantaged by unconventional monetary policy in rich countries will undoubtedly continue to complain, sustaining at least the appearance of currency conflict and underlining the need for both better international understanding of the issue and more effective policy tools to head it off.

Several key analytical distinctions underlie the fashioning of a constructive and sustainable policy response to the threat of renewed currency conflict. The current period, during which most of these conflicts (but not the domestic political reaction to them in the United States and elsewhere) are in remission, would be a propitious time to start implementing responses, because they could be taken without indicting individual countries as "manipulators" and thus inflaming the effort. Indeed, it may be essential to move expeditiously on the issue to overcome the risk that the domestic political reaction in the United States will seriously disrupt the global trading system. We address the key analytical issues in turn and indicate how each could be resolved as part of a comprehensive policy package.

Self-Insurance versus Manipulation

The central theme of this study is that direct intervention by surplus countries in the foreign exchange markets to keep their currencies from appreciating in value is the most important currency issue of the current era. But many countries that intervene excessively justify their action on the grounds that they need to accumulate large amounts of foreign exchange to protect themselves against future downward pressure on their currencies that could disrupt their economies. They argue that their intervention is motivated by self-insurance goals rather than by competitive mercantilist objectives. The issue reduces largely into the question of the level of reserves that countries need to defend themselves in a world of globalized economies and high capital mobility. Such concerns have always been present but were underlined for Asian countries by their experience with the region's financial crisis in 1997–98, when countries ran short (or out) of reserves and thus had to borrow from the IMF and accept its policy recommendations, many of which they despised. This experience taught them, and many other countries, that they must hold much larger reserves than they had in the past. The rapid growth in both the value and volatility of international capital flows over the succeeding two decades reinforced those views in many countries.

There is no widely agreed upon measure of the "proper" level of a country's reserves, including the holdings of its sovereign wealth funds, as discussed in chapter 4. The number may differ sharply from country to country. Some extremes can be ruled out: The level of China's official assets (including its sovereign wealth fund) was clearly excessive when it exceeded $4 trillion at the peak and is still far too high today (at about $3 trillion). But there will inevitably be prolonged debates over whether legitimate defensive motives or competitive intent drive countries' intervention.

There is thus a need for clear new rules of the road with respect to reserve adequacy. The old norm of the equivalent of three months of imports of goods and services is not appropriate for all countries, particularly countries with open financial markets. We thus propose a two-part threshold of three months' equivalent of imports or 100 percent of short-term foreign currency liabilities, whichever is larger. Purchases of foreign exchange up to those levels should be tolerated even when a country already has a current account surplus. Larger holdings would be permitted, but significant purchases toward that goal would be prohibited when a country runs a substantial current account surplus. Exporters of nonrenewable resources would be permitted to save a reasonable fraction of their resource earnings in foreign official assets even when they have large surpluses.

Offensive versus Defensive Intervention

We have defined currency conflict primarily in terms of direct intervention in the foreign exchange markets by countries that buy foreign currency (usually dollars) in order to keep their currencies from rising in value. Not all intervention needs to be banned. Intervention to smooth disorderly short-term market fluctuations has traditionally been acceptable. Even countries that let their exchange rates float freely, such as the United States, have intervened in this way. Such intervention should be readily detectable (if the relevant data are made available) as occurring on both sides of the market, with little net effect on total reserves. Intervention is also justified for a country with low reserves that wants to build its holdings to the level indicated in the previous section.

Intervention is also permissible in two other sets of circumstances. One is where deficit countries are experiencing appreciation of their exchange rates that increase those deficits and push them away from sustainable equilibrium. Such appreciation, especially in emerging markets but also in the United States, can result from capital inflows triggered by an easing of monetary policy abroad, especially in advanced economies, and by hot money flows in response to market or other uncertainties. It can also result from direct intervention by manipulators, as it has in the United States.

Intervention to limit, or even reverse, such disequilibrating currency movements is defensive in nature and wholly appropriate. Brazil and other deficit countries have deployed such policies in recent years. More active use of such defensive intervention could be part of a comprehensive response to currency aggression, by the international community as a whole under a reference rate system or by the United States unilaterally under the heading of countervailing currency intervention, both of which were described in chapter 5 and are addressed below. Such intervention does not exacerbate international currency conflict; indeed, if carried out consistently and on a sufficient scale, it could deter it, by eliminating any gains to the manipulators themselves.

Another permissible, indeed laudable, type of intervention occurs when surplus countries buy their own currencies to keep them from weakening and thus promoting even larger surpluses in their current accounts. Downward pressure on the exchange rates of surplus countries that is sufficient to motivate them to take countervailing action is infrequent but does occur, as it did in China during 2015 and 2016, when doubts arose over both the future of its economy and the competence of its management.

More ambitiously, reference rate proposals for international monetary reform would encourage, or in their strong forms require, surplus countries to push their currencies upward toward equilibrium levels to correct persistent misalignments. They would bar countries from intervening to push their rates away from equilibrium levels, making existing imbalances even worse, as with competitive nonappreciations. We strongly support the adoption of such reforms and believe they should be pursued on their own or in tandem with any unilateral steps the United States might decide it needs to adopt to start resolving the issue.

The Special Case of Key Currency Countries

The key currencies play a special role in the currency conflict narrative, because they are the primary vehicles for manipulation: In intervening to keep their currencies from appreciating, manipulators buy key currencies directly and/or switch into them to diversify their growing levels of reserves. Most intervention, especially by China and other Asian economies, is believed to take place in dollars. Considerable intervention, especially by Switzerland and other manipulators in or near Europe, takes place in euros. A smattering apparently takes place in other currencies, including the yen, as revealed in 2011, when Japan complained publicly about Chinese purchases of yen bonds (when Japan was unable to reciprocally purchase Chinese bonds).

Much of the uniqueness of the reserve currency countries comes from the fact that the informal but powerful conventions of the international monetary system have precluded their intervening to counter the intervention of others. The implicit "grand bargain" underlying the Bretton Woods system, whether under the original "fixed" or subsequent "floating" exchange rate regimes, is that nonreserve countries can use the dollar as their intervention and reserve medium in return for financing the external deficits the United States runs as a result. Global liquidity, and reserves to finance increasing levels of trade and economic activity, rise as a consequence.

All parties widely accepted this "deal" for most of the postwar period, even after the United States abrogated gold convertibility for foreign monetary authorities in 1971, though it has frequently created perceptions around the world that it favors the United States and allows it to run "deficits without tears" and dominate global finance. In reality, the arrangement is a mixed blessing for the United States. It does earn modest amounts of seigniorage and a good deal of global prestige from the international use of the dollar, and the central role of the dollar in global markets enhances the ability of the United States to enforce financial sanctions.

But the United States also bears two major costs. One is that "deficits without tears" produce a steady buildup of net foreign debt for the United States that now exceeds $8 trillion. If left unchecked, this deficit will cause major problems, both for the United States and for the world economy, as described in chapter 3, by exempting both from normal disciplinary effects of the adjustment process.

A second cost is that other countries, rather than the United States itself, set the exchange rate of the dollar, virtually ensuring its chronic overvaluation and explaining much of the external US deficits that have prevailed throughout the postwar period. The mechanism is straightforward: China and other manipulators buy dollars, pushing (or holding) the exchange rate up and short-circuiting the corrective realignment that would occur under normal market conditions.[2] The willingness of the United States to accept dollar appreciation and overvaluation—and the resulting large trade and current account deficits—was essential if the currency manipulation was to succeed.

The reality is thus the opposite of the conventional wisdom: The rest of the world benefits greatly from the international role of the dollar, and the impact on the United States itself is uncertain at best and arguably quite negative. The United States provides a major global public good (from which it, of course, benefits as well) by permitting the dollar to play

2. Dooley, Folkerts-Landau, and Garber (2004) called this regime of managed exchange rates, led by China, the Bretton Woods II monetary system.

its key currency role—including by letting other countries enjoy export-led growth. Though they occasionally grumble about the alleged "exorbitant privilege," other countries have been largely content to adhere to the implicit rules of the game. But the costs of dollar overvaluation from foreign manipulation are extremely large for the United States. They include almost $200 billion of annual output and more than a million jobs during and after the Great Recession, sizable macroeconomic costs in the run-up to that period, and lasting distortions of the composition of the economy (see chapter 4).

The overarching questions for both the global system and the United States itself are whether the United States should permit this arrangement to continue and whether its domestic politics will allow it to do so. The attack on globalization in general and on new trade agreements in particular that arose in the congressional debates in 2015, the political campaigns of 2016, and especially the Trump administration raise serious questions about the viability of the traditional US stance. The future of the open international trading and financial system is at stake.

We conclude that the United States must take steps to eliminate the asymmetries in the current system, preserve global stability and prosperity, and protect its own economic interests—preferably with widespread international support. The most straightforward way to do so, as outlined in chapter 5 and elaborated on below, is to adopt a policy of countervailing currency intervention, through which the United States intervenes to counter the manipulation of other countries. If, for example, Japan buys $1 billion of dollars to keep the yen from rising, the United States would buy $1 billion of yen to offset and neutralize the Japanese move. Just announcing such a policy should deter intervention by other countries, which would recognize that such actions would become futile in affecting market exchange rates.

In adopting a policy of countervailing currency intervention, the United States should seek the support of the other key currency countries. The euro area has suffered substantially from manipulation and, as the second international currency, has a major interest in deterring the practice. Japan, which has manipulated in the past itself, was at least temporarily the target of Chinese intervention and is already severely constrained by US monitoring of its policies and G-7 accords. All of the world's largest economies, as members of the G-20, have effectively agreed to restraints on currency manipulation. The United States should propose the creation of a Special Drawing Rights (SDR) Council, preferably within the IMF, that would bring together the issuers of the five key currencies (China, the euro area, Japan, the United Kingdom, and the United States) that make up the

SDR as part of its new initiative on these issues and contribute inter alia to the further evolution of international norms against manipulation.[3]

The United States has elicited very little support from other countries for its efforts to address the currency (or broader surplus country) issue. The lack of support partly reflects the inertia of current international monetary arrangements, under which the United States essentially agrees to run deficits and provide liquidity in return for its "automatic financing" by others. It also partly reflects the mercantilistic predilections of other key countries, as manifested for some by the currency manipulation itself. Some of it is because the United States has not been more energetic itself—for example, never formally labeling China a "currency manipulator" despite the requirements of its own law. Hence it is likely that the United States will have to take unilateral action to galvanize the reform process, as it did in 1971, when the "Nixon shock" eventually produced the seismic (and highly desirable) shift from fixed to flexible exchange rates. It should nevertheless attempt to multilateralize the strategy as much as possible, as discussed below.

Rules versus (Lack of) Enforcement

The international rules that address currency issues are a mixed bag. The IMF's Articles of Agreement, and their interpretive guidelines, explicitly ban the manipulation and competitive devaluation of exchange rates. They require countries that plan to intervene to consult with other relevant countries, especially those in whose currencies they plan to operate.

However, manipulation and competitive devaluation are banned only if they are undertaken "in order to prevent effective balance of payment adjustment or gain unfair competitive advantage," raising the issue of intent. Many manipulators deny that their goals are mercantilist, arguing that their intervention is aimed at preserving financial stability or other purposes. Hence the IMF rules are imperfect. They are universally agreed on and frequently reiterated, however, and go far toward achieving the purposes we have in mind. We thus use them as the basis for our proposals, hoping and expecting that the qualifying caveats that undermine their practical utility will recede into irrelevance as the process is amended.

The frequent invocations of the IMF rules suggest that international currency norms may be evolving in a way that will help prevent future conflicts. The G-7 has gone farthest, pledging to avoid any intervention except after consultation within the group. The G-20 has not advanced that far, but it has emphasized its commitment to "not target our exchange rates for competitive purposes" (G-20 2016). The (now defunct) TPP side agree-

3. We are indebted to Robert Zoellick for this suggestion.

ment broke new procedural ground via its association with a trade pact and required some of its members to significantly increase the transparency and accountability of their current practices. The new US legal framework adds to this normative evolution, even though it is a purely US construct. This phenomenon may at least partly explain the recent remission in manipulation.

No effective enforcement mechanism supports the IMF rules, however. Hence its rules do not function as effective deterrents, and the Fund's toolkit is limited to hortatory "name and shame" efforts, which have some impact but cannot be counted on to induce countries to change policies they regard as important for their economies. Moreover, the IMF can pursue even these limited sanctions only through a decision-making process that is highly politicized and thus unlikely to be used against a major power. (It has used them only twice on the currency issue, against Korea and Sweden in the 1980s.) The IMF has therefore been unable to play any significant role on an issue that was supposed to be at the very top of its agenda of responsibilities.

The US government and some other governments of deficit countries have thus become enormously frustrated with the IMF. This frustration has permeated the Congress, much of which is already skeptical of international institutions. Congressional ire has been directed not just at the IMF but also at the Treasury Department and others in the executive branch who defend the IMF despite its ineffectiveness on this issue. The US authorities have been unable to rely on the IMF to address the currency problem and have concluded that they must look elsewhere, especially to their own unilateral devices, for meaningful action.

The WTO has a parallel rule on exchange rates, but it is more ambiguous than its IMF counterpart and has never been tested. There is considerable controversy among scholars concerning its applicability to cases of manipulation, with most doubting its utility. Moreover, the WTO must rely on IMF judgments concerning the substance of currency issues. The difficulties at the Fund thus compound those at the WTO (and the two institutions are frequently unable to work effectively together).

Unlike the Fund, the WTO can deploy effective trade sanctions when its rules are violated and could potentially contribute to a multilateral response to the problem. The irony is thus that the IMF has good rules but no teeth while the WTO has lots of ammunition but no action triggers in this domain. Any serious effort to develop new multilateral mechanisms to combat international currency conflict should draw on the comparative advantage of each institution. The management of the IMF should push hard for its membership to reach expeditious judgments by simple majority vote of its board of directors on the merits of currency complaints. The WTO should then be asked under its Article XV (4) to authorize its member countries to deploy trade sanctions against countries that violate its currency rules.

The key requirement is to reach agreement on practical operational criteria to implement the IMF's laudable goals. In addition to the norm on reserve adequacy suggested above, only two others are needed: definitions of a "substantial" current account surplus and "persistent one-sided intervention" in the foreign exchange markets. We suggest that any surplus above 3 percent of a country's GDP qualify as "excessive" and that net intervention that totals more than 2 percent of a country's GDP over the previous 12 months should activate that criterion. Table 4.1 shows the country coverage from our criteria in recent years.

Congress took a useful step in the direction of establishing such objective criteria when, working with the administration, it passed the Trade Facilitation and Trade Enforcement Act of 2015. The act requires the administration to undertake "enhanced engagement" with countries that meet a set of criteria that are conceptually similar to those suggested here (as originally suggested in Bergsten and Gagnon 2012). In its initial report under that legislation in May 2016, Treasury defined a "material" current account surplus as one that exceeds 3 percent of a country's GDP and "persistent one-sided intervention" as exceeding 2 percent of a country's GDP over the previous 12 months.[4] The new law requires Treasury to address countries that are "major trading partners of the United States," which it defines as exceeding $55 billion in exports plus imports in 2015. This group includes only a dozen countries. We would focus on systemically important currency manipulators (SICMs) and thus the slightly larger membership of the G-20.

The Trade Facilitation and Trade Enforcement Act of 2015 also requires a target country to run a "significant" bilateral trade surplus with the United States, which Treasury defines as exceeding $20 billion in 2015. We would drop this criterion as irrelevant in a world of multilateral trade and payments. The new law does not include a criterion for "adequate reserves," which we use to exclude countries where self-insurance is still justified. (See chapter 4 and Bergsten and Gagnon 2016 for more details on the new law and the Treasury report.)

Reflecting the widespread remission of manipulation, Treasury correctly concluded that no country currently met the standards of the new

4. In its October 2016 report, Treasury added language that gave it flexibility to apply the criterion of "persistent one-sided intervention" when the amounts totaled less than 2 percent of GDP, because the numbers resulting from that metric would be very high for large countries such as China and Japan.

law requiring “enhanced engagement” as it defines them. It did, however, place on a new “monitoring list” five economies that met three of its four key criteria: China, Germany (which could be branded a manipulator only as part of the euro area, because it does not have its own currency), Japan, Korea, and Taiwan.

The new US legislation, like the similar course of action suggested here, represents a major conceptual advance by substituting a set of objective criteria for the subjective judgments of “currency misalignment” and “intent to manipulate” that have been central to the issue in the past. Efforts to determine the extent of misalignments are fraught with huge intellectual difficulties, even before getting to the politics of trying to reach international agreement on them. We therefore suggested previously (Bergsten and Gagnon 2012) that the concept should be replaced with one that could be implemented objectively. Likewise, Treasury’s interpretation that countries could be designated as manipulators only with proof of their intent to manipulate became an insurmountable hurdle even when Treasury’s own analyses showed that a country was clearly engaging in such practices. The application of standards in this highly contentious policy area will always be difficult, but we believe that the new conceptual foundations represent major progress toward meaningful action where very little has transpired heretofore.

The 2015 legislation seeks to ensure enforcement of its norms by requiring the administration to take one or more specific actions against countries that meet its criteria (as several would have in past years under Treasury’s [and our] standards) and fail to remedy their practices within a year. These actions include (1) denying Overseas Private Investment Corporation (OPIC) programs, (2) denying US government procurement (except for countries that are members of the Government Procurement Agreement in the WTO), (3) proposing to the IMF that it dispatch a “special consultation” to the country to discuss the problem, and (4) “taking into account” the country’s currency policy in determining whether to pursue a trade agreement with it. The last of these actions might have had some deterrent effect vis-à-vis countries that would have liked to join an expanded TPP (such as Korea and even China) or might now envisage a bilateral agreement with the United States (such as Japan), but the four-part menu does not add much firepower to the battle against currency aggression, especially with the demise of the TPP. A highly desirable improvement would be the addition of countervailing currency intervention and submission of cases to the WTO under its Article XV (4), as described in chapter 5 and below, to the list of alternative remedies an administration would be required to take against continued manipulation.

Currency Policy and Trade Policy

This discussion indicates the need to think about currency policy and trade policy together. The United States, however, has seen trade and currency largely through separate lenses. The conceptual reason has been economic. Exchange rates have been seen primarily as driving the trade *balance*, a macroeconomic issue largely reflecting underlying economic fundamentals, such as the relationship between domestic saving and investment. In a world of flexible exchange rates, trade policy is viewed as affecting the *level* and *composition* of trade flows but not the overall balance.

The second and probably more powerful operational reason for this bifurcation has been institutional: At both the national and international levels, different agencies handle trade and currency. In the United States, the US Trade Representative is responsible for trade, and the Treasury Department is mainly responsible for macroeconomic, and especially direct currency (including intervention), issues. Most other countries maintain similar distinctions. Internationally, the IMF handles macroeconomic issues, including exchange rates, while the WTO is responsible for trade (its leadership has repeatedly rejected any direct role on currency topics).

This distinction is no longer tenable. It has already proven unviable at key points when the United States had to confront major trade imbalances brought on by currency misalignments. In 1971 President Nixon deployed a temporary import surcharge as leverage to negotiate dollar devaluation. In 1985 rampant protectionist pressure in Congress forced the Reagan administration to abandon the benign neglect of the dollar of its first term and negotiate a substantial depreciation via the Plaza Agreement. In 2015 Congress conditioned its willingness to pass new trade legislation (Trade Promotion Authority) on more aggressive efforts by the administration to counter currency manipulation. Both Donald Trump and Hillary Clinton couched their opposition to the TPP (and globalization more broadly) importantly in terms of unfair manipulation. Indeed, many political leaders have insisted that currency provisions be embedded directly in all new US trade agreements.

For both sound economic and practical political reasons, an effective US response to the currency problem should encompass both macroeconomic/monetary policy and trade policy tools. We turn now to a discussion of what those tools might look like.

A Proposed Strategy for the United States

The main goal of the new US policy should be to deter future currency conflict by creating credible policy mechanisms that would sanction manipulators with sufficient force to dissuade them from undertaking such activities. The targets should be countries that are systemically important, which we define as members of the G-20 steering committee for the world economy.[5] Manipulators should be identified through the application of a set of simple and objective criteria: current account surpluses exceeding 3 percent of their GDPs over the previous year coupled with annual intervention exceeding 2 percent of GDP over the previous year on top of reserves already exceeding the equivalent of three months' worth of imports or 100 percent of their short-term external liabilities in foreign currencies, whichever is larger, plus a reasonable amount of foreign saving by resource exporters.

We have already suggested that the most effective policy response to the risk of future currency aggression would be an announcement by the United States that it would henceforth carry out countervailing currency intervention against any G-20 country that met the relevant criteria and sought to prevent appreciation of its exchange rate by intervening directly in the foreign exchange markets. Such an announcement should, by itself, deter most if not all future manipulation, by promising to neutralize its impact and thus render it ineffectual in strengthening the manipulators' competitiveness. The announcement should work like the famous statement by European Central Bank President Mario Draghi in August 2012 to do "whatever it takes" to avoid a crisis of the euro, which immediately calmed markets and ended the crisis without action having had to be implemented. It should thus preempt the threat of "currency wars."

Unlike countervailing duties or other trade policy sanctions that apply only to imports, the new policy would address both sides of the trade balance. It would be very different from import controls, even wide-ranging ones, whose depressing impact on imports would probably be offset by corresponding dollar appreciation that would limit any net benefits for the US economy.

Countervailing currency intervention would, of course, have to be credible in market terms to have the desired deterrent impact. China's intervention over the past decade reached $500 billion in some years. Some other countries intervened at the same time, adding to the total the United States would have had to counter had it been implementing countervailing currency intervention (see box 5.2).

5. Avoidance of manipulation by G-20 countries would probably prevent manipulation as well by smaller countries that feel compelled to emulate their larger neighbors. A number of China's neighbors in Asia, for example, move their currencies in tandem with the renminbi (Kessler 2012) and have thus intervened at least partly to avoid losing competitive position to it. We do not include Switzerland as a potential target, despite its frequent manipulation and near G-20 size, but it could reasonably be included.

It is highly unlikely that manipulation, which is now largely in remission, would resume at anything like these levels—if at all—in the face of an announced US policy of countervailing currency intervention. In addition, private investors would almost certainly counter efforts by manipulators to place artificial ceilings on their currencies once the US government declared its intention to do so.

As described in chapter 5, however, countervailing currency intervention would maximize its credibility—and limit the likelihood that it would actually have to be used in practice—by assembling the largest possible stock of ammunition.

The Exchange Stabilization Fund (ESF) of the Treasury Department possesses assets of about $100 billion. Under the usual 50-50 sharing of responsibilities for currency operations, the Federal Reserve would probably provide another $100 billion. The "war chest" at present would thus amount to about $200 billion. It would be desirable to augment this total to make sure that the deterrent was sufficient. Congress should therefore be asked to authorize a large amount, perhaps $500 billion (which the Fed would presumably match, for a total of $1 trillion), of additional borrowing authority to bring the total to a "Powell doctrine" level of overwhelming force.

Such borrowing authority would not represent a charge to the US budget even if the resources had to be used (although any actual borrowings by the ESF would count against the debt ceiling). The dollars sold by the ESF would be fully offset by the foreign currencies that were bought in an "exchange of assets," to use the agreed budgetary terminology.[6] In terms of future revenues, the exchange should make money for the United States, which would by definition be buying foreign currencies when they are undervalued.[7] The Federal Reserve does not operate with authorized or appropriated funds, so its participation would raise no budgetary issues (though it, too, would probably enjoy increased profits that, under standard oper-

6. In its assessment of the budgetary cost of US funding of the IMF, the Congressional Budget Office opined that there is no budgetary cost arising from the exposure to foreign currency risk, because any difference in interest earned on foreign-currency versus domestic-currency assets is likely to be equal and opposite in sign to any expected change in the dollar value of foreign currencies (CBO 2016).

7. The US government would have made substantial profits from the sizable subsequent appreciation of the renminbi had it bought renminbi when countervailing currency intervention was first proposed, in the mid-2000s (see C. Fred Bergsten, "Muzzling Our Economic Negotiators," *Washington Post,* September 10, 2003; "The Chinese Exchange Rate and the US Economy," statement before the Senate Committee on Banking, Housing and Urban Affairs, January 31, 2007; "We Can Fight Fire with Fire on the Renminbi," *Financial Times,* December 17, 2010; and box 5.2 in chapter 5 of this book).

ating procedures, would be remitted annually to the Treasury and thus help reduce the budget deficit).

There are several possible objections to countervailing currency intervention. Chapter 5 addresses some objections of a technical nature. One objection of principle—cited by some in the Obama White House and Treasury when the idea was raised with them informally by members of Congress—is that it would be inconsistent for the United States to undertake currency intervention when it was urging other countries to avoid it. But there is nothing wrong with intervention per se. The problem is with intervention that *impedes* needed adjustment. The goal of countervailing currency intervention would be to *promote* needed adjustment, by providing a much more muscular deterrent to that particular form of intervention—one that ideally would not have to be used much if at all. Theory posits that the harm from foreign official distortion of exchange rates is optimally rectified by intervention in the opposite direction. Committed supporters of markets and opponents of government intervention should thus be the strongest proponents of countervailing currency intervention.

There is also an understandable concern that countervailing currency intervention could have unforeseen consequences. For example, US interest groups with parochial objectives could capture its implementation, as has sometimes happened with countervailing and antidumping duties. Congress and others could exert pressure to use the tool for blatantly protectionist purposes. Other countries could emulate the new US posture in less rigorous ways, and it could even be turned against the United States itself (e.g., versus a renewed use of quantitative easing, despite its clear analytical difference from manipulation, as outlined above). Fearing they might be targeted, countries could reduce or even reverse the liberalization (and increased transparency) of their own capital markets to reduce their vulnerability to countervailing currency intervention. They could look for more indirect and opaque ways to conduct intervention that could not be readily traced. If implementation of the new policy were mishandled, especially if it were applied too frequently, it could escalate rather than counter the risk of currency conflict and roil markets as a result. None of these concerns are dispositive, but it must be acknowledged that, like any major new policy instrument, this tool could trigger unintended consequences that could affect its impact on the US and world economies.

The most fundamental objection to countervailing currency intervention is that it would overturn the implicit bargain at the heart of the dollar-based monetary system: that the United States would provide this global public good, even as it led to dollar overvaluation and US external deficits, in return for which other countries would finance those deficits without grumbling too much. This bargain has provided adequate liquidity for the world economy. It has largely prevented external financial unsustainability for the United States (although it has failed to preserve domestic political sustainability and thus threatened an open US trade policy and, through it, the global trading system). A US effort to weaken its exchange rate would also run counter to the "strong dollar" rhetoric of the last two decades and perhaps be viewed as an explicit repudiation of its traditional systemic leadership role.

It is doubtful, however, that countervailing currency intervention would do much, if anything, to dent the role of the dollar in the world economy. Empirically, neither of the two previous US initiatives to weaken the dollar substantially, in 1971 and 1985, cut into the dollar's international role (though the sharp market-driven fall in the dollar in 1978 did so to a modest extent for a short while). Nor did the extended efforts to promote a stronger yen, in the 1980s and 1990s, and a stronger renminbi more recently. The continued absence of any significant rival to US currency leadership in the short to medium run underlies the age-old adage that "you cannot beat something with nothing" (Prasad 2014). Hence we believe that the United States could adopt a policy of countervailing currency intervention—or more broadly a strategy of responding much more firmly to currency aggression by others—without jeopardizing the international role of the dollar (for better or worse).

A side benefit of countervailing currency intervention, to the extent it was actually implemented, is that it would enable the United States to start building a meaningful reserve of foreign exchange of its own. US reserves of \$40 billion are very meager compared with the \$300 billion to \$600 billion held by Hong Kong and Singapore, much less the trillions of dollars held by China and Japan. The rationale is that the United States does not need to build international reserves because it can borrow unlimited amounts in private capital markets. Moreover, its external liabilities, though large, at about \$30 trillion, are denominated in its own currency, so it could not be forced into a currency crisis; the floating dollar would simply depreciate—and improve the US competitive position—if a sharp fall of confidence were ever to occur.

This logic has several flaws. The United States might not always welcome a sharp decline in the dollar if, as in 1978, when it had to mount a major rescue operation, the result was a sharp increase in inflation and/or interest rates. Numerous undesirable events, including another rating downgrade or a sequence of policy missteps, could trigger such a decline. A US reversion to protectionism or isolationism more broadly, which now seems all too possible, could drive down the currency, just as the Brexit vote led to a sharp fall in the value of the pound. Hot money could flow out of the United States the next time it is the epicenter of a global crisis. Over time the rise of China or recovery of the euro area could lead to international portfolio diversification out of the dollar. If the United States needed to intervene to support the dollar in such circumstances, especially on short notice, it would not have the wherewithal to do so. Hence it should build at least a modest war chest of foreign currency holdings. Countervailing currency intervention would generate just such an asset buildup if the United States actually needed to buy foreign currencies to offset their issuers' purchases of dollars for competitive reasons.

Germany and other members of the euro area (or any currency union) pose problems for countervailing currency intervention because they do not have their own national currencies. For this reason, currency unions must be analyzed on a consolidated basis for purposes of assessing currency manipulation. The euro area in any case would not be a target of countervailing currency intervention in the near future, because it is not accumulating official foreign assets. The United States and other countries, both inside and outside the euro area, should instead continue to press Germany to use its strong economic and budget position to adopt more expansionary fiscal policies in an effort to stimulate stronger growth and smaller surpluses in Europe as a whole, with consequent benefits for the world economy.

Countervailing currency intervention is clearly legal, in both domestic and international terms. We believe that a US administration could implement it without any need for new congressional authorization. Such intervention would simply be an adaptation of the intervention in currency markets that the United States has carried out, usually through joint action by the Treasury Department (via the Exchange Stabilization Fund) and the Federal Reserve System, on thousands of occasions in the past.

However, congressional authorization for additional borrowing would be needed to equip the ESF with adequate resources to provide full credibility for any intervention that might be needed; such authorization would also add weight and permanence to the new US policy. Countervailing currency intervention could, perhaps most expeditiously, be added to the inadequate list of remedies included in the currency chapter of the Trade Facilitation and Trade Enforcement Act of 2015. Adding it would serve a useful domestic political purpose in providing a tangible response, for which Congress could properly take credit, to widespread concerns over currency policy that Congress has expressed in recent years. The Senate passed a currency bill that included countervailing currency intervention, which it called "remedial currency intervention," in 2011. Passage of currency legislation, with the support or even lead of the administration, might be extremely helpful (or even necessary) to win support for any future trade agreements. Hence we recommend that Congress pass new legislation to authorize and fund countervailing currency intervention, either as an amendment to the currency chapter of the Trade Facilitation and Trade Enforcement Act of 2015 or on a stand-alone basis.

The United States could also adopt a trade policy tool to complement the monetary tool of countervailing currency intervention. One possibility would be the imposition of countervailing duties against imports subsidized by currency manipulation. Such duties could be imposed either through administrative reinterpretation of current legislation or, more definitively, through congressional authorization of the additional criterion for countervailing duties (as the House did in 2010 and the Senate did in 2011 and 2015).

However, countervailing duties would not be a very effective policy instrument. They would cover only the import side of the equation, and trade coverage would probably be modest, as industries would still have to petition for relief and demonstrate injury as a result of the affected imports (and pay the considerable legal fees involved). Moreover, any reduction in imports would probably lead to an offsetting appreciation of the dollar, which would preclude much, if any, net improvement in the current account balance.

In addition, countervailing duties against currency undervaluation are probably not compatible with US obligations under the WTO. No such case has ever been tested, but most trade lawyers believe that the WTO rules do not cover exchange rate issues. Target countries might therefore be able to legally retaliate against the United States, nullifying any net benefits from the tool. Adoption of such a policy would also cede some of the moral high ground that the United States could otherwise command on the issue and feed perceptions that the United States itself was launching a trade war rather than merely defending itself and seeking to deter economic conflict.

It would be desirable, however, to launch an effort in the WTO to add currency manipulation to the list of export subsidies subject to the application of countervailing duties under the Agreement on Subsidies and Countervailing Measures (ASCM). The United States should also initiate WTO cases against major manipulators under Article XV (4), which could authorize the adoption of import surcharges against such countries, if such manipulation begins again, as discussed in chapter 5 and below. The United States should also initiate new efforts to add currency provisions to FTAs, as outlined below.

Multilateralizing the Strategy

The unilateral nature of countervailing currency intervention, through which the United States would act as both judge and jury, would undoubtedly generate suspicion and opposition from other countries—especially economies that saw themselves as possible future targets, notably China and some other Asian economies. All economies have committed themselves not to manipulate through their membership in the IMF, some of them repeatedly through declarations of the G-20 and other groups. Most or all know that they have manipulated, but some genuinely believe that their actions were justified and would surely argue that unilateral enforcement of their multilateral obligations by the United States could sanction them arbitrarily and unfairly. Moreover, one of the primary goals of this entire strategy is to plug a gaping hole in the global financial architecture. Hence the United States should try to multilateralize the initiative, in at least three ways.

First, it should encourage the other key currency countries—the euro area, the United Kingdom (whose currency was the dominant key currency before the dollar), and Japan, as well as China now that the renminbi has officially attained reserve currency status as part of the SDR—to adopt similar countervailing currency intervention policies and offer to implement the policy in conjunction with them. To engage China, which could help greatly in achieving the deterrence objective, the United States should propose the creation of an SDR Council in the IMF to consult with the other four key currency issuers inter alia on implementation of the new policy. Other top economies, especially the euro area, have experienced substantial economic losses from manipulation. They should therefore be willing, despite their past reluctance, to join a "coalition of the willing" to curtail the practice.

Second, the United States should seek to engage the IMF and WTO to the maximum possible extent. The IMF's guidelines already include the key objective criteria that determine when a member country is guilty of manipulation (a substantial current account surplus and protracted, sizable one-way intervention in the currency markets). Definitions of *substantial*, *protracted*, and *sizable* would have to be negotiated as part of any new procedures at the Fund, to avoid the current problem of doing so ad hoc on each individual case that arises; we recommend the interpretations outlined above. The other major addition would be an informal new Fund agreement, perhaps initially by the proposed SDR Council, under which its members would be encouraged to apply countervailing currency intervention against designated manipulators.

More broadly, the United States should propose IMF adoption of a system of currency reference rates. Such rates would commit all participants to avoid destabilizing intervention and require, or at least encourage, them to undertake stabilizing intervention as well. The first part of the scheme would reinforce the countervailing currency intervention approach and greatly enhance its legitimacy, adding an enforcement dimension to the proscription of reference rates (and current IMF rules) against intervention to achieve competitive nonappreciation. The second part would add a proactive dimension to the adjustment process, along the lines of what China has already been doing recently to resist further depreciation of the renminbi.

The United States could likewise seek to use the relevant WTO rules to authorize trade policy measures against manipulators. One step would be to seek the addition of currency manipulation to the list of export subsidies prohibited by the ASCM and thus subject to countervailing duties. A broader and therefore more desirable possibility would be to seek interpretation of Article XV (4) as including currency manipulation as a monetary practice that "frustrates the intent" of the agreement and thus calls for across-the-board retaliatory action, presumably import surcharges, by bringing a case against a major manipulator if such circumstances arise again.

Third, the United States could propose including currency provisions in its future trade agreements. The TTIP or the proposed bilateral FTA with the post-Brexit United Kingdom would be natural vehicles to begin this approach, as manipulation has harmed most Europeans. The euro area and the United Kingdom operate floating exchange rates, in which manipulation (or indeed any intervention) is highly unlikely. They are thus natural collaborators with the United States in applying countervailing currency intervention. The euro area (let alone the entire European Union) has never decided how to handle currency policy, however, and is not equipped to do so; the United Kingdom, with its long history of currency policy, might therefore be a better prospect. Perhaps more important, Germany has strongly opposed the adoption of rigorous disciplines on surplus countries (within the European Union as well as internationally). It might well oppose the idea and carry the entire European Union with it (other European countries have also been unresponsive to earlier US proposals on this topic).

If the TPP were ever revived, an immediate question would be its renegotiation to include a currency chapter, as sought by numerous members of Congress as a condition for approving it even before President Trump jettisoned it. Such inclusion could be done by folding the agreed upon side arrangement on exchange rates into the TPP itself, tightening and binding the currency obligations and subjecting them to its dispute settlement mechanism, or converting that agreement into a set of binding commitments with its own dispute settlement mechanism. Either alternative would be difficult in light of the complex tradeoffs that were negotiated in the original TPP deal and the fact that the parliaments of several member countries have already approved it. It may, however, turn out to be necessary for the agreement to win US assent. This alteration of the TPP could be of considerable practical importance if Korea, possibly Taiwan, and especially

China were to participate at some point. The same issues would arise in any renegotiation of NAFTA.

FTAs should rely primarily on two remedies to deter and, if necessary, counter violation of any currency obligations they might include (see chapter 5). The most natural is the snapback of benefits provided to the violator under the FTA itself, the standard remedy for violations of any of a country's commitments. A superior alternative would be countervailing currency intervention, which would cover the exports as well as imports of all partner countries (and could be carried out by all aggrieved countries on a shared basis or simply by the United States as part of its broader countervailing currency intervention policy, as proposed here).

The broader point of multilateralizing the strategy is that unilateral action, especially by the most powerful individual country, has often proven to be essential to reforming the multilateral system. The clearest historical precedent was the brutal action by the United States in 1971 that terminated gold convertibility for foreign monetary authorities and applied an across-the-board import surcharge. That action eventually produced the seismic shift from the "fixed" exchange rates of the original Bretton Woods system to floating exchange rates. Virtually all observers, even those who excoriated the US action at the time (including one of the authors of this volume), subsequently agreed that the reform was highly desirable and that it would not have happened, at least for a very long time, without unilateral US action.

A similar dynamic occurred on trade policy a decade later, when newly aggressive US implementation of its authority to impose unilateral sanctions, under Section 301 of the Trade Act of 1974, beginning in 1985 induced the membership of the GATT, through the Uruguay Round of multilateral negotiations, to dramatically strengthen its dispute settlement mechanism. That mechanism became the core of the new WTO almost a decade later.

Aggressive action by the United States along the lines proposed here would inevitably lead to widespread outcries that it was igniting new currency conflicts rather than deterring them. The United States is still the world's largest economy. It has traditionally been the leader of an open multilateral trading and financial system and the chief defender of the global economic institutions. The dollar is the world's key currency. Other countries have become so accustomed to US provision of major global public goods, most notably its open markets and willingness to run sizable external deficits, that they will instinctively balk at any substantial changes in those arrangements.

The Trump administration's early expressions of skepticism about multilateral institutions and cooperation more broadly, including with respect to the European Union, and the "America First" rhetoric of the president's inaugural address, have heightened anxieties around the world over the unilaterialist tendencies of the United States, which are always present to some extent. Our proposals for a much more activist US approach to currency manipulation, especially the unilateral adoption and implementation of countervailing currency intervention, could reinforce these concerns if they are not handled with the necessary sensitivity.

Such major alterations in global economic arrangements should therefore be negotiated in a cooperative manner, without crises or heavy-handed pressure from the most powerful country. The inability of the system to adopt even modest and incremental steps to respond to currency problems, however, let alone the substantial reforms that are required to deal with them decisively, suggest that this path is not available. Unilateral action by the United States, while distasteful to many, will therefore almost certainly be necessary. But the United States should simultaneously offer to pursue multilateral steps, such as those indicated here, to give other countries an opportunity to participate in the process if they are willing to do so constructively.

Currency Conflict and Foreign Policy

The United States should be able to forge a wide-ranging "coalition of the willing" to counter currency manipulation. Manipulation has hurt a number of deficit countries and even some surplus countries that have never manipulated. The euro area alone was losing $50 billion to $100 billion of net exports a year at the height of manipulation. A number of emerging-market countries, including Brazil, India, Korea, and Mexico, have complained publicly about China's currency policy.

But US foreign policy objectives often complicate such a task. Some of the most active manipulators have also been close US allies that Washington would not want to alienate. Some of them may want to preserve the option of manipulating in the future—especially if their alternative growth strategies falter. To support very large current account surpluses, for example, Japan, Korea, and Taiwan, whose friendship with the United States has long been important, could (or still do) intervene at levels that exceed our criteria. Singapore and Switzerland also continue to intervene massively.

All of these economies have been hurt by the manipulation of others—Japan and Korea by each other, all of them by China.[8] The United States should be able to win their support for a strategy that is based on a credible

8. Japan tried to conduct a variant of countervailing currency intervention in 2011, when it objected to the appreciation of the yen prompted by Chinese purchases of yen bonds and asked China to let it purchase an equivalent amount of renminbi bonds to provide an offset.

policy of reacting strongly to any future instances of manipulation while convincing these trading partners that they could no longer benefit from the practices anyway.

An additional foreign policy complication arises from the fact that Germany, Sweden, and other surplus countries may be leery of the idea, whether or not they have manipulated. They have tended to place the onus of adjustment responsibility on deficit countries and have resisted proposals on exchange rates or other parts of the adjustment process that would limit their flexibility.

An additional concern in forging a consistent policy is that many potential supporters fear getting into a conflict with China and other target countries (EU countries, especially in the euro area, also worry about antagonizing Germany). Even countries that have assailed past intervention by China, such as India and Korea, might be reluctant to enter a coalition that was implicitly aimed against Beijing. Even Brazil, seeking to balance political imperatives with economic concerns, felt compelled to criticize the United States (for quantitative easing) and China alike while decrying the "currency wars" allegedly driving up its exchange rate and disrupting its economy.

Oil-exporting countries provide a special case of mixing foreign policy and economic concerns. Several oil exporters met our criteria as currency manipulators during the decade of manipulation. But only the United Arab Emirates and possibly Norway are likely to be saving excessively in the future and thus exceed our criteria for currency manipulation.

A final important foreign policy consideration stems from the perception that the proposed new US policy would be aimed primarily at China, despite its not manipulating since 2014, reinforced by the reversal of its currency policy to resist depreciation of the renminbi over the past year or so. Despite the lack of reason to take any action against China now, the proposed new US policy could stir tensions with Beijing.

Washington cannot ignore China's rise as an economic (and overall) superpower and the consequent need to integrate it into the leadership structure of the world economy. As China becomes the world's largest economy and trading nation, benefiting from the open trading and financial regimes, it must take greater responsibility for preserving and strengthening the system, especially as the renminbi becomes increasingly recognized as a global currency. This will be particularly essential if the United States abandons, or even significantly weakens, its role as the traditional leader and defender of globalization and the rules and institutions that govern it.

China's decision to stop manipulating its currency, although driven primarily by market forces, may signal Beijing's coming to terms with its global role and suggest a greater willingness to cooperate with the United States to avoid future currency conflict. China's long-stated intention to shift from export-led to consumption-led growth suggests that it does not plan to return to past manipulation policies.

For now China and the United States are benefiting from an interlude free of direct confrontation over the issue, making it timely for the United States to enter a conversation over currency issues, perhaps through the new SDR Council as well as bilaterally, after having adopted a firm new policy of its own on the topic: This would be essential to persuade China that the United States was serious and could not be deterred from proceeding. In the spirit of applying the G-2 concept of US-China leadership (Bergsten 2005) in the international monetary space, the United States should offer to take full account of Chinese views on how best to prevent future currency conflict and thus how to carry out its new plans.

The other major potential targets of a more muscular US policy toward currency manipulation are also mainly in Asia: Japan and Korea, and, if the policy extended beyond our recommendation to focus on the G-20, Taiwan and Singapore, and perhaps Hong Kong and Malaysia. Questions thus arise concerning the consistency of the policy with the "pivot to Asia" (or rebalancing strategy) that has driven US policy toward the region—and indeed overall US foreign policy—during the past several years, especially with the rejection of the TPP by the Trump administration. This adds to the case for multilateralizing the new US strategy to the maximum extent possible.

Remission of manipulation by China and others has reduced the sense of urgency for the issue. The Treasury Department has avoided designating any economy for "enhanced engagement" under its interpretation of the new currency legislation passed by Congress in February 2016. Other countries pressed on this issue by the United States might simply argue that no practical problem now exists.

To counter that resistance, the United States should argue that the problem is likely only in remission and that countries will inevitably be tempted to defend current account surpluses when their currencies resume appreciation. The United States will hardly be free of domestic political pressures if that happens. The absence of effective policy responses to currency manipulation (and the failure of surplus countries to contribute to the adjustment process) thus remains perhaps the biggest single gap in today's international financial architecture. A period of remission should not be an excuse for inaction. In fact, it is ideal for instituting the new policy, because no countries would be indicted and the United States, and ideally others, could establish their new countervailing currency intervention (and perhaps other) policies with less risk of pushback because they would not have to implement them. This period is an ideal time to seek a systemic remedy. We thus strongly advocate proceeding as soon as possible to take advantage of it.

Conclusion

The systemic failure to deter and deal effectively with past currency manipulation—and its sizable economic costs to the United States and other countries—justify a major new initiative to help prevent its recurrence. The domestic politics of trade policy and of globalization more broadly in the United States require a much tougher stance on this issue to avoid far-reaching threats to the global trading system. Erection of effective deterrents justifies the acceptance of some economic risks and foreign policy costs vis-à-vis China, traditional allies, and third parties.

In light of the realities of international negotiations, however, the United States will inevitably have to rely primarily on unilateral initiatives, at least initially. Maximum efforts should be made to persuade at least a few like-minded countries, particularly in Europe, to adopt parallel if not concerted measures and to engage China in a conversation to explore all possibilities for proceeding together. Success on those fronts should not be expected, however, unless the United States takes convincing steps first. Neither the IMF nor the WTO is going to be reformed in the needed directions within any reasonable period of time unless they are jolted by unilateral US initiatives, as in 1971–73, when the "Nixon shocks" ultimately moved most of the world from fixed to flexible exchange rates.

The United States should therefore launch a new initiative to deter currency manipulation and the risk of future currency conflict. The key step is to announce a policy of countervailing currency intervention, under which the United States will henceforth match (and thus neutralize) sizable and persistent one-sided intervention by G-7 and G-20 countries that have adequate levels of foreign exchange reserves and are running substantial global current account surpluses. This policy would build on and reinforce the commitments that G-20 countries have already undertaken to avoid currency manipulation.

This single step might suffice to resolve the problem. Announcement of such a policy alone should have enormous deterrent impact; like any successful deterrent, the policy itself might never need to be implemented (except perhaps for a few early salvos to demonstrate its credibility). Congress, and the domestic political process more broadly, should be assuaged that deliberate currency distortions would no longer create an unlevel international playing field and undermine the benefits of trade agreements and globalization more broadly. Implementation of such a policy could help counter the antiglobalization sentiment that suffused the political campaigns in 2016 and may well characterize the Trump administration.

The United States should pursue two additional steps through the IMF to attempt to multilateralize the process on the monetary side. First, it should propose the creation of a new SDR Council that would bring together the five issuers of key currencies that now constitute the SDR basket of the Fund to consult on the new set of policies and the problems of intervention and manipulation more broadly. Second, it should seek a new agreement in the Fund on reference rates for at least the main currencies, to reinforce its unilateral effort to deter national policies that block exchange rates from moving toward their equilibrium levels. Over time application of these principles should be extended beyond the G-20 to include all advanced and upper-middle-income countries.

In addition, the United States should adopt several new trade policies. The most important is to include currency provisions in its future FTAs. The administration should also launch an effort in the WTO to include currency manipulation as an export subsidy that can be countered by countervailing duties under the ASCM and prepare to bring a case under its Article XV (4) if a major country meets the criteria for currency manipulation.

Rollout of the new policy should be carefully orchestrated. Congressional leaders must be fully consulted and invited to provide legislative authorization for countervailing currency intervention, as the Senate did in 2011. Such authorization would also provide the most appropriate vehicle to obtain adequate funding for the ESF at Treasury to carry out any countervailing intervention that might actually be needed. Potential foreign partners in the initiative should be consulted, with priorities for Germany vis-à-vis the euro area and China both bilaterally and via the proposed SDR Council. All potential target economies should be assured that no early implementation of the new policy is envisaged and that none would be needed as long as they did not revert to manipulation. The management and governing bodies of the key international institutions, especially the IMF and the WTO, should be fully consulted and invited to multilateralize the initiative to the maximum extent possible through corresponding reforms in both.

Risk of renewed currency conflict calls for a major new US policy initiative. The substantial economic costs of past manipulation to the United States and other countries, the huge gap in the international systemic architecture, and especially the domestic political costs of the status quo in the United States—with their threat to the open global trading system—all call for such action. We recommend that the new administration and Congress move in these directions as promptly as possible.