3

Policy Implications and Options

We illustrated in the preceding chapter the multiple considerations that bear on how China should conduct its exchange rate policy in the period ahead. In addition, the domestic and external environment in which exchange rate policy operates has changed significantly since the fall of 2007, when we last offered advice on this matter (Goldstein and Lardy 2008).

To begin with, the world economy in 2009 is facing a global recession, defined by the International Monetary Fund (IMF) as real growth of global GDP of 3 percent or less. The credit losses and financial-market turbulence that began in the US subprime market have intensified and spread along several dimensions—as well as across countries—and have extracted a heavy toll on real economic activity. In October 2007, the IMF (2007c) forecast global growth in 2008 of 4.8 percent, based on 2.2 percent growth in advanced countries and 7.4 percent growth in the emerging and developing countries. The actual 2008 outcome was 3.2 percent—0.9 percent in advanced economies and 6.1 percent in the developing world (IMF 2009b).

The fragility of the IMF's forecasts for 2009 was even more marked. In April the Fund (IMF 2008) saw 2009 global growth as 3.8 percent, with advanced-country growth at 1.3 percent and developing-country growth at 6.6 percent. Yet in late January 2009 the IMF (2009a) downgraded that forecast to 0.5 percent, with advanced-country growth of −2 percent and growth in the developing world at 3.3 percent, and in April reduced its projections still further to −1.3, −3.8, and 1.6 percent for global, advanced-country, and developing-country growth, respectively (IMF 2009b).

While most countries are in the process of implementing macroeconomic stimulus—both as regards monetary and fiscal policies—these measures will only cushion the growth slowdown, not eliminate it. Thus this global growth slowdown means that China faces a considerably less buoyant outlook for external demand than before the crisis, as is already evident in the sharp decline in China's exports beginning in November 2008. In addition, economic growth in China has slowed materially since the second quarter of 2007 when it peaked at 14 percent. Measured year over year, China's growth has fallen for seven consecutive quarters, to a low of 6.1 percent in the first quarter of 2009, the slowest pace in nearly two decades. In April 2008, the IMF was forecasting 2009 growth in China of 9.5 percent; in January 2009 the Fund lowered its forecast to 6.7 percent, and in April 2009 reduced it further to 6.5 percent (IMF 2008, 2009a, 2009b).

One important implication of this marked slowdown in China's actual and prospective economic growth is that unlike in 2003–07, exchange rate policy is no longer in what James Meade (1951) characterized as a "nondilemma" situation in which exchange rate action (that is, real exchange rate appreciation in China's case) would move the economy closer to both internal and external balance. In that earlier period, not only did real exchange rate appreciation offer the promise of a smaller global external surplus, it also could be expected to reduce the overheating of the domestic economy. Now the situation is more complicated. Further real appreciation of the renminbi is an attractive policy option to reduce China's still large external imbalance but it would also, if sizable, move China farther away from internal balance—i.e., would push China's growth further below its potential.

At least through the first quarter of 2009, China's imports fell even faster than its exports, pushing the quarterly trade surplus up by half compared with the first quarter of 2008. While this pattern likely will become less pronounced over the balance of the year, it is likely that China's global current account surplus in 2009 will be 8 to 9 percent of GDP, smaller than the estimated 9.8 percent global surplus in 2008 but still high by international standards.[1] On the domestic side, in November 2008 the Chinese

1. There are three reasons to anticipate a moderation from the sharp increase in the trade surplus in the first quarter of 2009. First, much of the increase in the Q1 surplus appears to result from the sharp slowdown in processed exports (predominantly consumer electronics and information technology hardware), which account for half of China's total exports and are produced predominantly from imported parts, components, and assemblies. As export orders for these goods fell starting in late 2008, firms cut back sharply on their imports of the related parts and components. This inventory adjustment appears to have been largely completed in December 2008–March 2009. Thus the contribution of this inventory adjustment to falling imports is unlikely to be a significant factor beyond Q1. Second, another reason for the large Q1 drop in imports was the sharp decline, compared with the first quarter of 2008, in the prices of commodities (such as crude oil and iron ore) that China imports in large quantities. That terms of trade contribution to China's increasing trade balance in the first quarter of 2009 is likely to wane markedly in the second half of the year since prices of China's key commodity imports fell sharply in the second half of 2008. Third, as noted earlier in this study, about three-quarters of the cumulative appreciation of the renminbi from mid-2005 through the end of 2008 occurred in November 2007–2008; much of the impact of this

government announced a considerable fiscal stimulus package—with a headline figure of RMB4 trillion in investment—to cushion the slowdown in economic activity. Our reading of that fiscal stimulus package (sifting out the parts that were already in the pipeline) suggests that it will be in the neighborhood of 2 to 3 percent of GDP annually in 2009 and 2010. China also began to ease monetary policy in the fall of 2008, and in the final months of the year and the first months of 2009 bank lending increased significantly. In addition, as noted in chapter 2, the government is increasing transfer payments to low-income households and retirees and is working to bring a much larger share of the population into existing health insurance schemes. But even with such monetary and fiscal stimulus, we still expect China's growth in 2009 to decline to between 7 and 8 percent.

In our earlier recommendations (again, offered before the global financial crisis), we suggested that China adopt an immediate sizable revaluation of the renminbi along with a fiscal policy stimulus, in order to significantly reduce its external surplus while minimizing any adverse growth consequences of the revaluation (Goldstein and Lardy 2008). As we summarized in chapters 1 and 2, the Chinese authorities have taken such actions over the past 12 to 18 months, and we applaud them for doing so, even if the measures came later than they should have and even if it's too early to declare mission accomplished. Going forward, it is now apparent that it would be more difficult to use fiscal policy stimulus to counteract the growth effects of a further *immediate*, large real appreciation, so the case for undertaking a sizable real appreciation of the renminbi in 2009 is considerably weaker than it was in, say, October 2007. Thus if a further appreciation of the renminbi is still needed—and we think it is—the bulk of it would need to take place after the recovery from the present growth slowdown is firmly established.

A third big change from October 2007—again discussed in chapters 1 and 2—relates to the size of the real trade-weighted (effective) appreciation of the renminbi. In October 2007, the cumulative real effective appreciation of the renminbi since the currency reform of July 2005 was a modest 7 percent. The value of the currency in October 2007 was actually 2 percent less than in February 2002, when the US dollar peaked in value (both according to the JPMorgan index). We say "modest" because China's global current account surplus had risen sharply and without interruption from 1 percent of GDP in 2001 to an unprecedented 11 percent of GDP in 2007. For that and several other reasons, we characterized China's exchange rate policy as being well "behind the curve."

But developments since October 2007 have altered that picture. By December 2008, according to the indices shown in table 1.2, the cumu-

relatively large appreciation had yet to feed through to the trade account by the first quarter of 2009.

lative real effective appreciation of the renminbi (from July 2005) had climbed to 17 to 20 percent. This can no longer be called "modest," even if one's updated calculations of the "equilibrium" value for the renminbi suggest (as ours do) that some further appreciation—say, on the order of 12 to 25 percent—would still be desirable. In other words, the Chinese authorities—assuming that they don't allow the sizable real appreciation of the renminbi in 2008 to be undone—are not as far "behind the curve" as they were in October 2007. This in turn also means that the case for an immediate step revaluation of the renminbi (rather than for a further upward crawl) is also weaker than it was then.

Finally, the deterioration in the economic situation in the United States could alter the external pressure on China's exchange rate policy. In the short interval between October 2007 and April 2008, the IMF lowered its forecast for 2008 US economic growth from 1.9 to 0.5 percent, and in January 2009 downgraded its forecast for 2009 from April 2008's already modest 0.6 percent to −1.6 percent. In April 2009 the IMF further reduced its forecast to −2.8 percent (IMF 2009b). Furthermore, the United States is in the midst of what is widely expected to be its most severe postwar recession, with, inter alia, the cumulative real output decline and peak (monthly) unemployment rate expected to hit at least 5 and 9 percent, respectively—compared with the averages of 1.8 and 7 percent, respectively, during the ten previous postwar US recessions.[2]

The onset of the financial crisis and the accompanying US recession could well have conflicting effects on US attitudes toward China's exchange rate policy. On the one hand, crisis management—especially the design of the 2009 fiscal stimulus bill and repeated massive interventions by the US Federal Reserve and US Treasury to bail out weak financial institutions and to maintain financial stability—has diverted attention away from the US external imbalance and the exchange rate policies of other countries, including China.[3] Some would go farther and argue that the financial crisis has induced more and more members of Congress to recognize that China is the biggest official creditor of the United States and that sanctions could lead the Chinese to reduce their lending to us, perhaps leading to a rise in risk premia on US assets and to a disorderly decline in the dollar.

On the other hand, the longer the US recession persists, the greater the likelihood that Congress will take action against any economy whose currency policy smacks of beggar-thy-neighbor manipulation. Thus if China

2. By May 2009 the current recession had already gone on for 18 months (using the finding of the National Bureau of Economic Research that it started in December 2007); on this measure too the current recession already exceeds the postwar average of 10 months and could exceed it by a wide margin if it continues, as many expect, through the end of 2009.

3. The recession, by reducing US import demand, has (along with the earlier real depreciation of the dollar) also led to a sharp improvement in the US current account deficit, which may come in at less than 3 percent of US GDP in 2009, down from its peak of 6 percent in 2006.

were to allow its recent significant progress on real exchange rate appreciation to backslide, prospects for the revival of congressional currency bills aimed at China could be much greater.[4]

With these changes in the operating environment in mind, it is useful to clarify the options available to Chinese policymakers by framing the choice of exchange rate policy in terms of two competing strategies. The first, which we call "stay the course," reflects the strategy that emerged in the second half of 2008. The second strategy, which would entail greater efforts to maintain and extend the recent progress on real effective appreciation of the renminbi, we call the (revised) "three-stage approach."[5]

The Stay-the-Course Strategy

The stay-the-course strategy begins from the proposition that no one should care much about exchange rate policy for its own sake, that it is basically a facilitating mechanism for more fundamental objectives. From this bottom-line perspective, China's existing exchange rate policy could be regarded by its supporters as quite successful. After all, the average annual rate of economic growth from the July 2005 currency reform through mid-2008 was above 10 percent. Core inflation was low. The rise in the consumer price index (CPI) starting in the second half of 2007 was mainly attributable to a temporary reduction in the supply of pork on the domestic market and was short-lived, as reflected in a marked slowing of CPI inflation in the second half of 2008. Bank credit growth, after running way ahead of central bank targets in 2003, the first quarter of 2004, and the first half of 2006, was back in a reasonable range by the first half of 2008. The listing of four large state-owned commercial banks and the sale of minority stakes to foreign strategic investors went well.[6] The investment share of GDP had leveled off after several years of rapid increase (see figure

4. Note that progress on real appreciation of the renminbi could be undone in two (nonmutually exclusive) ways: There could be "active" efforts to drive down the value of the renminbi relative to the dollar by, inter alia, increasing the scale of official intervention in the exchange market; or, more "passively," China could choose not to react to (that is, not try to offset) future appreciations in the currencies of its trading partners that have been driven low (depreciated) by the global financial crisis. Both of these effects would lead to a future depreciation in the real effective exchange rate of the renminbi.

5. We call it the revised three-stage approach to differentiate it from the original three-stage approach that we outlined in October 2007 (Goldstein and Lardy 2008).

6. The four are the Bank of Communications (listed in Hong Kong June 2005, in Shanghai May 2007), China Construction Bank (listed in Hong Kong October 2005 and in Shanghai September 2007), Bank of China (listed in Hong Kong June 2006 and in Shanghai July 2006), and the Industrial and Commercial Bank of China (listed simultaneously in Hong Kong and Shanghai October 2006).

2.2). Yes, there had been pockets of overheating but the central bank's series of increases in both interest rates (nine upward adjustments from October 2004 to December 2007) and reserve requirements (21 upward adjustments from mid-2003 to June 2008), along with the continuation of heavy sterilization and targeted window guidance on bank lending, mitigated this problem. The stock of outstanding sterilization instruments relative to GDP has, as indicated earlier, grown enormously in recent years but is still low relative to the shares in some other Asian economies such as Malaysia, Singapore, and Taiwan (Anderson 2007c).[7]

Contrary to the predictions of many outside analysts, it has been possible to implement a gradual appreciation of the renminbi vis-à-vis the dollar and still conduct a reasonably independent monetary policy without being overwhelmed by foreign capital inflows; when those inflows have gotten large, in some periods it seems to be more because of the attractions of the booming equity and property markets than because of strong speculation on further renminbi appreciation. Some progress has meanwhile been made both in liberalizing further the capital outflow regime and in strengthening the structure of the foreign exchange market.

External criticism of China's mushrooming global current account surplus and the only modest appreciation of the renminbi's real effective exchange rate was significant earlier. But the Bush administration opposed the currency bills cum trade sanctions introduced in the US Congress, preferring instead to negotiate within the Strategic Economic Dialogue framework. In any case, the deepening of the global financial crisis after the failure of Bear Stearns in the spring of 2008 dampened congressional enthusiasm for these currency bills, which as noted in chapter 2, were not voted on in Congress. And while candidate Obama talked tough on China's exchange rate policy, President Obama's first Treasury Department Report, issued on April 15, 2009, continued the policy of the Bush administration and declined to name China as a currency manipulator.[8]

The IMF issued a revised set of guidelines for exchange rate surveillance in June 2007. But, as mentioned in chapter 2, the new managing director, Dominique Strauss-Kahn, apparently did not wish to begin his term with a confrontation on China's exchange rate policy when he was trying to garner support for IMF reform in other areas. Indeed, the IMF board postponed considering the staff report on the Fund's 2007 Article IV consultation with China—it should have been taken up in the fall of 2007

7. Anderson's comparisons of sterilization debt do not take into account the sterilization accomplished by increasing the reserve requirement imposed on banks. In mid-2008 sterilization bonds outstanding in China were RMB4.2 trillion but the increase in the required reserve ratio immobilized an additional RMB5.2 trillion.

8. US Department of the Treasury, Office of International Affairs, *Report to Congress on International Economic and Exchange Rate Policy*, April 15, 2009.

but it was repeatedly bumped from the agenda and as of late spring 2009 the Fund's board had still not reviewed the 2007 staff report.

Seen from this perspective, some would say that the sensible strategy is to make only minor modifications to China's existing exchange rate policy, a view reinforced by the softening of China's growth, particularly after the first half of 2008.[9] The slowdown in growth, to 9 percent in 2008 compared with 13 percent in 2007, was caused roughly equally by a smaller contribution of China's trade surplus and a slowdown in domestic demand (most likely largely a reduction in construction activity).[10] Given the impending global recession, it appeared that further softening of the export sector might reduce China's growth by another percentage point or two. Absent an offsetting government policy adjustment, that would take the quarterly growth rate down to around 5 to 6 percent, a pace not seen since China's economic slump of the late 1990s.

The strategy going forward would then contain the following key elements. The authorities, by adjusting the scale of their exchange market intervention, would hold the renminbi virtually constant vis-à-vis the dollar, continuing the policy in place since mid-summer 2008. If the dollar continued the rapid pace of appreciation seen in 2008, the authorities might even allow their currency to depreciate vis-à-vis the dollar in order to limit the pace of renminbi appreciation measured on a trade-weighted basis. If, as anticipated by many economic forecasters, the global recession was severe, the authorities would slow considerably the pace of appreciation on a trade-weighted basis (compared with the annual pace of about 5 percent during the three years since the adoption of a more flexible exchange rate policy in mid-2005). Indeed, a vice-governor of the People's Bank of China at the meetings of the IMF/World Bank in Washington in the fall of 2008 explicitly endorsed this strategy (Beattie 2008). Some temporary depreciation in the real trade-weighted exchange rate might be considered on the grounds that the cumulative real appreciation since July 2005 was substantial enough to permit some small temporary change in the opposite direction, at least until China's growth returns to trend.

In addition, to further mitigate the potential reduction in the contribution of the external sector to economic growth, the authorities would reverse the pattern of 2006–07 and raise the rate at which the value-added tax (VAT) on exports is rebated. The first step in this direction was an

9. China's growth in 2008 was 10.6, 10.1, 9, and 6.8 percent in Q1 through Q4, respectively (with growth in each quarter calculated by comparison to the same quarter in 2007).

10. Analysis by the central bank attributes 9.1 percent of China's 9 percent growth in 2008 to the expansion of net exports (People's Bank of China, Monetary Policy Analysis Small Group 2009a). This implies that 0.82 percentage points of China's growth was due to the expansion of net exports, a reduction of 1.5 percentage points compared with the 2.3 percentage point contribution in 2007 (National Bureau of Statistics of China 2008b, 57).

announcement in July 2008 that the VAT rebate on a selection of textile and apparel products would be raised to 13 percent, an increase of 2 percentage points, effective August 1 (Ministry of Finance and State Administration of Taxation 2008a). The next step was in mid-October when the authorities announced that higher rebate rates would take effect November 1 on over 3,000 products, mostly labor-intensive traditional exports such as textiles and garments, where the rebates were pegged at 14 percent, but included some high value-added electrical machinery products (Ministry of Finance and State Administration of Taxation 2008b). Subsequently, four additional batches of products became eligible for increased rebates beginning in December 2008, January 2009, February 2009, and April 2009. Some less favorable export tax and tariff treatments, which the authorities had introduced after 2005, also were reversed. The increase in the VAT rebate rate reduced export prices for Chinese goods on average by about 5 percent in the first quarter of 2009 compared with the first quarter of 2008, thus making them more competitive on international markets and making exports more profitable.[11]

After global growth began to recover, the authorities would reexamine their options and presumably allow the currency to resume a moderate rate of appreciation.

If all this is doable, what then are the objections to the stay-the-course option? First and foremost, China's external imbalance is much bigger than it was five or six years ago, and second, notwithstanding the more rapid pace of currency appreciation in 2008, the renminbi is still undervalued on a real effective basis. The stay-the-course option is therefore likely to mean that China's global current account surplus remains elevated for a longer period. Indeed, if China allows little currency appreciation over the coming quarters, continues raising export rebates, and global growth soon converges back toward long-term potential, the risk is that China's current account surplus would begin to expand once again, perhaps at the rapid pace observed in 2005–07.

Recall that in 2003, China's global current account surplus was about 3 percent of GDP and the undervaluation of the renminbi was probably 15 to 20 percent. At that point, it would probably have been possible to eliminate China's entire current account imbalance—albeit not its overall balance of payments imbalance—with a 15 percent step revaluation of the renminbi, without doing undue harm to the domestic economy; indeed, in late 2003, we recommended such action as the first stage of what we called two-stage currency reform, where the second stage entailed floating of the

11. In the first quarter of 2009 VAT rebates on exports totaled RMB186 billion, an increase of RMB42 billion compared with the first quarter of 2008. The average rebate rate (calculated by dividing total rebates into the value of exports) rose by 4.5 percentage points, from 6.6 percent in the first quarter of 2008 to 11.l percent in the first quarter of 2009. Monthly data on VAT rebates since January 2007 are available from CEIC.

renminbi and a gradual lifting of capital account restrictions once China's financial sector was on a firmer footing (Goldstein and Lardy 2003b). By 2007, China's global current account surplus was 11 percent of GDP and renminbi undervaluation was much larger, 30 to 40 percent (conservatively). No longer could the exchange rate disequilibrium be eliminated in one step without a large contractionary impact on the domestic economy. And with such a large difference between the actual and equilibrium exchange rates, any "staged" approach to renminbi appreciation brought with it the challenge of coping with a "one-way bet" for speculators.

Keeping in mind that the degree of renminbi undervaluation in 2008 is not trivial, the stay-the-course strategy has a number of economic disadvantages. First, perpetuating an undervalued currency will continue to distort domestic investment decisions. As we discussed in chapter 2, currency undervaluation and the accompanying low lending rates lead to excessive investment in manufacturing and underinvestment in services. Thus industries such as steel, for example, which has experienced explosive growth since 2003, may continue to expand their exports as production exceeds domestic demand; in 2005 and 2006, the rise in China's net exports of steel accounted for two-fifths and one-third, respectively, of the growth in China's apparent steel usage (Anderson 2008b). The government's other non-exchange-rate attempts to slow the expansion of the industry, such as encouraging industry consolidation and using window guidance to slow investment in the steel sector, have not made much headway. Until China's growth dropped sharply in the last quarter of 2008, the undervalued exchange rate made steel production sufficiently profitable that its growth continued to outpace the expansion of domestic demand (Anderson 2007c). As a result, China is on track to add an additional 230 million tons of steel capacity between 2007 and 2009 (Anderson 2008b).

Second, the stay-the-course strategy undermines government efforts to transition to more consumption-driven growth. As we outlined in chapter 2, appreciation of the renminbi is one of several policies necessary to transition to more sustainable growth. With external demand now weakening, the need to generate more domestic demand has never been greater. In fact, the global financial crisis and recession have made even clearer to Chinese policymakers the risks of relying too much on external demand for sustaining economic growth. Given that the investment share of GDP has been quite elevated (over two-fifths of GDP) since 2003, the greatest potential for efficiently increasing domestic demand is in private and government consumption rather than increased investment.

Third, offering special treatment, in the form of increasing VAT rebates and potentially other preferential measures, to industries that are facing a profit squeeze undermines the government policy of fostering innovation, improving and upgrading China's industrial structure, and accelerating the development of service industries, all goals repeatedly endorsed by Premier Wen Jiabao and China's highest governmental bodies (Wen Jiabao

2008; State Council 2007, 2008). Maintaining an undervalued currency and offering preferential treatment for China's most labor-intensive industries will maintain investment and human resources in the lowest value-added industries, thus impeding the growth and expansion of both services and industries in areas that China seeks to develop, such as information technology, biology, aerospace, new energy sources, and new materials.

The fourth disadvantage of the stay-the-course strategy is that it is not fully consistent with the pledge of China's president at the G-20 meetings in November 2008 in Washington and April 2009 in London that China would resist protectionism. Raising the VAT rebate rate for an increasingly broad range of export products on six separate occasions between July 2008 and March 2009 is hardly consistent with either the pledges made by Hu Jintao or the public call by China's Minister of Commerce Chen Deming (2009) to avoid trade protectionism. The rest of the world may not accept the implicit Chinese view that only new barriers to imports or export promotion measures that violate World Trade Organization (WTO) rules can be said to be protectionist.[12] Export promotion measures such as raising VAT rebate rates on exports have exactly the same economic effect as import restrictions (i.e., a reduction in demand in trading partner countries) and thus are likely to be seen as beggar-thy-neighbor policies.

Thus in the global environment that emerged in the second half of 2008, the stay-the-course strategy could increase foreign pressure for China to move faster on renminbi appreciation. Recall that as the Chinese currency became increasingly undervalued after 2002 the world was just entering a five-year period of almost unprecedented global economic growth, prosperity, and low unemployment levels. Thus, although China's undervalued exchange rate did harm some sectors of manufacturing in the United States (and other countries), the strong macroeconomic growth and employment made it difficult for those proposing unilateral action on China's currency to gain much political support. But now, in an environment of rising unemployment and zero or perhaps negative real global growth, China's stay-the-course strategy—in which currency appreciation slows considerably or stalls altogether and in which the authorities promote exports through increasing VAT tax rebates for a broader range of export products—is bound to attract growing criticism as beggar-thy-neighbor policies.

The fifth disadvantage of the stay-the-course strategy is that perpetuating the undervaluation of the currency by large-scale intervention in the exchange market will need to be accompanied by continued sterilization of the resulting increases in the money supply.[13] Failing that, inflation could

12. Rebate of the VAT on exported products is allowed under WTO rules. China, however, is the only country that periodically adjusts the share of the VAT that is rebated. Other countries do not use the VAT rebate rate as a policy instrument but rather rebate the entire amount.

13. As part of its policy of monetary easing adopted in early fall 2008, the central bank re-

eventually become a major risk—particularly if the recovery occurs relatively soon (in, say, the second half of 2009). Sterilization involves not only selling new bills/bonds to banks to mop up the increase in the domestic money supply caused by reserve accumulation but also rolling over the existing stock of such instruments. Changing the mix among sterilization tools from bill/bond sales to increases in banks' reserve requirements doesn't really solve the problem because the low interest rate for reserves held at the central bank acts as a "tax" on the banks in much the same way as it does on sterilization bills/bonds. In a liberalized financial system with market-determined interest rates and commercial (rather than state-owned) banks, the sterilization task would normally become more costly as banks would hold a growing volume of central bank bills only if they were compensated in the form of higher interest rates on those bills.

As explained in chapter 2, the Chinese authorities mitigate this rising cost of sterilization by requiring banks to place larger and larger amounts of reserves on deposit at the central bank, but they do not compensate the banks for their rising reserves by paying an interest rate competitive with what the banks could earn by lending. Rather they appear to compensate them indirectly, by controlling interest rates that banks can pay on household savings accounts. The ceiling interest rates set by the central bank for demand deposits in particular are extremely low and not infrequently negative in real terms. Thus a further downside of the stay-the-course strategy is that it does not ease the high degree of financial repression, which (1) makes it less likely that China will achieve its objective of rebalancing the sources of economic growth, since such repression reduces the rate of growth of household income and (2) impedes progress toward a truly commercial banking system.

Sixth, if exchange market intervention and sterilization continue at high levels, the Chinese authorities will continue to foster a monetary disequilibrium that will perpetuate China's large external imbalance. As Michael Mussa (2008) argued, when the demand for base money grows briskly in China, the supply has to grow briskly to accommodate that demand. But if the central bank's large-scale sterilization operations cause negative growth of net domestic assets, Chinese residents will reduce their spending and borrow from abroad to satisfy the growing demand for base money—generating the very current account surplus and net capital inflow that the authorities claim they wish to reduce. To correct that monetary disequilibrium, the amount of sterilized exchange market intervention has to be reduced. The relevant question is not whether sterilization (in isolation) can be continued indefinitely but whether large-scale sterilization can be continued simultaneously with a reduction in the huge external imbalance.

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versed its sterilization policy. It cut the required reserve ratio, for example, four times, increasing the liquidity of banks, facilitating the rapid growth of credit that began in the closing months of 2008.

The Three-Stage Approach

If, based on the foregoing arguments, the stay-the-course strategy doesn't look so promising, what is the alternative? In our view, what is called for is an approach that would permit China to continue to reduce the undervaluation of the renminbi as well as its very large global current account surplus while keeping a lid on domestic social pressures.[14] We call this the "three-stage approach" to currency reform. It would have the following broad outlines.

In stage one, during the global slowdown/recession, China should eschew competitive devaluation as a mechanism to deal with reduced external demand. Indeed, it should not only resist preferential policies to prop up its labor-intensive exports but also continue to appreciate the real value of its currency vis-à-vis its trading partners at a pace of 4 to 5 percent per year (i.e., more slowly than the pace of appreciation in 2008).[15] It should also refrain from further increases in the VAT rebate rates on export products; otherwise, as explained above, domestic investment will continue to flow disproportionately into manufacturing, pushing its share of GDP to new heights, thus creating even larger costs of adjustment in the future. And the services sector, which has the greatest potential for job creation, will continue to suffer from underinvestment and its share of GDP will continue to stagnate. Difficulties in labor-intensive export industries as a result of continued appreciation of the renminbi should be addressed through trade adjustment assistance to redundant workers. That assistance would facilitate the shrinkage of industries that are no longer viable, as opposed to currency undervaluation and preferential tax policies, which impede needed structural adjustment. Any contractionary effects of renminbi appreciation could be minimized by increasing China's fiscal stimulus package.

At the same time the government should increase infrastructure expenditure along the lines already announced. That would offset, at least in part, the slowdown in construction investment that was evident in 2008 and the slowdown in manufacturing investment that likely will follow the further softening of export growth. Given massive investment in recent years in roads, ports, airports, and electric power generation, there are fewer opportunities for high-yielding infrastructure investment; but investment opportunities remain for the rail network, the power distribution (grid) system, urban subways, and water treatment facilities.

14. Prasad (2007, 3) also argues that China should abandon its incremental reform approach in favor of something bolder: "One key principle…is to recognize that there are inherent limits to the incremental reform strategy that has worked well in the past. At a certain level of development and complexity of an economy, the connections among different reforms become difficult to ignore."

15. In 2008 the renminbi appreciated by 9, 6, and 13 percent, respectively, according to the JPMorgan, Citi, and BIS data in table 1.2.

The government should also, as explained in chapter 2, continue to increase its own consumption expenditures and transfer payments to households. Increased government outlays for education, health, and pensions contribute directly to raising the consumption share of GDP and, by reducing the precautionary demand for savings by households, can eventually stimulate greater private consumption expenditures as well. Increased transfer payments to households will also contribute to increased private consumption.

During this first stage, the government could raise to 1 or 1.5 percent the daily fluctuation limit on the renminbi with respect to the major currencies, while retaining or only modestly liberalizing restrictions on capital outflows. Consistent with its repeated calls in October 2008 for international cooperation to resolve the global economic crisis on a cooperative basis, China would drop its insistence that the renminbi exchange rate is solely a matter of national sovereignty and would allow the IMF to complete the 2007 Article IV consultation and undertake an interim consultation as well.

Stage two begins when the global economy begins to recover and China converges toward its long-run sustainable growth.[16] At this point China's current account surplus is likely to still be quite large in absolute terms though smaller as a share of GDP. As global growth recovers, the government should allow the renminbi to appreciate sufficiently rapidly that much of the remaining current account surplus would be eliminated over three to four years.[17] Thus the government would reduce its intervention in the exchange market, along with its sterilization operations. Debate within China would accelerate on greater central bank independence and on the merits of an inflation targeting approach to monetary policy (Goodfriend and Prasad 2006). Gradual liberalization of restrictions on capital flows (both incoming and outgoing) would continue.

On the financial front, in stage two the government should resume the interest rate liberalization policy that was suspended in the fall of 2004. Market-determined interest rates on deposits would reduce the degree of financial repression faced by households, raise their real incomes, and thus pave the way for greater private consumption expenditure. Also in the financial sphere, the government should reduce the limits on foreign ownership of banks in an effort to improve the credit allocation process.

Finally, in stage three, when China's global current account surplus has been dramatically reduced, intervention in the exchange market, along with sterilization operations, should be curtailed still further and

16. We believe China's long-run sustainable growth is in the neighborhood of 9 to 10 percent, not the 12 to 13 percent pace of 2005–07.

17. The necessary pace of appreciation would have to take into account whether or not China continues to achieve rapid productivity growth in export industries, a phenomenon discussed earlier.

the daily fluctuation limit on the renminbi should be dropped, so that the renminbi would essentially be "floating." Monetary policy should continue to evolve toward an inflation targeting framework. Depending on how much progress had been made on bank reform, restrictions on capital flows could then be liberalized much more substantially.

In our view, such a three-stage approach to renminbi reform would offer many advantages over the stay-the-course option. First, continuing appreciation of the currency in stage one during the global downturn, even if at a more modest pace, would be an important signal to the international community that China is prepared to work cooperatively and constructively to address the global recession. That, plus the agreement to work with the IMF more cooperatively, would go a long way to counter the view that China "[i]n numerous areas is pursuing strategies that conflict with existing norms, rules, and institutional arrangements" (Bergsten 2008, 58) and lessen the risk of protectionist trade policies against China.

Second, continuing appreciation would also be a critical signal to Chinese firms that they could no longer count on an undervalued currency to prop up profitability in manufacturing.

Third, the expansion/redirection of government expenditures and the introduction of a trade adjustment assistance program should help China weather the global slowdown, economically and in terms of social stability.

Fourth, the increase in the daily fluctuation limit for the renminbi in stage three would permit greater flexibility of the renminbi and provide increased room for maneuver in the implementation of monetary policy—maneuver that would also be enhanced by stopping well short of the elimination of existing restrictions on capital inflows. The greater independence of monetary policy would in turn allow the central bank to act more preemptively in its interest rate policy decisions.

Finally, the reduction in both exchange market intervention and sterilization operations in stages two and three would not only further push the real effective exchange rate of the renminbi in the right direction but also help to correct any monetary disequilibrium and reduce the strains on the banking sector. By slowly liberalizing the capital outflow regime, there would be a degree of insurance against large-scale capital flight if a large, unexpected negative shock occurred during the currency reform process. Discussions of greater central bank independence and of the merits of an inflation targeting framework would anticipate the need for a new nominal anchor, as the fixity of China's exchange rate continued to decline.

By the end of stage three, China should have eliminated any remaining undervaluation of the renminbi. It should also be closer to achieving four of its stated long-term goals: a truly market-determined exchange rate, an effective framework for independent monetary policy, a more open capital account, and a more harmonious relationship with its trading partners.