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## China and the Renminbi Exchange Rate

MORRIS GOLDSTEIN

During 2003 and 2004, there has been considerable debate about, and much international criticism of, China's exchange rate and its currency regime. It is a theme of this chapter that criticism of China's exchange rate policy is *not* simply a reflection of scapegoating, policy failures, and a lack of strategic planning outside China. China's exchange rate policy itself is seriously flawed, given its current macroeconomic circumstances and its longer-term policy objectives. On the basis of ongoing research with my colleague at the Institute for International Economics, Nicholas Lardy (Goldstein and Lardy forthcoming), I argue here that (1) the renminbi (RMB) is currently significantly undervalued—on the order of 15 to 25 percent; (2) that China has been “manipulating” its currency, contrary to IMF rules of the game; (3) that it is in China's own interest, as well as in the interest of the international community, for China to initiate soon an appreciation of the RMB; and (4) that China should neither stand pat with its existing currency regime nor opt for a freely floating RMB and completely open capital markets. Instead, China should undertake a “two-step” currency reform. Step one, to be implemented immediately, would have three elements. It would involve simultaneously a switch from a unitary peg to the US dollar to a basket peg,

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*Morris Goldstein is the Dennis Weatherstone Senior Fellow at the Institute for International Economics. This chapter includes ongoing work (Goldstein and Lardy, forthcoming) with my Institute colleague, Nicholas Lardy. I am indebted to Nick for helpful comments and advice and for allowing me to borrow from his substantial inventory of charts on the Chinese economy. I am grateful for Dean DeRosa's help in calculating the trade balance effects of a change in the renminbi exchange rate. Thanks are also due to C. Fred Bergsten, Pieter Bottelier, Michael Mussa, Ted Truman, and John Williamson for useful suggestions on an earlier draft. Thomas Flynn and Gunilla Pettersson provided excellent research assistance.*

a 15 to 25 percent appreciation of the RMB, and wider margins (say, 5 to 7 percent on either side) around the new peg. Existing controls on China's capital outflows would be either maintained or liberalized only marginally, at least in the short run. Step two, to be implemented later when China's banking system is considerably stronger than it is today, would involve a transition to a "managed float," along with a significant liberalization of China's capital outflows.

The rest of the chapter is organized as follows. The second section examines two complementary approaches to evaluating the misalignment of the RMB and summarizes the main conclusions. The third section takes up the thorny issue of what does and does not constitute "currency manipulation" and relates those principles to China's exchange market intervention. The fourth section considers how China's exchange rate policy affects its longer-term objectives for strengthening the domestic banking system, for maintaining low and stable inflation, for securing stable market access for its exports, and for achieving a high and sustainable rate of economic growth. The fifth section then discusses what kind of reform of the currency regime would be most suitable for China. The sixth section offers brief conclusions.

## **Is the Renminbi Out of Line?**

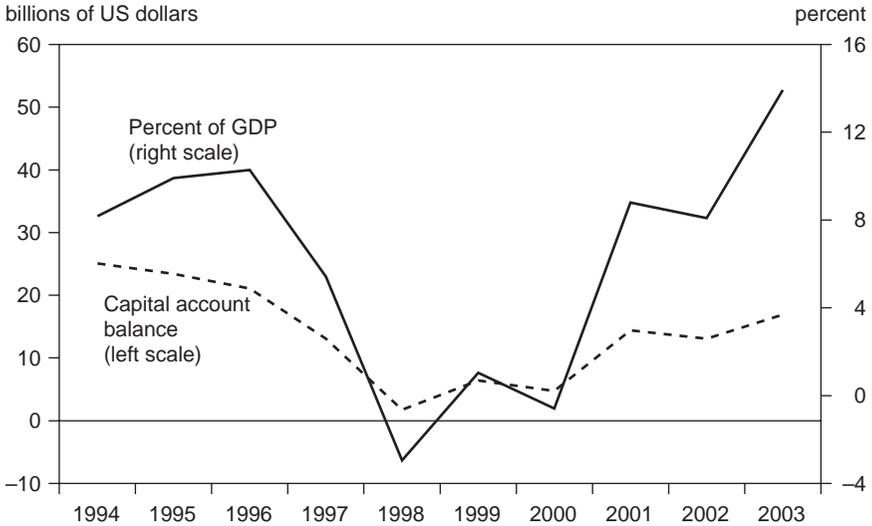
There are many approaches to estimating "equilibrium" real exchange rates. Here, I report two back-of-the-envelope estimates—the first solely from the perspective of China's balance of payments, and the second from the perspective of global payments imbalances. In both cases, a working assumption is that there is no large change in China's capital account regime over the next few years.

### **The Underlying Balance Approach**

The underlying balance approach views the equilibrium exchange rate as the rate that produces equilibrium in the country's balance of payments, where the latter is defined as a situation where "normal" net capital flows equal the "underlying" current account. What happens if we apply this underlying balance approach to the recent behavior of the RMB?

Figure 9.1 shows China's overall capital account balance over the past decade. Except for 1998 and 2003, it has shown a moderate surplus relative to GDP. Suppose we take the average for the 1999–2002 period—a surplus of 1½ percent of GDP—and call that "normal" net capital flows. Note that the capital account surplus for 2003 was much larger—just under 4 percent (3.7 percent) of GDP according to the official figures and closer to 7 to 8 percent of GDP if \$45 billion of reserve accumulation (subsequently used for bank recapitalization) and capital inflows recorded as errors and omissions

**Figure 9.1** China's capital account, 1994–2003



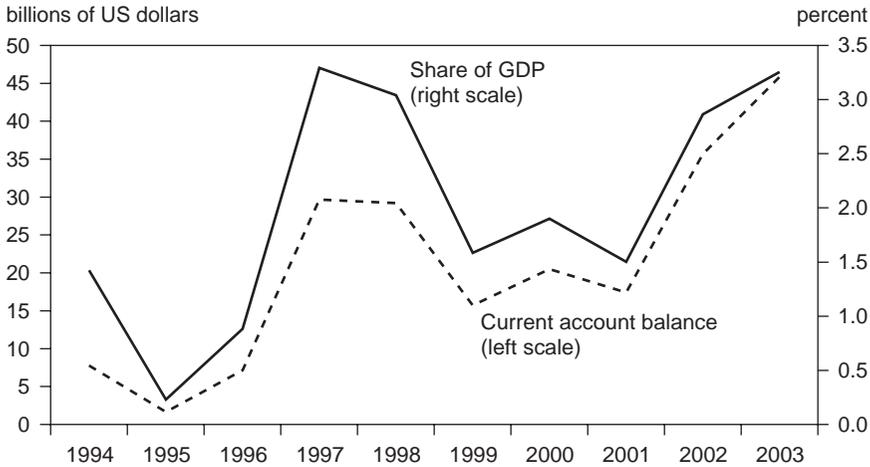
Source: Chinese State Administration of Foreign Exchange (SAFE).

were included in the totals. I have not included 2003 data in normal capital flows because that year's large capital inflow was likely motivated by strong speculation on an expected appreciation of the RMB and hence was not normal.

Figure 9.2 gives the parallel evolution of China's current account balance during the 1994–2003 period. This also shows a moderate surplus relative to GDP. According to the latest official figures, China's current account surplus in 2003 was about \$46 billion, or just over 3 percent of GDP. But this is the actual current account surplus. The "underlying" current account surplus in 2003 was certainly larger than that because the Chinese economy was overheating (pushing up both the volume and price of imports) and because the real effective depreciation of the RMB since the beginning of 2002 suggests that some positive trade-balance effects are still in the pipeline.

China's economy grew by 9.1 percent in 2003, the highest growth rate in six years. Investment increased in 2003 by 27 percent, bringing investment's share of GDP to a peak of 43 percent. Bottlenecks have been widely reported for coal, electric power, oil, and transport. Imports were up by 40 percent. By the end of 2003, consumer prices were increasing at an annual rate of more than 3 percent. Recent figures suggest that the overheating of the economy continued in the first-quarter of 2004—with first-quarter GDP growth estimated at almost 10 percent (9.7 percent), with fixed investment and imports both up over 40 percent in March, and with indices of inflation (consumer, producer, raw materials) all increasing at a higher rate than in 2003.

**Figure 9.2 China's current account, 1994–2003**



Source: Chinese State Administration of Foreign Exchange (SAFE).

On the exchange rate side, China's trade-weighted real effective exchange rate declined by roughly 6 percent in 2003; it has declined by 7 percent since the beginning of 2002. The lagged trade effects in the pipeline are thus expected to be positive. Putting together the overheating effect and the lagged trade effects of earlier exchange rate changes, a conservative estimate of China's "underlying" current account surplus in 2003 is  $4\frac{1}{2}$  to 5 percent of GDP.

Because China's trade account swung into deficit during the first four months of 2004, some might argue that a lower estimate of China's underlying current account surplus would be more appropriate. Perhaps; but the magnitude of the adjustment is far from clear. During the first quarter of 2003, China's trade balance was also in deficit, only to move into surplus for the remainder of the year. Recent private-sector forecasts for China's current account balance for 2004 tend to be 1 to 2 percent of GDP lower than for 2003.<sup>1</sup> Suppose we assumed that China's actual current account surplus for 2004 would amount to, say, 1 percent of GDP. This would still place the 2004 underlying current account surplus in the neighborhood of  $2\frac{1}{2}$  percent of GDP.

If overall balance of payments equilibrium requires that the underlying current account offset normal net capital inflows, then China's current

1. E.g., Deutsche Bank (*Emerging Markets Monthly*, April 2004) projects China's 2004 current account surplus to be 1.2 percent of GDP lower than the 2003 outcome, whereas Goldman Sachs (*Charting China*, April 2004) projects a 2004 current account surplus at 1.8 percent of GDP lower than last year.

account would have to deteriorate by roughly 4 percent of GDP (or approximately \$65 billion, at market exchange rates) to yield that outcome. This 4 percent swing is the difference between today's underlying current account *surplus* of 2½ percent (of GDP) and the underlying current account *deficit* (1½ percent) that would just balance out the assumed 1½ percent of GDP surplus for normal capital flows.

The operative issue then becomes what size real appreciation of the RMB would generate this 4 percent of GDP deterioration in China's current account balance? When we asked that question of a small, barebones, elasticity-based trade model, we found that the answers congregated in the upper half of the 15 to 30 percent range<sup>2</sup>—and this using elasticity values that easily satisfied the Marshall-Lerner conditions.<sup>3</sup>

An important reason why it takes a sizable exchange rate appreciation to move China's trade balance is related to China's important role as a regional processing center. The import content of China's exports is quite high—on the order of 35 to 40 percent. This means that a revaluation of the RMB reduces the local-currency price of China's imports and operates to limit the production cost of exporting more, thereby yielding a lower rise in the foreign-currency price of exports than would occur if revaluation took place in an economy with a very low import content of exports.<sup>4</sup> Put in other words, with a high import content of exports, it takes a bigger exchange rate “pop” to move the trade balance. To sum up, the underlying balance approach suggests that the RMB is undervalued by somewhere between 15 and 30 percent.<sup>5</sup>

## **The Approach Based on Adjustment of Global Payments Imbalances**

Instead of evaluating the RMB exchange rate solely from the perspective of China's balance of payments situation, a complementary approach is

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2. We first reported this finding in Goldstein and Lardy (2003a).

3. Anderson (2003, 2004b) substitutes the “basic balance” (i.e., current account plus net movements of foreign direct investment) for normal capital flows and the underlying current account and concludes similarly that the RMB is undervalued by roughly 25 percent.

4. Another way to look at the role of imported inputs in the trade-balance effects of an exchange rate change is that an RMB revaluation reduces the volume of exports, which, in turn, leads to a lower demand for imported inputs. We experimented with different ways of modeling China's imported inputs.

5. An advantage of presenting the estimate of RMB misalignment as a range is that it provides some leeway in case the current account turns out to be somewhat different from the baseline estimate, or in case Chinese inflation turns out to be somewhat higher this year, or in case subsequent empirical research reveals somewhat different elasticities than employed above. Frankel (2004), using a modified purchasing power parity approach, concludes that the RMB was undervalued by approximately 35 percent in 2000 and is undervalued by at least that much today. In contrast, Wang (2004) finds that it is difficult to arrive at any firm and robust conclusion about the equilibrium level of the RMB using a variety of existing techniques.

to look at the role that the RMB might play as part of the broader adjustment of global payments imbalances—particularly the US current account deficit.

According to IMF (2004) projections, the US current account deficit in 2004 will be about \$495 billion, just over 4 percent of GDP;<sup>6</sup> I regard a US current account deficit of that size as “unsustainable.” A sustainable one would be, say, half as large.<sup>7</sup>

To reduce the US current account deficit to, say, 2 to 2½ percent of GDP at reasonable cost, it would be helpful to have a real depreciation of the dollar of about 25 percent from its peak (in February 2002). This uses the rule of thumb that each 1 percent fall in the real trade-weighted dollar improves the US current account position by roughly \$10 billion; if anything, that is a low estimate of the needed dollar decline, because some analysts find much smaller (closer to \$5 billion improvement for each 1 percent dollar depreciation) exchange rate effects. Since February 2002, the dollar has fallen by approximately 15 percent. This means there is something like 10 to 15 percent still to go. The question then is how should this US current account improvement and implicit appreciation in nondollar currencies be shared internationally?

A good adjustment guideline should distinguish between surplus and deficit countries, take account of cross-country differences in the ability to shift demand from external to domestic sources, and consider other relevant factors, including the extent of recent exchange rate adjustments and cross-country differences in reserve holdings. When this is done, China emerges as an economy that ought to be in the lead in accommodating the second wave of dollar depreciation; see table 9.1.

Since the dollar peak in February 2002, the RMB (which has a weight of just under 10 percent in the US Federal Reserve’s broad index for the dollar) has fallen in real trade-weighted terms by 7 percent. China is currently growing at nearly 10 percent, with rising inflationary pressure. Its reserves have increased by more than \$160 billion in the 12-month period ending March 2004 and now stand at more than \$400 billion. It has a moderate surplus on current account and a large one on capital account. It has an external debt ratio of 14 percent of GDP. As James Meade (1951) emphasized more than 50 years ago, the classical remedy for an economy experiencing *both* domestic overheating and external surpluses is exchange rate

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6. This is quite a conservative estimate; some other analysts forecast a higher US current account deficit for 2004 and for the next few years.

7. A current account deficit of about 2 to 2½ percent of GDP would be sufficient to stabilize the ratio of net foreign liabilities to GDP (at about 42 percent, assuming a 6 percent annual growth of nominal income) and to prevent a further rise in the share of dollars in the foreign portion of non-US investors’ portfolios; see Truman (2004) and Mann (2003).

**Table 9.1 Sharing the adjustment of payments imbalances, selected economies and Euroland compared with emerging Asia, 2001–04**

Economy	Percent										Estimated exchange rate under-valuation, 2004 (percent) <sup>d</sup>
	Weight in FRB real dollar index, 2002–04	Change in effective exchange rate index since the dollar peak, <sup>a</sup> February 2002–April 2004	Current account as share of GDP, 2003	Change in international reserves, 2003 (millions of US dollars)	Change in international reserves, 2003 (percent of GDP)	Growth rate of real total domestic demand, 2001–02 (annual percent)	Growth rate of real total domestic demand, 2003 (annual percent)	Growth rate of real GDP, 2001–02	Projected growth rate of real GDP, 2004	Ratio of external debt to GDP, 2002	
<b>Selected countries and Euroland</b>											
Australia	1.3	+27.5	-6.0	11,592	2.3	3.7	5.3	3.2	3.5	33.6	n.a.
Canada	16.5	+9.9	2.1	-700	-0.1	2.6	4.2	2.6	2.6	n.a.	n.a.
China	9.8	-7.0	3.3	116,952 <sup>b</sup>	8.3	9.3	11.4	7.7	8.3	14.4	26
Euroland <sup>c</sup>	18.5	+16.6	0.6	-22,233	-0.3	1.8	1.0	1.3	0.4	1.7	n.a.
Japan	11.1	+3.0	3.2	203,852	4.7	0.1	2.0	0.1	3.4	n.a.	37
Mexico	11.0	-10.3	-1.5	8,501	1.4	0.7	2.5	0.3	1.3	23.7	n.a.
United Kingdom	5.2	+2.7	-2.4	2,635	0.1	2.3	2.7	1.9	3.5	n.a.	n.a.
<b>Emerging Asia</b>											
Hong Kong	15.8	-13.0	11.0	6,745	4.3	0.05	0.6	1.4	3.3	6.0	31.8
Indonesia	1.0	+9.1	3.7	4,091	2.0	3.7	3.6	3.6	4.1	4.5	12
South Korea	3.9	+4.3	2.0	34,320	5.7	5.2	0.1	5.4	3.1	4.8	28.9
Malaysia	2.3	-11.2	13.0	10,408	10.1	3.1	3.6	2.2	5.2	5.8	52.2
Singapore	2.2	+1.4	30.9	13,956	15.3	-4.0	-9.6	0.2	1.1	5.6	23.0
Taiwan	3.0	-3.6	10.0	45,545	15.4	-2.1	1.2	0.7	3.2	5.4	12.1
Thailand	1.4	-0.7	5.6	3,145	2.2	4.3	7.1	3.8	6.7	7.2	48.1

FRB = Federal Reserve Board

n.a. = not available

a. (+) equals appreciation, (-) equals depreciation.

b. The change in international reserves is net of \$45 billion transferred for bank recapitalization.

c. Euroland includes Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain.

d. Anderson (2003).

Sources: FRB real broad dollar index, Federal Reserve Board real effective exchange rate, JPMorgan Effective Exchange Rate Index; China's current account data, Chinese State Administration of Foreign Exchange, current account data on other countries, IMF's *International Financial Statistics*, change in international reserves, IMF's *International Financial Statistics*; real domestic demand: International Monetary Fund; GDP data, *World Economic Outlook*; ratio of external debt to GDP, Deutsche Bank; and exchange rate undervaluation, Anderson (2003).

appreciation, and neither reserve nor debt considerations appear to constrain such exchange rate action.

In contrast, the euro area (with a weight of more than 18 percent) has a small current account surplus (projected at less than 1 percent of GDP for 2004). It is expected to grow by less than 2 percent this year—just below its average rate over the past decade. Real domestic demand is projected to increase by only 1 percent in 2004. The euro has appreciated in real trade-weighted terms by 17 percent since the dollar peak.

China is not the only Asian country for which one could make a case for currency appreciation; indeed, there is a wider Asian problem of exchange rate undervaluation (Bergsten 2003). But what is striking from our cross-country comparison is that no other region or country on the list presents itself as a stronger candidate than China for currency appreciation in the necessary second wave of dollar depreciation.<sup>8</sup>

In thinking about the adjustment of global payments imbalances, let me emphasize what I am *not* saying. I am not saying that currency appreciation by China *alone* would solve the US current account problem.<sup>9</sup> After all, because China's weight in the dollar index is less than 10 percent, a 25 percent appreciation of the RMB would lower the aggregate value of the dollar by only 2½ percent; using the rule of thumb alluded to above, this would translate into only a \$25 billion improvement in the (2003) \$540 billion US current account deficit.<sup>10</sup> Clearly, a *broad-based* depreciation of the dollar is necessary to reduce the US current account deficit by \$250 billion or so.

I am also not saying that the preferred approach to bringing global payments imbalances into a better and more sustainable alignment is by exchange rate actions alone. Adjustments in fiscal and monetary policies would also be most helpful. To sum up, the global payments approach also suggests that the RMB is undervalued and that an appreciation—on the order of 15 to 25 percent—should be a key element of the needed second wave of dollar depreciation.

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8. Looking at 11 Asian economies, Anderson (2004a) concludes that China has the second largest exchange rate misalignment (undervaluation), behind Japan.

9. Nor would a 20 percent revaluation of the RMB reverse the fall in US manufacturing employment—a problem that has its roots in weak US economic growth over the past few years, slow growth in many US trading-partner countries, rapid productivity growth in US manufacturing, and the high US dollar. Baily (2004) has estimated that the increase in the (overall) US trade deficit over the 2000–03 period accounted for no more than 14 percent of the payroll job decline in the nonfarm sector of the US economy.

10. In Goldstein (2003), I also argue that China's exports to the United States compete mainly with exports from other developing countries and only to a limited extent with US industries; the empirical support for this conclusion can be found in Noland (1998).

## The Potential Role of Capital Outflow Liberalization in Misalignment Calculations

Thus far, I have assumed that, over the next few years, China will make no significant changes to its existing restrictions on capital outflows.<sup>11</sup> If that assumption were dropped, then the above conclusions about the undervaluation of the RMB could well be erased.

A quick calculation illustrates the point. Household savings deposits in China are presently equal to approximately 100 percent of GDP. Suppose Chinese savers decided for diversification reasons to put 5 percent of their savings into foreign assets abroad and that China liberalized its restrictions on capital outflows to permit that diversification to take place. A 5 percent of GDP swing in China's capital account would be sufficient to wipe out the assumed 4½ percent of GDP disequilibrium in China's balance of payments.<sup>12</sup>

The crucial issue is one of timing. If China does not liberalize significantly its restrictions on capital outflows for, say, six years, then it is asking a lot—I would say too much—to request the international community that live during the interim with an undervalued RMB just because things may be different down the road.

### Conclusion on Misalignment of the Renminbi

Given the dynamic character of the Chinese economy and the margin of uncertainty surrounding underlying parameters, it would be naive to pretend that estimates of the misalignment of the RMB can be made with great precision. That said, as long as China continues to run surpluses on its current and capital accounts (while its economy is overheating) and maintains binding restrictions on capital outflows, and as long as there are serious global payments imbalances afoot, there is a compelling case that the RMB is presently undervalued—on the order of 15 to 25 percent.<sup>13</sup>

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11. In discussing the current status of China's capital account liberalization, Li (2004) reports that the IMF divides China's capital account into 43 parts: in 8 of those (with a 19 percent weight), capital transfers can be made freely; in 11 (with a weight of 26 percent), transfers can be made with rare limitations; in 18 (with a 41 percent weight), transfers can be made with many limitations; and in 6 (with a 14 percent weight), transfers are subject to strict limitation.

12. If one assumes that such international diversification was largely a one-time event, then it would not offset continuing disequilibria in the balance of payments.

13. In assessing (in November 2003) the Fund's 2003 Article IV Consultation with China, the IMF's Executive Board took a different view. The Public Information Notice (PIN) of that discussion stated: "Most Directors noted that there is no clear evidence that the renminbi is substantially undervalued at this juncture. Directors also felt that a currency revaluation would not by itself have a major impact on global current account balances, particularly given China's relatively small share in world trade."

# Is China “Manipulating” the Renminbi?

## The Meaning of Manipulation

The troublesome experience with competitive depreciations in the 1920s and 1930s convinced the international community that international rules were needed to discourage “beggar thy neighbor” exchange rate policies. Indeed, that was one of the main motivations for establishing the International Monetary Fund. This concern with antisocial exchange rate policies is reflected both in the Fund’s charter and in decisions of the Fund’s Executive Board on exchange rate surveillance.

Article IV, Section 1 (paragraph iii) of the Fund’s *Articles of Agreement* stipulates, inter alia, that each member shall

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

Section 3 of Article IV symmetrically delineates the Fund’s obligations on exchange rate policies, including the injunctions that the Fund shall

oversee the compliance of each member with its obligations under section I of this article . . . [and]

exercise firm surveillance over the exchange rate policies of members, and shall adopt specific principles for the guidance of all members with respect to those policies.

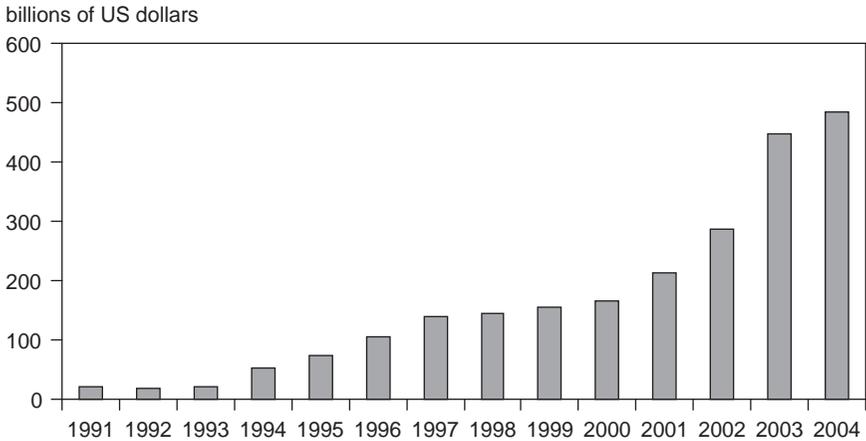
In 1977, the Fund’s Executive Board discussed a paper that laid out principles and procedures for its surveillance over exchange rate policies.<sup>14</sup> In the section on principles, the document discusses a number of developments that might indicate the need for discussion with a member. The first development listed was “protracted, large-scale intervention in one direction in the exchange market.” Figure 9.3 shows the behavior of China’s official foreign exchange reserves over the 1991–2003 period (and the first quarter of 2004); figure 9.4 draws on monthly data to focus on the huge buildup of China’s international reserves from 2002 through 2004. Suffice it to say that these reserve developments suggest that, during this period, there has indeed been “large-scale, protracted intervention in the exchange market in one direction.”

Two fallacious arguments are often put forward to refute charges of currency manipulation. The first argument is that because the IMF’s charter allows countries to adopt the currency regime of their choice and because the maintenance of a fixed exchange rate involves exchange market inter-

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14. See “1977 Decision on Principles and Procedures of Surveillance over Exchange Rate Policies,” reprinted in Boughton (2001).

**Figure 9.3** China's official foreign exchange reserves, 1991–2004



Source: Chinese State Administration of Foreign Exchange (SAFE).

vention, there can be no manipulation for countries that opt for a fixed exchange rate regime.<sup>15</sup>

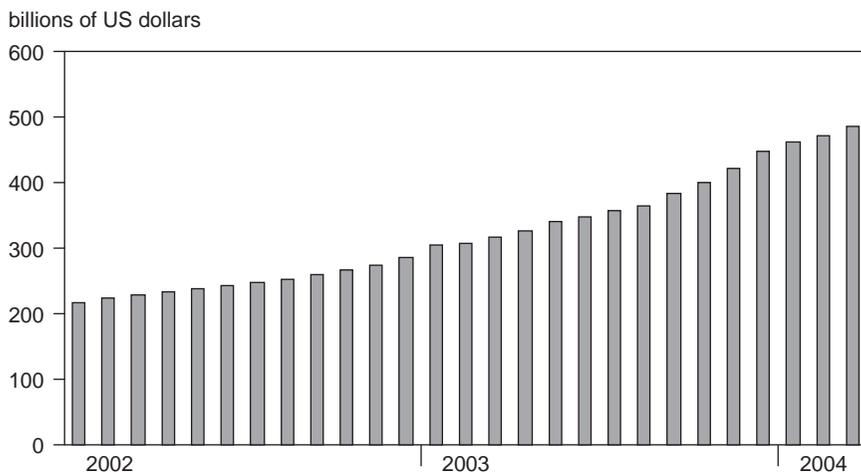
IMF member countries are free to pick fixed rates, floating rates, or practically any currency regime in between.<sup>16</sup> Also, it is true that member countries are permitted to intervene in exchange markets and, indeed, are expected to do so to counter disorderly market conditions. But what member countries should not do (regardless of their currency regime) is seek to maintain the “wrong” exchange rate by relying, *inter alia*, on large-scale, prolonged exchange market intervention in one direction. Put in other words, countries maintaining fixed rates can intervene if it is of relatively short duration, or if it is on a small scale, or if it is sometimes in one direction and sometimes in the other—but they cannot violate all three conditions simultaneously.

The second argument is that a country cannot be “manipulating” if it has maintained the same fixed parity over an extended period, as China has left untouched since 1995 its fixed parity of RMB 8.28 to \$1. This argument fails to recognize that what counts most is the real effective exchange rate, that the real exchange rate has to be evaluated against the changing backdrop of the balance of payments, and that misalignment of the real exchange rate can come about just as easily from “nonmovement” of the nominal exchange rate as it can from excessive movement of the nominal rate.

15. Although China describes its currency regime as a “managed float,” the behavior of the RMB suggests that it is maintaining (*de facto*) a fixed exchange rate (pegged to the dollar).

16. The only prohibition on currency regime choice is that the member cannot seek to maintain a fixed value for its currency in terms of gold.

**Figure 9.4** China's foreign exchange reserves, January 2002–March 2004



Source: Chinese State Administration of Foreign Exchange (SAFE).

China's real exchange rate has been depreciating during the period 2002–04 at the same time that its balance of payments has been moving into a strong underlying surplus. What would be desirable in this context is for China's real exchange rate to be appreciating—not depreciating. If China is preventing the real exchange rate from appreciating because of its intervention behavior, then it is thwarting the international adjustment process by keeping its nominal (bilateral) exchange rate fixed at RMB 8.3 to \$1.

### **Conclusion on Manipulation of the Renminbi Exchange Rate**

As the weight of emerging economies in the global economy has increased, the interest of the international community in how these countries conduct their exchange rate policies has increased along with it.<sup>17</sup> This is particularly the case with China's exchange rate policy, because the country is now the world's third largest importer and fourth largest exporter.

The exchange rate system cannot be concerned only with overvalued exchange rates; undervalued exchange rates must also be subject to surveillance and corrective action. International codes of conduct for exchange rate policy are no less necessary than those for trade policy; without them,

17. To cite but one reflection of this increased weight for emerging economies, Asian emerging economies alone now hold over 40 percent of global foreign exchange reserves.

there can be a free-for-all that is in no one's interest, least of all the emerging economies that depend so heavily on access to international markets.

The IMF is the institution uniquely charged with the responsibility for overseeing the international monetary system and for exercising firm surveillance over its members' exchange rate policies. It is regrettable that it has not acted with more "firmness" to investigate, discuss, and rule on allegations of currency manipulation. It is striking that at a time when, for example, the Japanese Ministry of Finance has requested financing authorization for 2004 to use (if needed) as much as \$575 billion in exchange market intervention (and has already intervened to the tune of nearly \$150 billion in the first quarter of 2004), both the IMF and the United States have been practically silent on the currency manipulation issue.

When there is a growing perception that "no one is minding the store" at the international level, then the likelihood increases that responses to alleged exchange rate policy abuses will occur at the bilateral level. There are now at least a half-dozen bills before the US Congress that threaten to impose a unilateral surcharge on China's exports to the United States if negotiation does not produce an end to China's alleged currency manipulation. Far better for such currency issues to be handled multilaterally in the IMF and, over time, for a body of case law to develop that would spell out more fully what is and what is not acceptable behavior on exchange rate policy.

Although it is far from the only country doing it, from 2002 to 2004 China has been engaging in protracted, large-scale intervention in one direction in exchange markets. This is currency manipulation. China should stop doing it and deal instead with the root causes of the problem.

## **Would a 15 to 25 Percent Appreciation of the Renminbi Be in China's Interest and That of the Rest of the World?**

### **What Would Be in China's Interest?**

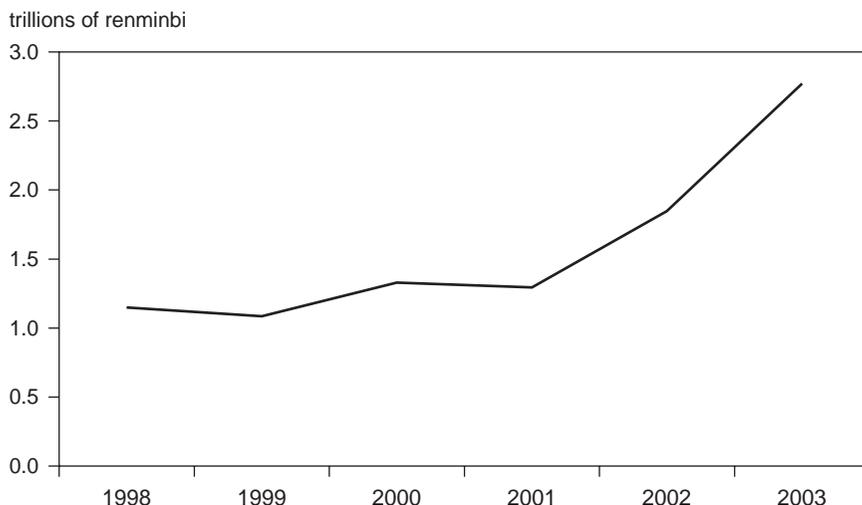
Would a significant appreciation of the RMB be in China's own interest? My short answer is yes.

The currency regime is not an end in itself. In China's case, the question to ask is how does attempting to maintain an undervalued RMB affect its pursuit of banking reform, of price stability, of continued secure market access for its exports, and of a high and sustainable rate of economic growth? Let me comment on each.

### **Banking Reform**

By now, it is well accepted that banking reform is vital for improving the efficiency of resource use in China (Lardy 1998). Although banking

**Figure 9.5 Increase in the stock of loans outstanding, 1998–2003**  
(domestic currency)

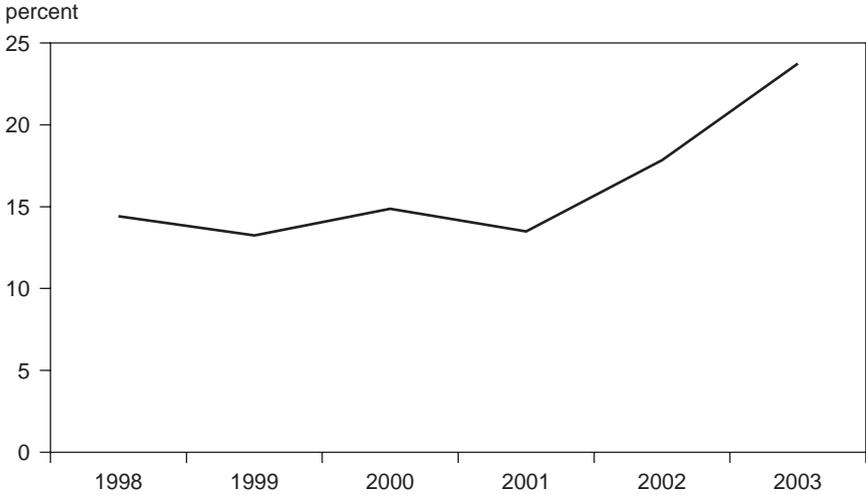


Source: The People's Bank of China, *Quarterly Statistical Bulletin*.

reform contains many elements, a sine qua non is a good credit allocation process, based on a forward-looking, objective assessment of the borrower's creditworthiness (Goldstein 1997). Experience suggests that credit allocation decisions suffer when bank credit expands at very rapid rates, say, 20 percent or more per year.<sup>18</sup> The enormous increase in bank loans that took place in 2003 in the Chinese economy is therefore cause for serious concern—raising the specter of a reversal of the progress recently made in bringing down the ratio of nonperforming loans. As figure 9.5 shows, after rising by an annual average of 1.1 trillion to 1.3 trillion renminbi during the 1998–2001 period, the stock of loans outstanding increased by 1.9 trillion renminbi in 2002 and then mushroomed to an unprecedented 3 trillion renminbi in 2003. Relative to GDP, the 2003 increase in loans outstanding hit 24 percent—an all-time high; see figure 9.6. The last time (in the early 1990s) there was a bank lending boom in China, approximately 40 percent of the loans extended eventually wound up as nonperforming. The People's Bank of China (PBC), in its *Monetary Policy Report for 2003* (PBC 2004), issued in March 2004, acknowledges that there was “excessively fast growth” of commercial bank loans in 2003, and cites concerns about that growth as contributing to its decisions to

18. Rapid bank credit expansion was a prominent feature of the Asian financial crisis (see Goldstein 1998), as well as of many earlier banking crises (see Gavin and Hausmann 1996).

**Figure 9.6 China's M2 growth, 1998–2003**



Source: The People's Bank of China.

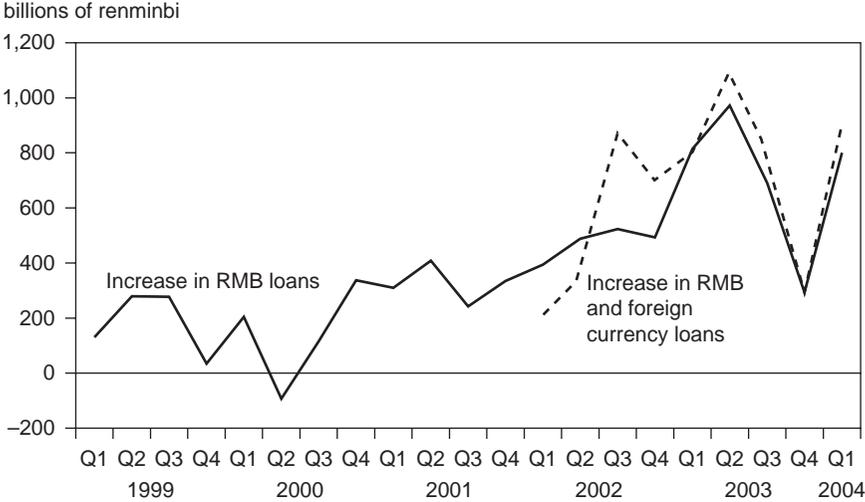
raise the deposit reserve requirement, to signal risks on real estate loans, to strengthen window guidance on commercial bank loans, and to conduct wide-ranging sterilization operations to control the growth rate of base money.<sup>19</sup>

The average monthly increase of RMB loans outstanding fell from 296 billion renminbi in the first half of 2003, to 230 billion renminbi in the third quarter, to 98 billion renminbi in the fourth quarter.<sup>20</sup> As shown in figure 9.7, however, the increase in bank lending accelerated sharply again in the first quarter of 2004—rising to an average monthly increase of 304 billion renminbi. The increase in bank lending was thus a whopping 20 percent in the first quarter of 2004 (*vis-à-vis* the first quarter of 2003). We will thus have to wait (at the time of this writing) until at least the third quarter of 2004 to see whether the restrictive measures already taken are having much of a slowing effect.

19. In addition to these measures, the State Council raised capital requirements for fixed investment projects (in steel, cement, real estate, and aluminum) and required line ministries and regional governments to evaluate ongoing and planned fixed investment projects in certain sectors; also, the China Bank Regulatory Commission recently advised commercial banks not to front-load loans to projects or to continue lending to overheated sectors.

20. It may be that the low fourth-quarter figure for the increase in bank lending reflected a concentration of bad-loan write-offs in the fourth quarter—not a decline in the rate of new lending.

**Figure 9.7 Increase in RMB loans and total loans, 1999–2004**



Source: The People’s Bank of China, *Quarterly Statistical Bulletin*.

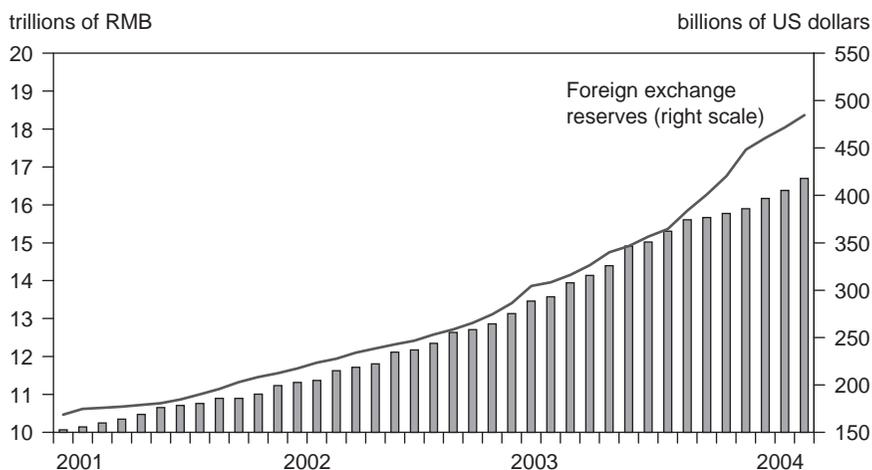
The link of credit growth to the exchange rate comes about via the impact of an undervalued exchange rate on accumulation of international reserves and, in turn, the effect of reserve accumulation on the expansion of bank reserves and on bank-lending behavior.<sup>21</sup> As was noted above, China’s reserve accumulation in 2003—driven mostly by portfolio capital inflows seeking to profit from an expected appreciation of the RMB—amounted to an unprecedented 11 percent of GDP.<sup>22</sup> When reserves increase, banks sell them to the central bank and receive in exchange an RMB account at the central bank. If the funds in that account are larger than the required minimum, banks can use this larger reserve base to increase bank lending. The central bank can “sterilize” some or all of this potential increase in liquidity by undertaking a number of offsetting operations.

As is shown in figure 9.8, both international reserves and RMB loans outstanding have been on strong upward trends during the period 2002–04. Base money grew by almost 17 percent in 2003, and broad money (M2) grew by almost 20 percent; as is shown in figures 9.9 and 9.10, these money growth rates were considerably higher than the average over the past several years.

21. In contrast, Mundell (2004) argues that RMB appreciation would aggravate the banking problem by raising the real value of debts to the banking system.

22. This figure for reserve increases does not subtract from reserves the \$45 billion subsequently used for bank recapitalization.

**Figure 9.8 China's foreign exchange reserves and total RMB loans outstanding, January 2001–March 2004**



Notes: Bars represent RMB loans (left scale). From December 2003 on, foreign exchange figures are adjusted to reflect \$45 billion transfer to state-owned commercial banks.

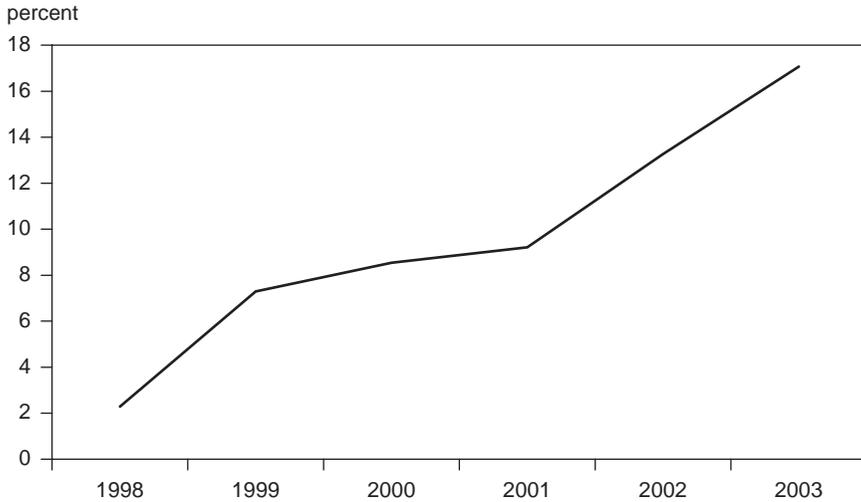
Source: Loans, The People's Bank of China, *Quarterly Statistical Bulletin*; foreign exchange, Chinese State Administration of Foreign Exchange (SAFE).

According to our estimates, the PBC last year sterilized almost half (46 percent) of the increase in reserves on base money. Sterilization operations in the first quarter of 2004 appear to have been even more aggressive. Still, broad money growth in the first quarter of 2004 was more than 19 percent (*vis-à-vis* the first quarter of 2003), and base money growth was more than 14 percent.

Making good estimates of sterilization cost is harder for China than for some other countries. We do not know the maturity composition of China's reserve holdings; because the term structure of US interest rates is significantly upward-sloping, it makes a difference whether we use the 10-year bond rate or the six-month Treasury bill rate in estimating the return on China's reserves. Estimates of sterilization cost could also be significantly affected by future changes in the exchange rate between the RMB and the US dollar. Most problematic—because the involvement of the government in the banking system in China is still considerable and because interest rate deregulation is not complete—there is considerable uncertainty about the true cost of borrowing from the banks.

Whether one calls it "window guidance," "moral suasion," or making bank managers "an offer they can't refuse," it is clear that the Chinese

**Figure 9.9 China's base money growth, 1998–2003**



Source: The People's Bank of China.

authorities have leverage with banks that is not captured in posted or observed interest rates.

The incentives for strong loan demand also continue to be impressive. As is shown in figure 9.11, the real interest rate on one-year bank loans—defined as the posted one-year interest rate less the change in the overall corporate goods price index—has been on a steadily declining trend in the period 2002–04; indeed, with the recent increase in the corporate goods price inflation to more than 8 percent in March 2004, the real interest on these loans is now negative.

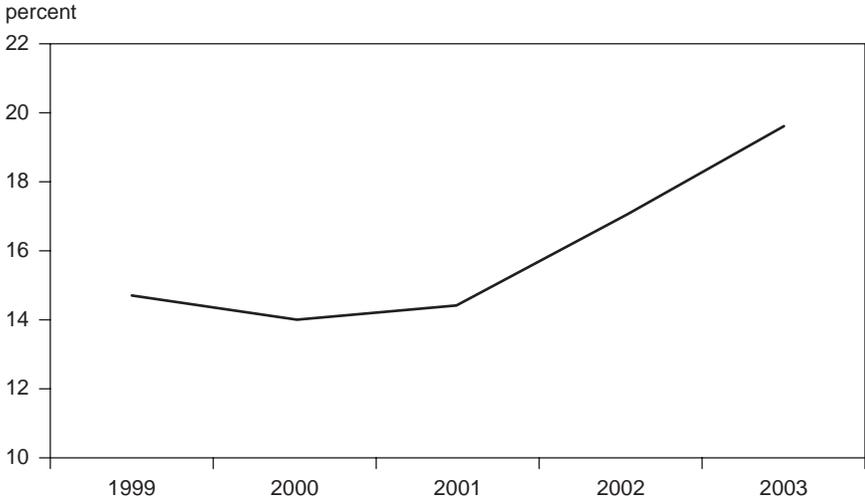
The fact that the Chinese authorities have been unwilling so far to increase interest rates (by other than a minor amount) in the face of the credit boom also suggests that short-term economic growth considerations and worries about the potential effect of higher interest on further capital inflows are weighing against more aggressive monetary tightening.<sup>23</sup> This increases the risk that they may remain “behind the curve.”

To sum up, the Chinese banking system is still faced with a serious non-performing loan (NPL) problem. The good news was that the NPL ratio appeared to be declining in recent years. But the blowout in bank lending in 2003 threatens to erase that progress and send the NPL ratio back

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23. The PBC raised the rates at which it lends to financial institutions by between 27 and 63 basis points in March 2004.

**Figure 9.10 China's M2 (broad money) growth, 1999–2003**



Source: The People's Bank of China.

upward.<sup>24</sup> Even if one believes that the credit boom has been driven primarily by the domestic component of the monetary base, it is undeniable that an increase in international reserves by 11 percent of GDP makes more difficult the reining-in of bank lending to a more prudent and sustainable pace.

### **The Pursuit of Price Stability**

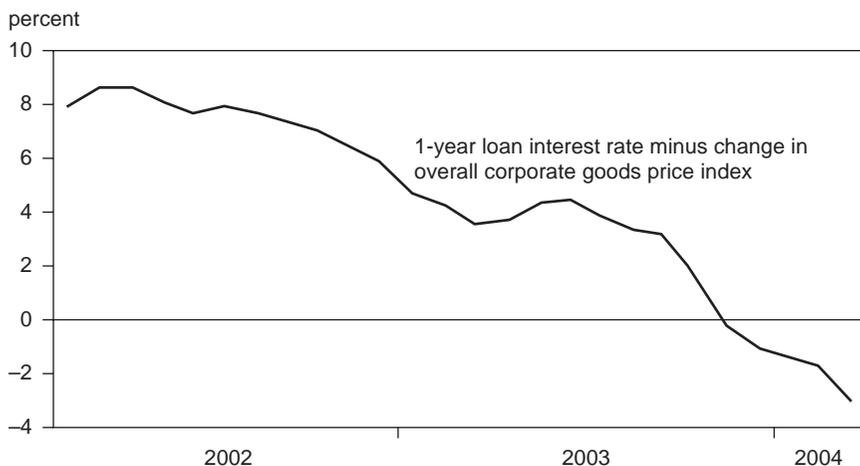
China has good reasons to pursue low and stable inflation. With an average annual per capita income just above \$1,000 and with some sectors and regions considerably below that, sizable groups in the population would begin to feel the pinch of lower purchasing power before inflation rates hit double digits;<sup>25</sup> in this sense, control of inflation, like keeping a reasonable cap on unemployment, is seen as an element of social stability.

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24. Although the PBC (2004) argues that the NPL ratio declined in 2003 (vis-à-vis its level in 2002), one has to be careful about interpreting NPL ratios in a period of very rapid credit expansion; this is because the denominator (total bank loans) is increasing rapidly and because the effects of current lending decisions may show up only in later years.

25. Of course, the pinch of higher inflation on particular groups in the population depends on how inflation affects their terms of trade.

**Figure 9.11** China's real lending rates, 2002–04



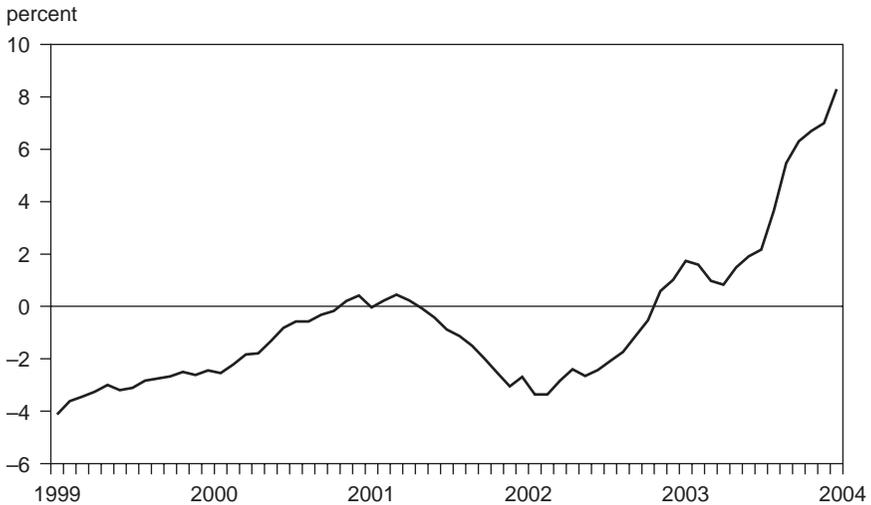
Source: The People's Bank of China.

Inflationary pressures increased during 2003, and those pressures intensified during the final quarter of 2003 and first quarter of 2004. In 2002, the consumer price index (CPI) actually fell (year over year) by 0.8 percent. In 2003, the CPI rose by just over 1 percent and the GDP deflator by 2 percent. The most revealing statistics, however, are those that capture both the recent upward trend in inflation and the higher inflation rates for producer goods and raw materials. By December of 2003, CPI inflation had increased to more than 3 percent—a rate that was maintained through the first quarter of 2004. The PBC's monthly index of corporate goods prices showed a rise of 8.3 percent in March 2004 (see figure 9.12). No wonder then that official concern has shifted from ending mild deflation (in 2002) to controlling rising inflationary pressures before the latter gets up too much of a head of steam.

Here, too, the exchange rate matters. As was argued above, an undervalued exchange rate spurs speculative capital inflows, reserve accumulation, and expansion of the monetary aggregates. All this makes it harder to keep inflation under control; see figure 9.13, which shows the similar time series behavior of M2 money growth and (CPI) inflation in China during the 1990–2003 period.<sup>26</sup> M2 money growth increased by 19 percent in the first quarter of 2004 (relative to the first quarter of 2003). Sterilization of reserve increases permits the authorities to limit the increase in the monetary aggregates but has the disadvantage of keeping interest rates higher than would be the case if there were no sterilization; the higher interest rates, in turn, provide an incentive for continuing capital inflows.

26. Adjusting for the downward trend in velocity growth and assuming economic growth at potential, several studies have suggested that price stability in China is consistent with a growth of M2 of 13 to 16 percent.

**Figure 9.12** People's Bank of China corporate goods price index, percent changes, 1999–2004



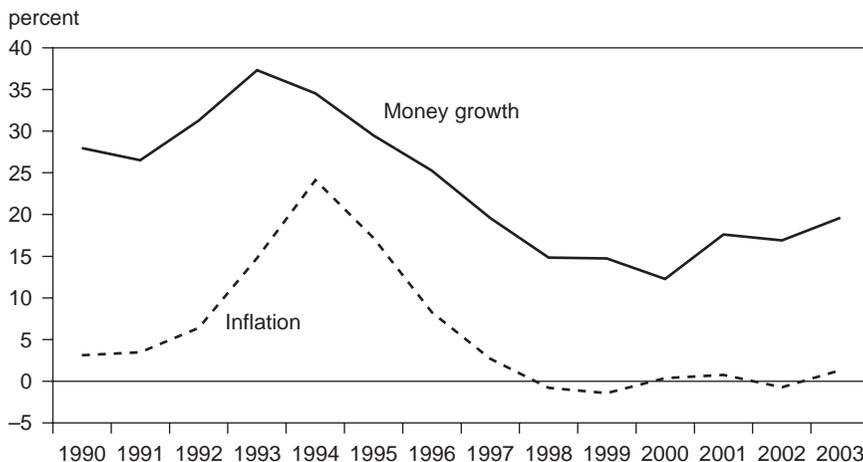
Source: The People's Bank of China.

China's capital account is more open to inflows than to outflows. Indeed, the country has been suffering of late from the classical incompatibility among a fixed exchange rate, open capital markets, and a desire for a more independent monetary policy. The least costly way to overcome that dilemma would be to revalue the RMB. If China persists in sticking to an undervalued parity for the RMB and keeps accumulating reserves at recent rates, the real undervaluation of the RMB will ultimately be undone by a further increase in the country's inflation rate.

A recent Goldman Sachs study by Sun-Bae Kim, Liang Hong, and Enoch Fung (2004) addresses the issue of whether the policy adjustments to date are sufficient to reduce China's GDP growth to a more sustainable level (assumed to be 7 to 8 percent). To answer that question, Kim and colleagues construct a financial conditions index (FCI) for China that incorporates M2 growth, the real interest rate, and the real effective exchange rate. According to the FCI, there has been very little monetary tightening since the third quarter of 2003. Kim and colleagues (2004, 1) find that "policy tightening to date represents only about one-fifth of the total FCI tightening required to bring growth to a more sustainable level." They also find that an exchange rate move would reduce substantially the degree of monetary tightening necessary. In the end, Kim and colleagues conclude that reliance on administrative controls and delays in FCI tightening raise the risk of a more powerful boom in 2004 and a sharper retrenchment in 2005.

To sum up, the question for China is which form of adjustment of its real exchange rate is preferable. Surely, it is the one that relies on the adjustment

**Figure 9.13 M2 money growth and CPI inflation, 1990–2003**



Source: The People's Bank of China.

of nominal exchange rates. The alternative adjustment path, early signs of which are already in evidence, involves an excessive increase in monetary aggregates and a potentially large rise in the inflation rate; these, in turn, could bring with them a weakening of the banking sector, longer-term damage to China's hard-won gains in anti-inflationary credibility, and a higher risk of a hard landing of the real economy later this year or in 2005.<sup>27</sup>

### **Continued Secure Market Access for China's Exports**

China is now the world's fourth largest exporter. Its exports account for 30 percent of its GDP. The value of China's merchandise exports grew in

27. A few analysts continue to argue that greater flexibility in China's currency regime would bring deflation with it. E.g., McKinnon and Schnabl (2003) have argued that if China were either to revalue or to float the RMB, it would soon be caught in a dangerous liquidity trap with the risk of prolonged deflation (à la Japan's recent experience). Central to their argument is the proposition that any appreciation of the RMB would generate expectations of further appreciation. Assuming that open interest rate parity needs to hold between dollar and RMB assets and that China has no influence on US interest rates, they arrive at the conclusion that interest rates in China will be driven (lower) into a liquidity trap to offset the expected appreciation of the RMB. I find their argument unpersuasive on at least two counts. First, it is no appreciation or small appreciation of the RMB that will drive expectations of further appreciation—not a 15 to 25 percent appreciation that would remove the existing disequilibrium in China's balance of payments. Second, it is going too far to suggest that international integration of capital markets has proceeded sufficiently that Chinese monetary policy is driven exclusively by arbitrage and exchange rate considerations; it has been monetary policy developments in China that have had a major influence on China's inflation rate—not exchange rate expectations (e.g., in 1994).

2003 by 35 percent, providing a substantial impetus to growth and employment. It thus makes perfect sense for the Chinese authorities to be concerned about prospects for China's exports.

Many critics of an RMB revaluation have focused on the expected contractionary effect of an exchange rate change on China's trade balance, output, and employment. Implicitly, they are assuming that, without a revaluation, China could continue for the indefinite future to record rapid export growth and to accumulate ever larger stockpiles of international reserves. I think such a view underestimates the protectionist threat to China's exports associated with continuation of the current regime. Imagine complaints about the lack of a level playing field against a backdrop in which the US bilateral trade deficit with China continues to be large, the RMB continues to depreciate in real effective terms alongside the dollar, and China and Japan continue as part of their large reserve accumulation to increase their share of US Treasury securities held abroad. Is this the kind of environment in which protectionist pressures in China's major export markets can confidently be forecast to be held at bay? Is this the kind of environment in which China's own trade liberalization can move ahead, with sufficient domestic popular support? I doubt it.

Half of China's total exports go to the United States, Euroland, and Japan. Reformers in China fought long and hard domestically to convince skeptics that China's accession to the WTO and full participation in the international trading system would be to China's advantage. The question that the Chinese authorities need to ask themselves is whether it pays to put in jeopardy the gains linked to market access for China's exports and to continued liberalization of China's import regime—for the sake of trying to maintain for a little longer an undervalued real exchange rate that may well be unsustainable anyway for other reasons. I know what my answer would be.

## **A High and Sustainable Rate of Economic Growth**

Perhaps the single most popular argument against RMB revaluation is that it would be inconsistent with China's overriding need for rapid economic growth to employ its growing labor force and to ensure social stability (e.g., see Mundell 2004). In my view, this argument is flawed on three principal grounds.

First, a key threat to high and sustainable growth in China comes from an unsustainable credit boom in China itself and from a protectionist backlash against China's exports. If the credit boom is not brought under control soon, the chances increase that the monetary authorities will have to implement large increases in domestic interest rates and in reserve requirements. Such a monetary policy "crunch" would initiate a hard landing for the Chinese economy and depress growth significantly. The undervalued RMB,

via its effect on speculative capital inflows and the pace of reserve accumulation, increases the risk that the monetary authorities will get so far behind the curve that they will have to act more aggressively.

Second, the experience of the 1990s does *not* suggest that real appreciation of the RMB will cause China's growth performance to fall unduly. Between 1994 and early 2002, the real trade-weighted exchange rate of the RMB rose by 29 percent; see figure 9.14. Yet the average growth rate of the Chinese economy from 1985 through 2001 was 8½ percent, and in no single year did the growth rate fall below 7½ percent.

Third, a revaluation of the RMB would put more focus within China on the *domestic* sources of economic growth and on what policy changes would be needed to strengthen domestic demand.<sup>28</sup> Chief among those policy changes would be an improvement in the system of financial intermediation and particularly a strengthening of the domestic banking system.

## Conclusions on China's Interest in an RMB Revaluation

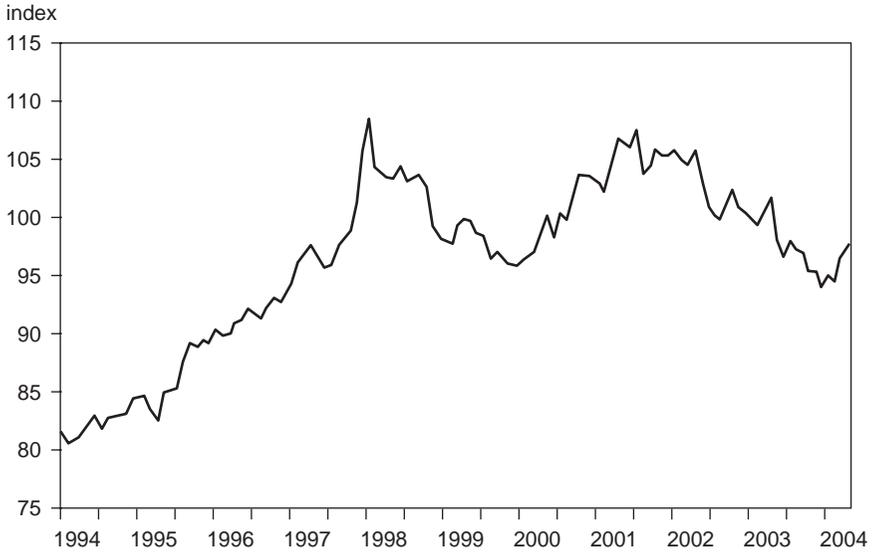
Whatever its earlier virtues, China's exchange rate policy has become increasingly problematic in the period 2002–04. The significantly undervalued RMB has been working against efforts to rein in an excessive growth of bank lending. It has been handicapping efforts to bring an end to overheating of the economy and to keep inflation from rising too much. And it could interrupt the market access that China now enjoys for its exports and weaken popular support within the country for further trade liberalization. The proposition that an RMB revaluation would be antigrowth and anti-employment is based on a fallacious assumption: that China's growth can be maintained at very high rates indefinitely without substantial changes in either the exchange rate or interest rates. This is most unlikely. A revaluation of the RMB would actually improve China's prospects for healthy, *sustainable*, noninflationary economic growth.<sup>29</sup>

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28. Fernandez (2004) argues that a consistently undervalued currency also impedes industrial restructuring.

29. The same fallacious line of argument applies to the view that an RMB revaluation should be avoided because it will lead to a sizable decline in the RMB value of China's international reserves. The longer the RMB remains undervalued, the greater the likelihood that the subsequent revaluation will be even larger; meanwhile the undervaluation increases reserve accumulation, so that any subsequent revaluation would apply to a larger base. Unlike many other emerging economies, China has a net foreign asset position and thus does not have to worry that any future devaluations would generate large-scale insolvencies; see Goldstein and Turner (2004) on the measurement and control of currency mismatches.

**Figure 9.14 Renminbi real trade-weighted exchange rate, 1994–2004 (index: 2000 = 100, monthly averages)**



Note: Tick marks are for January and July of years indicated.

Source: JPMorgan data.

## What Would Be in the Interest of the Rest of the World?

An RMB revaluation would also be in the strong interest of the rest of the world. If a lack of exchange rate action were to prompt a hard landing for the Chinese economy, China's imports would be expected to fall markedly. This would have an adverse impact on both partner countries' exports to China and on global commodity prices.

Eswar Prasad and Thomas Rumbaugh (2004), for example, report that (using purchasing power parity-based GDP) China accounted for about one-quarter of world economic growth during the 2001–03 period. Stephen Roach (2004) estimates that in 2003 China accounted for 32 percent of Japan's total export growth, 21 percent for the United States, 28 percent for Germany, 36 percent for South Korea, 68 percent for Taiwan, and about 30 percent (on average) for the countries that belong to the Association of Southeast Asian Nations.

To illustrate China's impact on primary commodity prices, the IMF (2004) estimates that China's net imports now account for 20 percent of world trade in soybeans, 15 percent in copper, and just under 5 percent in

oil. Equally relevant, in 2003 China accounted for 121 percent of the increase in global copper demand; respectively, the corresponding percentages for steel, iron ore, aluminum, and primary nickel were 90, 66, 51, and 44 (Simpfendorfer 2004). Clearly, the “harder” the landing for Chinese growth, the more negative would be the growth implications for China’s trading partners. Economies where exports to China account for a relatively high share of GDP (e.g., Hong Kong, Taiwan, Malaysia, Singapore, South Korea, Thailand, the Philippines, Russia, Indonesia, and Japan) would be the most affected.<sup>30</sup>

As was suggested above, the absence of an RMB revaluation would also make it more difficult to reduce global payments imbalances, especially the correction of the US current account deficit. To reduce the US external deficit in a more controlled manner, the US dollar needs to depreciate further and US spending needs to decline relative to US output. Since the peak in early 2002, the dollar has fallen on a real, trade-weighted basis by about 15 percent. But that first round of dollar depreciation has taken place against a relatively limited group of currencies—principally the euro, the Canadian dollar, the Australian dollar, the New Zealand kiwi, the Chilean peso, and, only slightly, the Japanese yen. Notably, the currencies of most Asian emerging economies have generally depreciated in real terms against the dollar since early 2002, even though most of them have balance of payments surpluses.

If the burden of adjustment is not more “balanced” across countries and regions during the necessary second round of dollar depreciation, the consequences would be adverse; either the overall dollar depreciation would be too small to correct the US deficit or the concentration of currency appreciation in regions (e.g., Euroland) with relatively slow growth and earlier significant appreciation would slow regional and global growth unduly. Economic policy cooperation, both among the Group of Seven (G-7) coun-

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30. See Anderson (2004c). Along similar lines, Hueck (2004) concludes that a hard landing of the Chinese economy would most adversely affect Thailand, Singapore, Malaysia, and Indonesia. Effects on Latin America and the transition economies of Eastern Europe would be more subdued. Among the industrialized countries, Hueck finds that the negative consequences would be larger for Japan than for either the United States or the euro zone. He estimates that a decline of Chinese growth by 6 percentage points would yield a slowdown of global growth by 0.2 percent this year and 0.4 percent in 2005. Eichengreen (2004) argues that the countries that will benefit most from an RMB revaluation are Cambodia, Vietnam, Bangladesh, Sri Lanka, and Pakistan. These are the countries whose exports, broken down by industry, have the highest-rank correlation with Chinese exports, according to Shafaeddin (2003). These countries are argued to benefit because an RMB revaluation will increase China’s relative unit labor costs and because it will induce China to shift into more technologically advanced, higher-value-added product lines. He argues that the next tier of Asian countries, like Thailand, will benefit less because China’s move up the technology ladder will increase competition with them. Finally, he argues that the region’s most advanced economies will feel mainly negative effects of an RMB revaluation.

tries and between the G-7 countries and Asia, might also suffer if global rebalancing via currency realignments did not take place in 2004; this, in turn, could damage confidence, especially if there were more serious conflicts over currency and trade policies.

Because Asian emerging economies plus Japan account for almost a 40 percent weight in the trade-weighted value of the dollar, because most of these economies have current account surpluses and strengthening domestic demand, and because their currencies did not participate in the first round of dollar depreciation, it is time for them to play a leading role in the second round of exchange rate adjustment.

China's role in this adjustment of Asian currencies is crucial. For if China does not permit the value of the RMB to rise significantly, other Asian economies—fearful of losing competitiveness to China if they acted alone—will be reluctant to allow their currencies to appreciate. In contrast, if the currencies of these Asian economies appreciate simultaneously (although by a somewhat smaller amount than China), each will gain competitiveness vis-à-vis China while limiting the decline in their overall competitive position. The global adjustment process will then be shared across a broader base.

## **Conclusions on the Rest of the World's Interest in Renminbi Revaluation**

If an RMB revaluation is good for China in terms of promoting sustainable growth, it will also be good for the rest of the world; conversely, an exchange rate policy that would push China into a hard landing (because of its unhelpful contribution to rising domestic financial pressures within the country) would likely have adverse spillover effects on the rest of the world's exports to China. In addition, a rebalancing of global payments imbalances—and the avoidance of a hard landing stemming from a disorderly correction of the excessively large current account deficit in the United States—will be more difficult to achieve without the appreciation of Asian emerging economies. And China's own exchange rate appreciation is the linchpin for wider Asian currency adjustment.

## **What Kind of Currency Regime Would Best Facilitate an Appreciation of the Renminbi?**

Once it is agreed that an appreciation of the RMB would be both in China's interest and in the global interest, the next operational issue is how that appreciation should be implemented. There are at least four alternative approaches: go slow in making changes to the currency regime, open capital markets and float the currency, float the currency but maintain controls on capital outflows, or implement two-stage currency reform.

## The Go-Slow Approach

Under the go-slow approach, China would make only minor changes to the status quo. Specifically, a series of trade, capital account, and tax measures would substitute for a medium-sized revaluation. The exchange rate substitutes would be measures like a further reduction in the value-added-tax export rebate, promotion of tourist expenditures abroad, allowing banks to issue more dollar-denominated bonds, easing further surrender requirements on foreign exchange earnings, treating more favorably requests for outward foreign direct investment, and permitting mainland residents and certain financial institutions to purchase agreed-on amounts of foreign securities. The authorities might also consider a very small (2 to 3 percent) revaluation or small widening of the exchange rate band, perhaps in conjunction with a shift to a currency basket.

The appeal of the go-slow approach to the Chinese authorities is presumably that it will have only a minor negative effect on China's exports, on its incoming foreign direct investment, and on its near-term growth prospects. But as was suggested above, if the undervaluation of the RMB is substantial—say, 15 to 25 percent—then the go-slow approach is likely to be inadequate for removing the disequilibrium. This in turn means that the go-slow approach will not stop the huge capital inflow and the associated very large reserve accumulation.

Indeed, the go-slow approach may actually *increase* incoming capital flows, because speculators will assume that these small policy adjustments are only a precursor to a larger exchange rate appreciation. Put in other words, the go-slow approach may well create a “one-way bet” for speculators and thereby increase speculation on an RMB appreciation.

## Opening Capital Markets and Floating the Currency

Another suggested prescription is for China to move rapidly to open its capital markets and to freely float its currency. This approach was proposed by US Treasury secretary John Snow during his visit to Beijing last fall. It is a good idea for the long run but not for now.

What makes the Snow proposal inappropriate for China's present circumstances is the still-fragile state of the Chinese banking system.<sup>31</sup> If China's restrictions on capital outflows were lifted, the risk is that there could be large-scale capital flight and sharp currency depreciation in response to bad news about the banking system or the economy. Given the unhappy experience of many of its neighbors during the Asian financial

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31. Anderson (2004b) also argues that China cannot lift restrictions on capital flows now because Chinese interest rates are not sufficiently flexible to adjust to prevent speculative arbitrage.

crisis, China is understandably reluctant to risk repeating that outcome. Instead, it would rather phase in the liberalization of its capital account according to the progress made in strengthening the banking system. In addition, the foreign exchange market in China is still dominated by the government; getting a proper price signal will thereby require widening the number of participants in the market, as well as making a series of technical improvements.<sup>32</sup>

### **Floating the Currency but Maintaining Controls on Capital Outflows**

A third approach would retain controls on capital outflows but would introduce a managed float right away. In so doing, it would (appropriately) delink the capital account regime decision from the currency regime decision. Because I am a longtime supporter of managed floating for emerging economies that have heavy involvement with private capital markets, this is the regime I would ordinarily prefer.<sup>33</sup> But not in this case. The reason is that I fear that a managed floating regime in China will in practice have plenty of “management” and very little “floating.” If the managed float is heavily managed, the movement in the exchange rate may well be very little different from that in the go-slow approach. In that event, it too would not remove most of the existing disequilibrium, with adverse effects on the quest for financial stability and sustainable growth.

### **Implementing Two-Stage Currency Reform**

It was because of the disadvantages of the three alternative approaches outlined above that Lardy and I (Goldstein and Lardy 2003b) proposed that China implement “two-stage currency reform.” The first stage, to be undertaken immediately, would entail three elements: the switch from a unitary peg to the dollar to a currency basket, a medium-sized (15 to 25 percent) revaluation of the RMB, and a widening of the currency band (to between 5 to 7 percent, from less than 1 percent). Also, the substantive restrictions on capital outflows would be retained. Stage two, to be implemented after China strengthened its banking system enough to permit a significant liberalization of capital outflows, should be adoption of a managed float.

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32. The four state-owned commercial banks now account for 95 percent of interbank market trading in foreign exchange. Risk-hedging products in the market are very limited relative to enterprises’ demand for them. Financial trading (vs. trading for commercial purposes) in the foreign exchange market is low in China relative to that in the international foreign exchange market.

33. E.g., see the case for a “managed floating plus” regime in Goldstein (2002).

This two-stage approach does not ask the rest of the world to live with a seriously undervalued RMB until China is ready to lift the restrictions on its capital outflows; nor does it ask China to put its domestic financial stability at risk by undertaking premature liberalization of its capital account. And by implementing immediately a sizable revaluation of the RMB, the two-stage approach removes the incentives for further large capital inflows and reserve accumulation; the external component of the monetary base would therefore no longer be working at cross-purposes with the domestic component. Exchange rate policy would thus become the ally—not the enemy—of bank reform and of anti-inflationary monetary policy.

Because there would no longer be a need for large-scale, prolonged exchange market intervention in one direction, allegations of currency manipulation would cease. Moreover, because a significant down payment would have been made on currency flexibility in stage one, there would be less risk that a Chinese announcement of a move to “greater currency flexibility” would be more press release than de facto exchange rate flexibility. Finally, by implementing a revaluation of the RMB and improving the incentive for other Asian economies to follow its lead, China would (once again, as during the Asian financial crisis) become part of the solution to global payments imbalances—not part of the problem.

By moving to a currency basket, the stability of China’s overall effective exchange rate would be enhanced. Contrary to what is often asserted, the present currency regime does not deliver exchange rate stability to China, as evidenced by the significant volatility that one observes in China’s overall, real, trade-weighted exchange rate during the past decade (see figure 9.14). Also, the currency basket would permit a further depreciation of the dollar with respect to the RMB without the need for a series of further parity changes. If China retains its current unitary peg to the dollar, this will not be possible. By widening the currency band, China could gain valuable experience with managing greater currency flexibility and at the same time improve the institutional structure and depth of the foreign exchange market.

By adopting a managed float in stage two, China would acquire the monetary policy independence it increasingly needs. As the events of 2003 demonstrated, the domestic requirements for monetary policy in China can at times be quite different from the domestic requirements in the anchor country (i.e., in the United States).<sup>34</sup> Also, it is not necessary for China to have a fixed exchange rate to produce good inflation performance in the future. Instead, it can do what an increasing number of other emerging

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34. Because of the increased openness of the Chinese economy, it will also become more and more difficult for China to control capital flows; this too argues for increased exchange rate flexibility down the road.

economies are doing, namely, adopt a monetary policy framework of inflation targeting (along with a managed float).<sup>35</sup>

Most studies conclude that countries adopting inflation targeting have been relatively successful in meeting their announced inflation targets, that the track record in meeting inflation targets has been much better than that in meeting announced monetary growth targets, that countries adopting inflation targeting still allow monetary policy to respond to falls in output, and that inflation targeting has rarely been associated with a subsequent loss of fiscal prudence.<sup>36</sup> In short, two-stage currency reform will permit China to solve its exchange rate policy dilemma.

## Conclusions

China should not change its exchange rate policies simply because other countries are urging it to do so. But, by the same token, the fact that many are recommending a revaluation of the RMB is not sufficient reason for rejecting that policy option if it is the best one available.

The main reason for revaluing the RMB by an appropriate amount is that it increases the odds that China will be able to achieve the economic objectives it has long pursued, namely, domestic financial reform, domestic macroeconomic stability, open market access for its exports, and a healthy, sustainable rate of economic growth. Exchange rate action differs from other policy measures in one crucial respect: It addresses simultaneously internal balance (overheating) and external balance (the surplus in the balance of payments). The cost of a hard landing is too high to rely on half measures.

China's decisions on its future currency regime should pay primary attention to China's own circumstances—not to one-size-fits-all prescriptions. Given the still-fragile state of China's banking system, the capital account decision should be delinked from the currency regime decision. All things considered, two-stage currency reform is better than the alter-

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35. Following Mishkin (2000) and Truman (2003), inflation targeting is a framework for monetary policy that constrains discretion in at least four key elements: (1) There is an institutional commitment to low inflation as a primary objective of monetary policy; (2) there is public announcement of a numerical target (or sequence of targets) for inflation, with a specified time horizon for meeting that target; (3) the central bank is given enough independence from political pressures and/or government directives that it can set the instruments of monetary policy as it sees fit in pursuit of its mandate; and (4) the conduct of monetary policy is subject to transparency and accountability guidelines, so that the public is informed about both the reasons for monetary policy decisions and the extent to which the objectives of monetary policy have been attained. Jenkins (2004) also suggests that China should move to an inflation-targeting regime for monetary policy, along with a flexible exchange rate. Mundell (2004) takes the opposite view that a fixed exchange rate would be better.

36. See Truman (2003), and see Mishkin and Schmidt-Hebbel (2001) for a review of these studies.

natives because it reduces China's current internal and external imbalances, it promotes the right sequencing of internal reforms, it contributes to the timely correction of payments imbalances abroad, and it moves monetary policy independence and capital account liberalization in the desired direction in the long term.

## Addendum

This paper was written relying on data through the first quarter of 2004. Data for the second quarter of 2004 have since then become available. In brief, the second-quarter data show evidence of a slowing of growth for real fixed investment, industrial value added, broad monetary aggregates, and bank lending. On the other hand, growth of private consumption increased, inflation rates are still rising, the trade balance began showing monthly surpluses in May, and international reserves increased by \$30 billion. Also, investment is still rising faster than GDP, pushing the investment share up yet further. Second-quarter growth of real GDP was 9.6 percent—just a bit below the figure for the first quarter and somewhat higher than the figure for 2003 as a whole. Enough to say that I think it premature to conclude at this stage that China has achieved its desired “soft landing.”<sup>37</sup>

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37. See Goldstein and Lardy (2004) for an explanation of why the unwinding of China's investment boom was barely begun and of why administrative controls are not likely to prove effective over the medium term.

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