Editors' Summary

he *India Policy Forum (IPF)* is a new journal, jointly promoted by the National Council of Applied Economic Research (NCAER), New Delhi, and the Brookings Institution, Washington, D.C., that aims to present high-quality empirical analysis on the major economic policy issues that confront contemporary India. The journal is based on papers commissioned by the editors and presented at an annual conference. The forum is supported by a distinguished advisory panel and a panel of active researchers who provide suggestions to the editors and participate in the review and discussion process. The need for such real-time quantitative analysis is particularly pressing for an economy like India's, which is in the process of rapid growth, structural change, and increased involvement in the global economy. The founders of the *IPF* hope it will contribute to enhancing the quality of policy analysis in the country and stimulate empirically informed decisionmaking. The style of the papers, this editors' summary, and the discussants' comments and general discussions are all intended to make these debates accessible to a broad nonspecialist audience, inside and outside India, and to present diverse views on the issues. The *IPF* is also intended to help build a bridge between researchers inside India and researchers abroad, nurturing a global network of scholars interested in India's economic transformation.

The first India Policy Forum conference took place at the NCAER in Delhi on March 26–27, 2004. In addition to the working sessions, the occasion was marked by a public address given by Stanley Fischer, vice chairman with Citigroup International and a member of the *IPF* advisory panel. This inaugural issue of the *IPF* includes the papers and discussions presented at that conference. The papers focus on several contemporary policy issues. The first two papers provide alternative perspectives on the trade policies that would do the most to enhance India's future growth prospects in the context of ongoing developments in the global trading system. The three papers that follow are devoted to an analysis of recent developments in India's balance of payments and their implications for the future exchange rate regime, the integration of exchange rate

policy with other aspects of macroeconomic policy, and capital account convertibility, respectively. The sixth paper is devoted to an examination of the performance of the Indian banking system and the implications of the dominant role of government-run banks.

The first paper, by Arvind Panagariya, provides a broad review of India's external sector policies; the impact of these policies on trade flows, efficiency, and growth; and the future direction trade policies should take. Since trade policies are a means to an end, namely faster growth and improved efficiency, and since trade policies support other domestic policies, Panagariya's review necessarily ranges into these areas as well. Finally, to place India's performance in perspective, Panagariya makes extensive comparisons throughout between Indian and Chinese outcomes over the past two decades (1980–2000), a period when both economies have chosen to reintegrate into the world economy.

India's growth experience since 1950 falls in two phases. The first thirty years were characterized by steady growth of around 3.5 percent; thereafter growth has tended to stay in the 5 to 6 percent range. Panagariya links this differential growth performance with the imposition and subsequent relaxation of microeconomic controls, particularly in the external sector. In turn he divides these external sector policies into three phases. Between 1950 and 1975 the trend was toward virtual autarky, particularly after a balance-of-payments crisis in 1956–57. This was succeeded by a period of "ad hoc liberalization" starting around 1976, when reform of quantitative restrictions on trade was complemented by deregulation of industrial licensing in certain sectors. A further balance-of-payments crisis in the period from late 1990 to early 1991, concurrent with a general election, provided the background for a switch to deeper and more systematic liberalization, which, in fits and starts, continues today.

In the merchandise trade area the focus of reform has been to reduce tariff levels, particularly on nonagricultural goods. This has been done by gradually reducing the peak rate and reducing the number of tariff bands. In 1990–91 the peak rate stood at 355 percent, while the simple average of all tariff rates was 113 percent. By early 2004 the peak rate on individual goods was down to 20 percent, though there were notable exceptions, such as chemicals and transport equipment. Similarly, there has been less than ideal progress in reducing end-user and other exemptions. In non-industrial areas there has been substantial liberalization of trade (and investment) in services, but following the OECD example, less in agriculture.

Panagariya next reviews the impact of this liberalization on trade flows, on efficiency, and on growth, in many cases using China as a benchmark.

India's share in world exports of goods and services—which had declined from 2 percent at Indian independence in 1947 to 0.5 percent in the mid-1980s—bounced back to 0.8 percent in 2002, implying that for roughly twenty years India's trade has grown more rapidly than world trade. In addition, the deeper reforms of the 1990s yielded a pick-up of almost 50 percent over the previous decade, from 7.4 percent to 10.7 percent. Encouraging though these numbers are in light of India's past performance, they pale in comparison with the Chinese record over the same period. Aside from any issues that may arise in the measurement of Chinese GDP at a time of rapid institutional and economic change, the combined share of exports and imports of both goods and services rose in China from 18.9 percent in 1980 to 49.3 percent in 2000, according to World Bank data. For India, the comparable numbers were 15.9 percent (in 1980) and 30.6 percent (in 2000).

The increase in India's trade intensity has been accompanied by significant shifts in composition. The most dramatic has been the increased share of service exports in the 1990s. Within industry, exporting sectors with above-average growth tended to be skill- or capital-intensive rather than labor-intensive, while on the import side the share of capital goods imports declined sharply. In the area of services, rapid growth was exhibited by software exports and recorded remittances from overseas Indians. However, tourism receipts remain below potential. With regard to trade partners, the main shift over the 1990s was a move away from Russia toward Asia, particularly developing Asia. An interesting recent development has been the rapid expansion of India's trade with China.

Panagariya then reviews the evidence on the impact of liberalization on static efficiency and on growth. One common approach is to use a computable general equilibrium (CGE) model to estimate the effects of the removal of trade distortions. The one study cited estimates the impact as raising GDP permanently by 2 percentage points. Additional domestic liberalization could raise this figure to 5 percentage points. Panagariya argues, however, that such models miss some key sources of gains. He cites two in particular: the disappearance of inefficient sectors and improvements in product quality. In addition, disaggregated analysis at the five-digit SITC level reveals far more dynamism in product composition of both exports and imports than is revealed at the two-digit level. This suggests greater gains from trade and improved welfare from enhanced choice than is captured in more aggregate models.

The links between liberalization and aggregate growth—or growth in total factor productivity (TFP)—have been controversial both in India and elsewhere in the emerging economies of Asia. In the case of India, the focus has been almost exclusively on manufacturing. After reviewing several studies, which admittedly differ in methodology and data quality, Panagariya judges that the weight of the evidence indicates that trade liberalization has led to productivity gains. Notwithstanding this reasonably positive assessment, Panagariya reminds us that overall, Indian industry's performance in the 1980s and 1990s has been pedestrian, particularly compared with that of services.

The poor performance of Indian industry and the stronger growth performance of Chinese industry form the backdrop for Panagariya's final section, on future policy. He discusses four issues: domestic policies bearing on trade; autonomous liberalization; regional trade agreements; and India's participation in multilateral negotiations. With regard to the first, the central question for Panagariya is why Indian industry's response to liberalization has been more sluggish than China's. Panagariya attributes this in part to differences in economic structure but also to differences in the two countries' domestic policies. He argues that it is easiest to expand trade in industrial products, and it is easier to do so if the industrial sector represents a large share of national value added. As far back as 1980, the share of industry in China was 48.5 percent, while in India it was half that, at 24.2 percent. Two decades later things are not very different. Panagariya makes a further interesting point: a relatively small industrial sector also reduces the capacity of the economy to absorb imports, leading to a tendency toward exchange rate appreciation (although even China has not been immune from this tendency). He concludes that it is imperative to stimulate industrial growth and cites reform in three areas as being essential: reduction of the fiscal deficit; reduction and ultimately elimination of the list of manufactured products "reserved" for small-scale industry; and reform of the country's labor laws, which make reassignment or retrenchment of workers prohibitively difficult in the so-called formal or organized sector.

Turning next to autonomous trade reform, Panagariya is critical of the view, widely held in India, that the tariff structure ought to favor final goods over intermediates. He also notes that the current tariff structure remains riddled with complexity. He urges the authorities to move quickly to a single uniform tariff of 15 percent for nonagricultural goods and to move to a uniform tariff of 5 percent by the end of the decade. With regard to agriculture, Panagariya points out that India stands to gain from autonomous tariff liberalization given its potential as an agricultural exporter. He also addresses the issue of "contingent protection," wherein India's liberal use of antidumping regulations has clearly had protectionist intent. Pana-

gariya urges changes in the antidumping procedures currently in place and also greater use of safeguard measures, as they are applied on a nondiscriminatory basis to all trading partners.

While India has traditionally taken comfort in a multilateral rule-based system of international trade, it has more recently embarked on an ambitious program of regional trade negotiations. It has signed free trade area (FTA) agreements with Sri Lanka and Thailand and is in the advanced stages of negotiating an FTA with Singapore. Panagariya analyzes the global, regional, and domestic factors that have brought about this shift in strategy—essentially the weakening of the U.S. commitment to multilateral negotiations, together with political imperatives. Panagariya observes that for a relatively protected economy, trade diversion and the associated revenue loss should be important concerns. He is also concerned that preoccupation with FTAs diverts attention from both unilateral liberalization and multilateral negotiations, each of which yields greater return for the effort expended. However, Panagariya concedes that there is a strategic case for FTAs, both to exert leverage in the multilateral sphere and to create a template that reflects India's interests in future bilateral and multilateral negotiations. In this context he is critical of the template developed in the agreement on the South Asian Free Trade Area (SAFTA), which, in his view, is cluttered with many nontrade issues. In the specific case of a U.S.-India FTA, he believes that there is a strong case for an agreement in services, with mutually beneficial exchange of market access.

The paper ends with a discussion of India's interests in ongoing multilateral trade negotiations. Panagariya's main point is that India has a strong interest in successful conclusion of the Doha Round and could agree to the U.S. proposal aimed at eliminating tariffs on industrial goods by 2015. As noted before, India also has interests in improved market access in agriculture; given the considerable water in its bound tariffs, some concessions should be possible, particularly if accompanied by reductions in subsidies by rich countries.

The 1990s and the new millennium have seen a massive proliferation of preferential trade arrangements (PTAs), which typically lead to free trade among two or more countries, as, for example, under the North American Free Trade Agreement (NAFTA). Until recently, Asian countries had more or less stayed away from these arrangements, but this is changing rapidly, with many countries in the region now forging free trade areas. In their paper, Robert Lawrence and Rajesh Chadha assess the likelihood and benefits of the negotiation of a free trade area between India and the United States. Like Panagariya, Lawrence also embeds his discussion of

India's trade policy within the framework of the larger Indian reform effort. Following Ahluwalia, he characterizes Indian reform since 1991 as incremental, not radical.² While there has been deepening consensus about the broad direction of reform within the policy elite, excessive clarity on endpoints and on the pace of transition is seen to be politically risky. Trade policy reform has been an important part of this liberalization effort, and it has been similarly characterized by a clear direction but fitful implementation and shifting promises as to endpoints.

Lawrence accepts that this strategy has been relatively successful in producing steady growth without major policy reversals or financial crises over the last decade. Yet, like Panagariya, he notes that trade reform is a job only half done. India's tariff rates remain among the world's highest, and there remain significant barriers to foreign investment. Within India, there continues to be political resistance to liberalization. Lawrence asks what the best trade and reform strategy for India is now, given the tasks yet to be accomplished.

Lawrence articulates three options available to India at this time: continued incremental unilateralism dictated, as in the past, by domestic concerns and feasibility; more active engagement with multilateral negotiations through the World Trade Organization (WTO); and what he calls a multitrack approach, whereby deeper bilateral free trade agreements complement the first two channels. Within this larger context the specific question he explores in depth is what role might be played by an FTA between India and the United States. He recognizes that consideration of such an FTA is at best at a nascent stage in official circles and that it is far from being an idea whose time has come. Nonetheless, his core thesis is that given India's domestic reform goals, a multitrack approach centered on a U.S.-India FTA would be superior to excessive reliance on the WTO, given likely outcomes under the ongoing Doha Round. This is the argument that the paper attempts to substantiate.

Lawrence first considers a purely defensive motive for such a FTA. From this perspective, the key issue is to establish a legal and institutional framework for keeping trade in information technology (IT) services free. Noting the rapid growth in India's export of such services, Lawrence cites studies that suggest that this trade is still in its infancy. Given that the

- 1. As indicated in the paper, Rajesh Chadha is responsible primarily for measuring the quantitative aspects of a possible India-China free trade arrangement and is not responsible for the qualitative views expressed in the paper. Accordingly, in this summary only Lawrence is referred to, except when the simulations are discussed.
- 2. M. S. Ahluwalia. "Economic Reforms in India since 1991: Has Gradualism Worked?" Journal of Economic Perspectives 16, no. 3 (2002): 67-88.

United States is currently the destination of two-thirds of India's IT services exports—and that this share could well be maintained—trade between the United States and India has the potential to become one of the most dynamic examples of trade in global commerce.

Will this growth be allowed to take place? Protectionist pressures in the United States already are strong. Outsourcing is headline news in the United States, and federal and state governments are taking politically visible stands to restrict the practice under government contracts. While some of this is undoubtedly election year politics, preserving access for India in the U.S. market is a genuine challenge. Lawrence explores various options available to India to preserve its access, including through the General Agreement on Trade in Services (GATS) agreement within the WTO. He notes that GATS operates on a positive list approach, which can create some ambiguity as to what forms of market access have been bound. By contrast, services liberalization in U.S. bilateral agreements already uses a negative list approach: trade is allowed unless it has specifically been prohibited.

Lawrence then explores the possibility, from the U.S. perspective, of an FTA with India. He notes that the United States first moved away from exclusive reliance on multilateral negotiations as far back as the 1980s, when it signed FTAs with Canada and Israel, followed by NAFTA in 1993. Under the Bush administration the pace of negotiation of bilateral agreements has accelerated dramatically. Agreements with Chile, Singapore, and Jordan have been implemented; those involving the Central American Free Trade Area (CAFTA), Morocco, and Australia have been completed; and numerous others are either under active negotiation or planned.

In this environment Lawrence believes that an FTA with India would be seen by the U.S. authorities as being of great strategic interest in the larger U.S. negotiating strategy but also politically difficult to achieve, given the current mood in Congress. But he is skeptical of the possibility that such an agreement could be restricted to services alone—as proposed, for example, by Panagariya and by a recent task force of the Council on Foreign Relations. The United States is unlikely to forgo the opportunity of obtaining preferential access for the exports of its goods to the Indian market. In addition, dropping all goods trade in an agreement with India would create a difficult precedent for the United States in its other FTA negotiations, in which, with few exceptions, there have not been sectoral opt-outs.

Accordingly, in his discussion Lawrence deals with the case for a comprehensive U.S.-India FTA with most of the features of those that the United States already has concluded. These include a negative list for services; investment provisions with a few sectoral exclusions; full national treatment for U.S. companies; intellectual property rules that might be more comprehensive than those in the WTO; and additional provisions relating to labor, environmental standards, technical barriers, and government procurement. While the phase-in periods may differ for the two sides, once the agreement was fully implemented (generally in fifteen years), the obligations would be symmetric.

Lawrence readily concedes that willingness to sign an FTA agreement of this scope with the United States would be a radical departure for India in a number of respects. While much Indian trade liberalization has been unilateral, India has so far been a strong advocate of multilateral trading rules, but there too its efforts have concentrated on obtaining special and differential treatment for developing countries. As Panagariya has also noted, India has only lately entered the game of bilateral FTAs, so far with countries in Asia, but even in terms of goods trade these have not been comprehensive. A U.S.-India FTA would have major implications for India's trade and domestic policies. It is the positive (or offensive) case for such a radical shift that Lawrence next examines.

He starts by offering some hypotheses on the political economy of liberalization. At the beginning, an opportunistic and piecemeal approach may be necessary to create constituencies for liberalization. But unilateralism carries the risk of reversal, and such policy uncertainty can inhibit the private investment decisions needed to shift the economy in the direction of its comparative advantage. Trade agreements, whether bilateral, regional, or multilateral, can impart credibility to commitments by the home government, making it more likely that liberalization will be successful. Such enhanced credibility is not costless, however. In contrast to an incremental approach, a comprehensive agreement means that many political battles have to be conducted simultaneously. This drawback can be offset by the fact of reciprocity, which can be used to develop coalitions of exporters who favor the trade reform. A further set of allies is provided by proponents of domestic reform, who can argue that the domestic reforms necessary for domestic growth can also deliver improved access to international markets. Lawrence believes that such a strategy was followed by the Chinese in connection with their accession to the WTO.

If these are some of the benefits of comprehensive reciprocal agreements, the question of what type of reciprocal agreements, multilateral or bilateral, remains. This is the choice addressed by Lawrence in the remainder of the paper. In making his assessment, Lawrence uses as a yardstick the impact of each of the two routes in assisting India to undertake changes

in its own interest while avoiding constraints that have the potential to damage its welfare.

In order to assess the impact of a U.S.-India FTA, Lawrence examines some of the FTAs that the United States has recently negotiated. His review makes it clear that the institutional changes needed in the Indian economy would indeed be deep but in most areas they would prod Indian policymakers to move in directions that are inherently desirable. A particular concern of Indian policymakers is the introduction of labor and environmental standards through an FTA, and Lawrence clears up several misconceptions in this area. Recent bilateral agreements place the emphasis on each government enforcing its own domestic environmental and labor laws and not weakening those laws or reducing protections to encourage trade or investment. While these obligations are backed by the dispute settlement provisions of the agreements, trade measures may not be used to retaliate. On balance, implementing a U.S.-India FTA at this time would probably help to bolster and accelerate many dimensions of economic reform, but Lawrence notes that the benefits depend crucially on taking a range of complementary actions. Failure to do so could lead to conditions that were worse than before.

Lawrence then examines whether a successful conclusion to the Doha Round could deliver equivalent benefits to the cause of Indian reform. In so doing he notes that those who argue for exclusive reliance on multilateral liberalization compare actual FTAs with an idealized version of multilateral liberalization. But actual achievement under multilateral liberalization is heavily conditioned by the specific rules of trade negotiations, which may not actually result in significant domestic liberalization at all. As a developing country, India benefits from the "special and differential treatment" provisions of the General Agreement on Tariffs and Trade (GATT), while benefiting from the most-favored nation provisions of the multilateral system. An additional institutional feature is the gap between applied and bound tariffs, which is particularly large where agricultural goods are concerned. A final feature is what Lawrence (following Jagdish Bhagwati) calls "first difference" reciprocity, where the offers made by each nation are measured against their protection levels at the beginning of the round.

Taking these elements into account and reviewing the actual performance of past rounds in reducing industrial tariffs, Lawrence comes to the strong conclusion that the current WTO system actually impedes a developing country like India from using WTO agreements to support meaningful liberalization; he also believes that the diffuse reciprocity involved in the most-favored nation system is not a strong catalyst for rallying exporter interests in favor of import liberalization.

Having provisionally concluded that an FTA would be of greater assistance than exclusive reliance on multilateral negotiations, Lawrence then explores the benefits to India of blending the two approaches in what he calls a multitrack approach. In his view, a U.S.-India FTA would certainly make India a more attractive negotiating partner for third countries hoping to match the access obtained by U.S. firms. Equally, assuming that it preceded the conclusion of the Doha Round, willingness to sign an FTA with the United States would also improve India's negotiating credibility in the multilateral sphere. India could then challenge developed countries to improve their own offers dramatically by indicating a willingness to engage in extensive multilateral liberalization itself. A comprehensive FTA with India would also be of strategic importance to the United States in its current policy of competitive liberalization. This would strengthen India's hand in its negotiations with the United States, while strengthening the U.S. hand in negotiating with other significant but reluctant partners.

The paper ends with some quantitative welfare simulations undertaken by Lawrence's coauthor, Rajesh Chadha of the NCAER, using a computable general equilibrium model of world production and trade developed by the NCAER and the University of Michigan. The simulations deal only with the impact of liberalization on trade in goods. The model is designed to capture the long-run impact of an agreement. More crucially, it is a real model that holds employment and the trade balance constant; as such it captures the second-round adjustments needed to restore full employment in the economy following an initial trade shock.

A U.S.-India FTA is compared first with the current situation and then with a number of counterfactuals. The results reveal that aggregate welfare gains are greatest under multilateral liberalization, next greatest under unilateral liberalization in each country, and least under a bilateral FTA, but they note that even in the last case the effects are positive. The results also point out asymmetries between the United States and India in unilateral and multilateral liberalization, given the differences in the openness of the two economies. Indian and world welfare both rise significantly when India liberalizes unilaterally, while for the United States the greatest welfare gains flow from multilateral liberalization.

Lawrence concludes that the more difficult decision facing India today is whether to opt for reciprocal approaches in lieu of the unilateral approach that it has traditionally pursued. There are gains in credibility to be achieved, but these could entail reduced policy space and require a significant agenda of complementary reform to achieve their full effect. Should India choose to pursue the reciprocal route, he suggests a U.S.-India FTA

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as worthy of serious consideration, precisely because of its comprehensive and deep character.

India has had a turnaround in its balance of payments in recent years, with a swing in the current account from a deficit to a surplus and rapid growth in the capital account surplus. It has used those inflows to build up substantial holdings of foreign exchange reserves that now stand at \$120 billion. While the initial reserve accumulation was welcome insurance against the risk of unanticipated future outflows, the current level is adequate to meet any foreseeable challenge, and policymakers need to develop an exchange policy that goes beyond simple reserve accumulation. Should India accelerate the process of capital account liberalization, perhaps allowing the export of capital by residents? Should it allow an appreciation of the exchange rate or speed up the liberalization of the trade regime? Above all, how should the exchange policy be integrated with the broader concerns of domestic economic policy?

In their paper, Vijay Joshi and Sanjeev Sanyal provide a broad review of the external aspects of Indian macroeconomic policy over the past decade. They use that review as the backdrop for a discussion of the policy options open to India in the future, posing the question of how economic policy should respond to the continuation of the strong balance-of-payments position of recent years. In their answer, they argue in favor of a combination of accelerated import liberalization on the external side and domestic fiscal consolidation. In particular, they view trade liberalization, which provides a means of absorbing continued capital inflows without constraining the competitiveness of the export sector, as an alternative to exchange rate appreciation.

In reviewing the economic events of the 1990s, they emphasize the degree to which India relied on an extensive system of capital controls. Foreign direct investment and portfolio investment inflows were gradually liberalized and foreign investors could freely repatriate their investments, but capital outflows by residents were prohibited. Offshore borrowing and lending by Indian companies and banks were also strictly limited. The capital controls allowed Indian monetary policy to maintain a relatively fixed exchange rate regime with minimal conflict with domestic economic policy. India's restrictive measures on the capital account, reluctance to permit short-term foreign borrowing, and strong accumulation of foreign exchange reserves allowed it to escape any serious consequences from the Asian financial crises.

By accumulating foreign reserves over the decade, India passed up the opportunity to use capital inflows to finance a larger current account deficit.

Joshi and Sanyal argue that this policy imposed relatively small costs in terms of forgone investment and growth. The reserve accumulation averaged 1.2 percent of GDP annually, and even if all of the accumulation had been used alternatively to purchase investment goods, the incremental impact on economic growth would have been small. This conclusion is in sharp contrast to the claims of others that foreign reserve accumulation imposed large costs in terms of forgone growth.

Overall, Joshi and Sanyal believe that the external aspects of Indian economic policy were well executed during the 1990s. However, the ample level of foreign exchange reserves and the continuation of strong capital inflows present a more difficult policy choice going forward. The current policy of sterilized intervention in exchange markets has outlived its usefulness, and further additions to reserves will impose rising fiscal costs with few benefits. At the same time, the authors oppose exchange rate appreciation because of its negative impact on export competitiveness. An intermediate policy of continued intervention in the foreign exchange market but without any attempt at sterilization would translate into an easing of domestic monetary policy and higher growth in the short run. However, they fear that it would quickly lead to increased inflationary pressures, and the resulting rise in the real exchange rate would be as unattractive from the export perspective as outright nominal appreciation.

Instead, Joshi and Sanyal argue for a mixed strategy that combines a faster rate of import liberalization on the external side with domestic fiscal consolidation. A rise in imports would provide a means of absorbing the excess capital inflows with no loss of export competitiveness. Since India's tariff structure is among the world's highest, the policy would also intensify the competitive pressures on the import-competing industries and strengthen incentives to raise productivity. The constraining factor is the negative public revenue impact of reductions in tariffs, but that is consistent with greater reliance on an expanded value-added tax to meet the revenue needs of both the central government and the states.

They stress the importance of action on the fiscal side because of fear that maintaining the large deficit will crowd out investment and slow the pace of growth in future years. A combination of fiscal contraction and monetary expansion would produce lower interest rates with strong incentives for growth. The greater foreign and public saving would provide the resources necessary to support the higher rate of investment and growth.

Finally, Joshi and Sanyal reflect a strong shift in professional sentiment in their lack of enthusiasm for further liberalization of the capital account.

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They argue against liberalization of the restrictions on capital outflows by residents, based on the risks they pose in the event of adverse future shocks. In fact, they conclude with a willingness to use Chilean-type taxes in the event that inflows of foreign capital should intensify.

In a paper that is largely devoted to a positive analysis of the experience with exchange rate management in India, Ila Patnaik examines the reactions of the monetary authority to the changing external environment. The exchange rate plays a central role in the economic policy of most emerging economies, as monetary policy is torn between a focus on stabilizing the domestic economy and maintaining an exchange rate that is consistent with export competitiveness. In a world of capital controls, it is possible to manage both of these goals simultaneously, but once the economy is fully open to the free inflow and outflow of capital, monetary policy must choose between the external and the internal balance. Over the 1990s, Indian monetary policy operated in a transitional phase, as it only gradually reduced its restrictions on capital account transactions. Since 1993, the external value of the rupee has been determined by market forces, but the central bank intervenes extensively to maintain a stable rate vis-à-vis the U.S. dollar. The continuation of partial controls on capital flows provides some room for an independent monetary policy.

Patnaik focuses on two periods of substantial net capital inflows that necessitated large-scale intervention by the central bank to prevent currency appreciation. The first was a relatively short episode extending from June 1993 to November 1994; the second lasted from August 2001 until at least the middle of 2004. Despite official protestations to the contrary, Patnaik's empirical analysis demonstrates that India is best characterized as operating a tightly pegged exchange rate over the full period. Her paper explores the extent to which the focus on the exchange rate limited the operation of a monetary policy directed at stabilizing the domestic economy.

The first period began with an easing of the restrictions on inflows of portfolio capital in early 1993. The result was a sharp surge of capital inflows and private expectations of a rise in the exchange rate. However, the Reserve Bank of India (RBI) chose to purchase a large portion of the inflow to prevent appreciation. The bank also acted to sterilize a portion of the inflow, financing some purchases through the sale of government debt. However, the lack of liquidity in the bond market restricted the efforts at sterilization and led the bank to finance much of its purchases through an expansion of reserve money. It attempted to offset the inflationary effects of a rapid growth in the monetary base through a series of increases in the cash reserve ratio. However, the net result was still a significant accelera-

tion of growth in the money supply and, at least in the early months, a decline in interest rates. Despite the small size of the external sector and the limited openness of the capital account, the episode represented India's first experience with the partial loss of monetary policy autonomy, dictated by the need to intervene in the currency market.

The second episode, beginning in the summer of 2001, was triggered by a swing in the current account from deficit to surplus. Increased capital inflows played a significant role only in later years. Again, the RBI intervened to prevent appreciation, and the exchange rate actually depreciated slightly up to mid-2002. This time around, the market for debt was considerably more developed. The bank was able to finance nearly all of its purchases of foreign currency through the sale of government debt instruments, avoiding use of the currency reserve ratio. There was little or no acceleration of growth in reserve money, and the growth of a broad-based measure of the money supply (M3) actually slowed. However, the RBI did not attempt to hold the exchange rate completely fixed after the summer of 2002, opting instead for a small but steady appreciation. Capital inflows also began to accelerate at the same time, perhaps motivated by currency speculation.

The two episodes differ in the extent to which the RBI was able to engage in sterilizing interventions to avoid any conflict with its policies for domestic stabilization. Patnaik's review suggests that controls on the capital account are still sufficient to permit considerable discretion in the conduct of domestic monetary policy. To date, Indian policymakers have opted to prevent the capital inflow from translating into a current account deficit. However, the sustainability of the bank's interventions in future years is debatable because the fiscal costs of accumulating additional reserves are rising.

The paper by Kenneth Kletzer offers a third perspective on India's exchange rate regime, focusing on the issue of capital account convertibility. Should India accelerate the pace of its liberalization of capital account transactions? Kletzer views this as a particularly critical decision in light of a history of severe repression of domestic financial markets. He points to numerous international examples in which liberalization led to large financial inflows followed by equally abrupt outflows and financial crisis. In his paper, he lays out the conditions necessary to achieve a successful policy for capital account liberalization.

Kletzer begins with a review of the potential benefits and costs of capital mobility. On the benefits side, he points to five factors. First, there are gains from trade in commodities across time, just as there are gains from

contemporaneous trade in goods and services. Second, international financial integration, which brings direct foreign investment, may raise the growth rate by raising productivity growth. Third, such integration allows the sharing of risk between savers and investors. Domestic residents are able to diversify risk, which may raise the saving rate. Fourth, the presence of these flows may reduce output and consumption volatility. Finally, capital account liberalization may provide a means for forcing an end to financially repressive policies. The ability of resources to move across borders in response to unsustainable fiscal or financial policies may impose discipline on public authorities.

The principal cost of an open capital account is the possibility that a crisis may occur in the form of capital flight, leading to large depreciation, large-scale bank failures, or both. For example, under a pegged exchange rate regime, a realization or expectation of monetization of public sector budget deficits that is inconsistent with the pegged rate of currency depreciation forces its abandonment sooner or later in a sudden outflow of international reserves. Such depreciations may then spill over into bank failures if the banks have large, unhedged foreign currency—denominated liabilities and home currency—denominated assets.

To date, the international empirical evidence on the growth effects of capital account liberalization for emerging markets is inconclusive. The bottom line is that countries tend to benefit from liberalization when they can better absorb capital inflows by having higher levels of human capital, more developed domestic financial markets, and greater transparency in financial and corporate governance and regulation. On the other hand, the opening of the capital account in the presence of significant macroeconomic imbalances reduces net gains and raises the prospects of subsequent crisis.

Turning to India, Kletzer notes that India had a relatively unrestricted financial system until the 1960s. Starting in the 1960s, interest rate restrictions and liquidity requirements were adopted and progressively tightened. The government established the State Bank of India, a public sector commercial bank, and went on to nationalize the largest private commercial banks toward the end of the decade. Through the 1970s and into the 1980s, credit directed to "priority" sectors constituted a rising share of domestic lending and interest rate subsidies became common for targeted industries.

With the start of economic reforms in 1985, steps were taken toward internal financial liberalization, mainly in banking. The government began to reduce financial controls by partially deregulating bank deposit rates, though that step was partially reversed in 1988. However, in later years the

government simultaneously began to relax ceilings on lending rates of interest. Progressive relaxation of restrictions on both bank deposit and lending rates of interest and the reduction of directed lending was under way by 1990.

Liberalization accelerated after the 1991 crisis, when important steps were taken toward external liberalization. Specifically, both direct foreign investment and portfolio investment were progressively opened. A major development was full current account convertibility of the rupee under IMF Article 8 in August 1994. In the subsequent years, sectoral caps on direct foreign investment and restrictions on portfolio borrowing and foreign equity ownership were relaxed. Currently, foreign investment income is fully convertible to foreign currency for repatriation. External commercial borrowing has been relaxed, but it is regulated with respect to maturities and interest rate spreads. Effective restrictions continue on the acquisition of foreign financial assets by residents and on currency convertibility for capital account transactions.

According to Kletzer, there remain four macro-cum-financial vulnerabilities that must be considered in evaluating the case for full capital account convertibility: high public debt and fiscal deficit; financial repression; weakness in the banking sector; and a tendency to peg the exchange rate. India's external debt is low in relation to its foreign exchange reserves, so there is less to fear on that front.

Using two alternative measures of the real interest rate, Kletzer evaluates the sustainability of the current public debt as a proportion of GDP and concludes that without a major reduction in the primary deficit (fiscal deficit minus interest payment on the debt) it cannot be stabilized at its current level of 82 percent. Based on one measure, the current primary deficit of 3.6 percent must be turned into a primary surplus of 0.8 percent for the debt to be sustained at its current level. On the deficit, Kletzer points out that the combined central and state government budget balances understate total public sector liabilities. Unfunded pension liabilities, various contingent liabilities, and guarantees on the debt issued by loss-making public enterprises (most notably state electricity boards) must also be taken into account.

High levels of public debt and deficits have been sustained partially through financial repression, which has been a central aspect of the Indian fiscal system for decades. Capital controls provide the public sector with a captive capital market and allow lower-than-opportunity rates of interest for government debt. Kletzer estimates that the implicit subsidy to the government averaged 8.2 percent of GDP from 1980 to 1993 and 1.6 percent

from 1994 to 2002. Thus the liberalization of the 1990s is clearly reflected in the substantial reversal, though not elimination, of financial repression. In the same vein, the government collected seignorage revenues that averaged 2 percent over the entire 1980–2002 period, but 1.4 percent from 1997 to 2002. The decrease in public sector revenue from financial repression is large, indicating some significant progress in financial policy reform.

Policies of financial repression hamper domestic financial intermediation and raise the vulnerability of the banking system to crisis as international financial integration increases. At the end of March 2003, according to the Reserve Bank of India, the gross nonperforming assets of the commercial banks were 9.5 percent of bank advances; taking provisions into account, this figure drops to around 4.5 percent. Directed credit to priority sectors accounted for 31 percent of commercial bank assets but about 40 percent of nonperforming assets of the banks. At 2 percent of GDP, nonprovisioned and nonperforming assets are not large. But some researchers estimate that the actual figure may be twice as large as the official one. Banks also suffer from unhedged interest rate exposure arising from the large holdings of government debt (currently 40 percent of their total assets) and the liberalization of deposit rates.

Finally, capital controls allow policymakers to manage the nominal exchange rate and influence domestic rates of interest as independent objectives of monetary policy. Past exchange rate management in India displays resistance to currency appreciation. The adoption of a floating exchange rate, albeit managed relatively tightly, reduces crisis vulnerability. The government can resist exchange rate movements while not offering any exchange parity guarantee, as under a pegged exchange rate (or crawling peg or narrow target zone). The uncertainty that is induced, especially for short-term rates of change in the exchange rate, could lead to private sector hedging against currency risk. A possible source of concern is the revealed tendency of the government to lean against exchange rate movements that could result in sudden losses of reserves and capital account reversals under an open capital account.

Kletzer concludes that the initial conditions for capital account convertibility in India are strong, with the exception of public finance. India's very low short-maturity foreign debt exposure, low overall foreign debt, large stock of foreign reserves, and flexible exchange rate place the Indian economy in a strong position by international standards. The average maturities of foreign and public debt could be expected to fall with international financial integration, but a prospective rise in short-term debt does not in itself justify capital controls. The stock of foreign reserves exceeds the current level of short-term external debt several fold. Liberalization and further opening of the banking system requires regulatory improvement, but the present level of nonperforming assets in the banking system is not excessive in comparison with the emerging markets.

In concluding, Kletzer notes two aspects of fiscal vulnerability relevant to financial integration. First, the primary deficit and the need to amortize public debt constitute the government borrowing requirement that would need to be financed on international terms under an open capital account. Second, the banking system holds the overwhelming majority of the public debt; with international financial integration, these become risky assets. Any gain to the government from currency depreciation or rising interest spreads on public debt would be matched by losses by the banks. These holdings pose a threat to the banking system, and a capital account crisis could begin with the exit of domestic depositors. In this case, deposit insurance could reduce the exposure of the banking system to crisis. Limiting the contingent liability of the government created by deposit insurance so that it just offsets public sector capital gains requires institutional reform to ensure successful prudential regulation.

The final paper, by Abhijit Banerjee, Shawn Cole, and Esther Duflo, addresses some of the concerns raised above about India's domestic financial system. In comparison with its peers at similar stages of development, India has an advanced and extensive banking system, with branches throughout rural and urban areas, providing credit not only to industry but also to a significant number of farmers. As in many other developing countries, publicly held banks are by far the largest players, and financial sector reforms have become major policy goals. The authors evaluate the performance of India's banking sector in terms of its provision of financial intermediation and its contribution to the achievement of a variety of "social goals." They also offer a comparison of the performance of public and private sector banks.

The paper begins with an overview of banking in India, including the two episodes of bank nationalization in 1969 and 1980. Because the Indian government used a strict policy rule (based on the asset base of banks) to determine which banks were nationalized and which were left in the private sector, India offers an ideal case study in the relative performance and behavior of public and private sector banks.

A primary rationale for bank nationalization was to increase the flow of credit, both in general and to targeted "priority sectors" such as agriculture and small-scale industry. In the first section of the analysis, Banerjee and colleagues use detailed records from a public sector bank to determine

whether there is "under-lending" to priority sector firms in the Indian financial system. They define under-lending as a situation in which the marginal product of capital for a firm is higher than the rate of interest it is currently paying. A change in lending regulations that increased the amount of credit issued by banks to one group of firms but not another allowed them to estimate the effect of additional credit on output and profits. They find a strong, positive effect of the change, suggesting that the firms are indeed credit constrained.

Enhancing credit supply was a primary goal of nationalization: while the performance of this public sector bank was not impressive, perhaps private sector banks fared worse? Using a regression discontinuity approach, the authors compared the propensity of public and private banks to lend to borrowers in several sectors of the economy: agriculture, small-scale industry, and the composite sector called trade, transport, and finance. They find that public sector banks did lend substantially more to agricultural borrowers than did private sector banks. Contrary to popular wisdom, however, they find that once bank size is taken into account, public sector banks lend no more to small-scale industry than do private sector banks.

Nor does bank nationalization appear to have increased the overall speed of financial development. The authors find that in the period 1980–91, nationalized and private banks of similar asset size grew at about the same rate. However, in the more liberalized period of 1992–2000, old private sector banks grew 8 percent more than public sector banks. (The lack of attention to new private sector banks is explained by the fact that there are simply not enough data at this stage to allow meaningful analysis.)

To gain further insight into under-lending and a low level of financial development, the authors again study the loan information from the same public sector bank. Under government regulations, loan officers are required to calculate credit limits on the basis of firm size (as measured by turnover) rather than profitability; though the rules do allow for some flexibility on the part of the loan officer, the authors find that in most cases loan officers simply reapproved the previous year's limit. Because of inflation, real credit thus typically *shrinks*. Firms that are growing rapidly or that have profitable opportunities are not rewarded with additional credit, nor are poorly performing firms cut off.

The authors then turn to potential explanations for the reluctance of loan officers to lend. Public employees are subject to strict anticorruption legislation, and bank officers have expressed concern that if they issue a new loan that subsequently goes bad, they could be charged with corruption, denied promotion, fired, or even put in jail. The authors test this hypothe-

sis by examining whether a corruption charge against a bank employee in a specific bank led to a reduction in overall lending by all loan officers in that bank. They find that it did: corruption charges led to a reduction in lending of approximately 3 percent compared with lending of other banks. That decline lasted approximately twenty-four months.

Critics of public enterprises are quick to point out that since employees tend not to have a stake in the performance of the enterprise, they may tend to exert less effort. For public bankers, this may mean making guaranteed safe loans to the government rather than spending time and energy on screening new clients and monitoring existing ones. To test this possibility, the authors compare how public sector banks in low- and high-growth states responded to a change in spread between lending rates and the rate at which the government was willing to borrow. They find that banks in low-growth states were more inclined to make "low-effort" loans to the government when the spread increased.

The final exercise was to examine the contentious issue of nonperforming assets, bank failures, and bailouts. The official rates of nonperforming loans in public sector banks tend to be higher than those in private sector banks, but because those numbers are notoriously unreliable, the authors instead compare the fiscal costs of bailing out failed private banks with the costs of recapitalizing poorly performing public sector banks. Using data starting from the first nationalization, they identify twenty-one cases of bank failure between 1969 and 2000 and compute the costs imposed on the government in rupees at 2000 prices. That sum is compared with the substantial cost of recapitalization of public sector banks in the 1990s. Controlling for size, the cost of the bank failures appears to be slightly higher than recapitalization, implying a small advantage for public sector banks. However, since recapitalization expenses are recurring, in all likelihood the public sector banks represent a greater cost to the treasury.

The authors conclude by arguing that the evidence suggests a tentative case for privatizing public sector banks. Privatization is not a panacea, however, and both public and private sector banks could benefit from significant internal reform. Liberalization and privatization should be accompanied by strong regulation to ensure the continued existence of social banking. But in net terms, the reduction in agency problems, the increased flexibility, and the reliance on private rather than public incentives to limit corruption and NPAs should make for a more dynamic banking system that is more responsive to borrowers' needs.