

Annex I

China—Growth and Economic Reforms

Since the initiation of economic reforms in the late 1970s, China has achieved impressive economic growth coupled with significant structural transformation (Figure 32). During 1978–96, real GDP grew on average by over 9 percent a year, contributing to a near quadrupling of per capita income and the lifting of millions out of poverty. Over the same period, many of the distortions and rigidities of the former central planning system were eliminated and market forces came to play an increasingly important role in economic decision making. Concomitantly, the state's role in the economy was gradually reduced and a dynamic nonstate sector emerged that now accounts for almost two-thirds of GDP.¹ In addition, as part of the normal process of economic development, employment in agriculture has declined substantially while a thriving manufacturing sector has emerged.

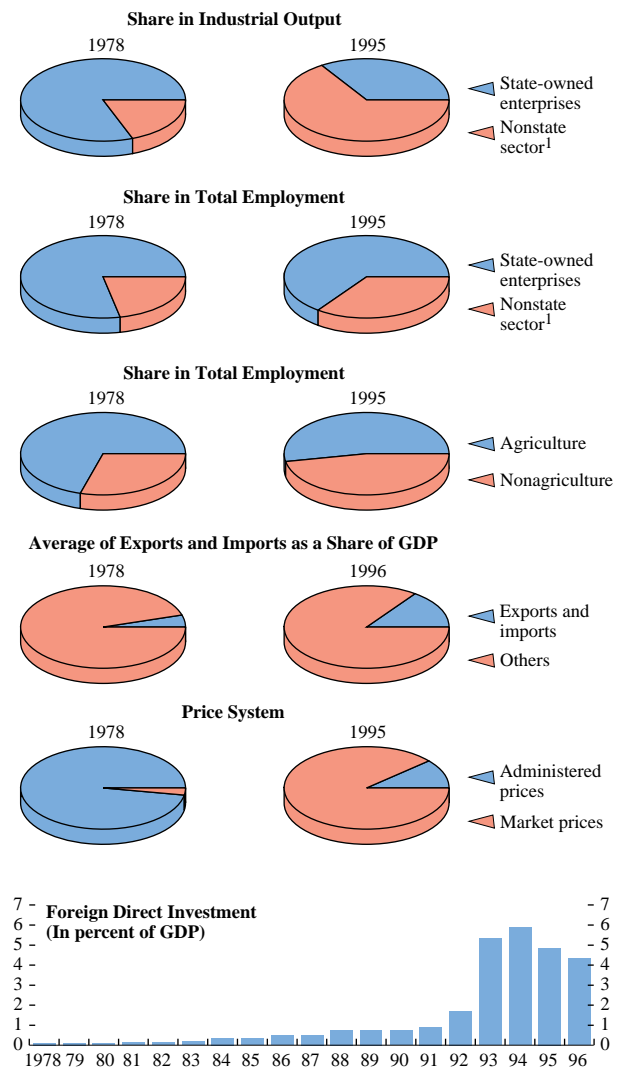
Equally significant has been the gradual opening and integration of the economy with the rest of the world, as reflected in large increases in external trade and foreign direct investment and the recent establishment of current account convertibility. In less than two decades, China's share in world export markets has nearly tripled. The Chinese economy has absorbed almost half of total foreign direct investment flows to developing countries in recent years and with the exchange rate of the renminbi kept broadly stable vis-à-vis the U.S. dollar, the strong external position has resulted in a sharp rise in international reserves; in fact, China's foreign exchange reserves, amounting to more than \$120 billion in June 1997, are the second largest in the world.

Macroeconomic performance has generally been favorable. Most notably, China has avoided the large output declines and severe macroeconomic instability that have tended to characterize the transition experiences in central and eastern Europe and the former

¹This annex was prepared by Charles Adams of the Asia and Pacific Department.

¹The nonstate sector in China comprises urban and rural collectives (including town and village enterprises), joint-stock companies, private businesses, joint ventures, and foreign-funded enterprises. While collectives represent a form of public ownership, they differ importantly from state enterprises in that they typically have faced harder budget constraints and less direct involvement from government ministries. In addition, in recent years, many collectives have been effectively privatized while retaining their original classification.

Figure 32. China: Indicators of Structural Transformation and External Opening
(In percent)



Sources: Data provided by the Chinese authorities; and IMF staff estimates.

¹Proportions of retail sales at administered or market prices.

Soviet Union. In addition, notwithstanding brief episodes of overheating, inflation on average has been relatively low as rapid rates of monetary expansion have been absorbed by strong growth in money demand. At the same time, the infrastructure and institutions for market-based macroeconomic management have been gradually developed, including a relatively autonomous central bank with a mandate for inflation control, instruments for indirect macroeconomic management, and a market-determined exchange rate system.²

Despite the rapid growth of the past two decades, China has some way to go to achieve income levels comparable with those in such newly industrializing economies of Asia as Indonesia, Malaysia, and Thailand.³ Beyond the normal challenges of economic development, a number of problems related to the partial nature of reforms are currently being addressed that will importantly influence China's medium-term growth prospects. This annex provides an overview of China's recent experience with market-oriented reforms as well as current issues in the reform agenda.

Economic Reforms

China embarked on reforms in the late 1970s without a detailed blueprint of the ultimate goals or the steps that would be taken. The approach can best be described as incremental and experimental with considerable responsibility assumed by local governments.⁴ Reforms were often introduced on an experimental basis in some localities—on many occasions at the initiative of local governments—and then applied more widely after they were judged successful. They typically followed a two-track approach under which existing allocation mechanisms were retained while

new ones were adopted at the margin and came to assume an increasingly important role.⁵ Under domestic price liberalization, for example, firms were permitted to sell increasing amounts of output at market-determined prices as the proportion sold at controlled prices was progressively reduced. In the external sector, market-determined exchange rates were permitted alongside official rates and the share of transactions at market-determined rates was gradually increased before the rates were ultimately unified.

Market-oriented reforms were introduced into a backward rural economy that had made limited economic progress under central planning. When reforms started in 1978, as much as 70 percent of the labor force was in agriculture and most of the population lived in rural areas. Poverty rates were high by international standards and average per capita income was very low. Reflecting the legacy of planning, the economy was relatively centralized with the central government controlling key production and allocation decisions;⁶ in addition, most prices, including those for foreign exchange, were administratively controlled. As a result of an extremely inward-looking approach, foreign trade and investment were relatively insignificant and the economy was, to a large extent, “closed.” Unlike many other transition economies, however, China did not face severe macroeconomic imbalances at the start of reforms, nor was it undergoing the kinds of political transitions many of these countries simultaneously embraced.

Three main waves of economic reform can be identified:

- *Phase I—Agricultural and rural reform (1978–84).* China's economic reforms began in agriculture in the late 1970s, following the upheavals of the Great Leap Forward and the Cultural Revolution. Key measures included the leasing of land to farmers under the household responsibility system, higher procurement prices for key crops, and introduction of the two-track price system. The reforms led to a surge in agricultural production and productivity, contributing to higher savings and investment, and the release of large amounts of labor for employment in emerging rural industries, notably town and village enterprises. Reforms also began in other areas but were not as dramatic in scope or effect. Most notably, open economic zones were established in coastal re-

²For an overview of financial sector reforms, see Hassanal Mehman, Marc Quintyn, Tom Nordman, and Bernard Laurens, *Monetary and Exchange System Reforms in China: An Experiment in Gradualism*, IMF Occasional Paper No. 141 (1996).

³At market exchange rates, China's per capita income is currently estimated at about \$600. Purchasing-power-parity measures suggest a significantly higher per capita income of between \$2,000 and \$3,000, roughly 30 percent below comparable estimates for Indonesia, 60 percent below Thailand, and 70 percent below Malaysia (see *World Economic Outlook*, May 1997, Table 18, p. 81). The estimates of per capita income for China are subject to a considerable margin of uncertainty owing to incomplete information on the structure of domestic prices. See *China: GDP Per Capita*, Report No. 13580-CHA (Washington: World Bank, 1994).

⁴For a discussion of China's reform experience, see Michael Bell, Hoe Ee Khor, and Kalpana Kochhar, *China at the Threshold of a Market Economy*, IMF Occasional Paper No. 107 (September 1993); and Wanda Tseng, *Economic Reform in China: A New Phase*, IMF Occasional Paper No. 114 (1994). See also “China Embraces the Market: Achievements, Constraints and Opportunities,” draft report of the Australian Department of Foreign Affairs and Trade (Canberra, 1997).

⁵The two-track approach was adopted in virtually all areas including agriculture, price liberalization, exchange markets, and the opening of the economy to foreign trade and investment. See Jeffrey Sachs and Wing Thye Woo, “Structural Factors in the Economic Reform of China, Eastern Europe and the Former Soviet Union,” *Economic Policy: A European Forum*, Vol. 9 (April 1994), pp. 101–45.

⁶Central planning, however, was somewhat less pervasive than in the former Soviet Union.

gions to attract foreign investment and promote exports, and to serve as laboratories for bolder market-oriented reforms. Tentative steps were taken to scale back the planning system for industrial state enterprises, and experiments were initiated to link bonuses more closely to performance and to establish tighter links between wages and productivity.

- *Phase II—Broadening of reforms (1984–91)*. The success of rural reforms led to a gradual broadening of reforms, most notably to state industrial enterprises in urban areas, and the gradual dismantling of the central planning system. Important measures included experiments to grant state enterprises more autonomy in production and employment decisions (the contract responsibility system) and the extension of the two-track system to industrial prices. In addition, other types of enterprises such as urban collectives began to gain importance. In the financial sector, the monobank system was dismantled and the People’s Bank established as the central bank. In the fiscal area, reforms in 1984 allowed enterprises to retain a larger share of profits, and an enterprise tax system was introduced to replace profit transfers to the budget. The trade and exchange system also began to be liberalized as the number and scope of open economic zones were expanded, and the foreign trade plan scaled back. Key measures included the establishment of “swap centers” for trading retained foreign exchange⁷ and the formation of local foreign trade corporations. The reforms helped to sustain and broaden growth following the earlier surge in agricultural production and led to the emergence of a dynamic nonstate sector. Difficulties in macroeconomic control, however, eventually gave rise to inflationary pressures, necessitating a tightening of macroeconomic policies. The late 1980s represented a period of “rectification” during which reforms were slowed or reversed in an effort to help reestablish macroeconomic stability.
- *Phase III—Deepening of reforms (since 1992)*. The rectification program succeeded in reducing inflation but at the expense of slower growth and a partial reversal of reforms. Following Deng Xiaoping’s 1992 tour of the Southern Provinces and his call for the country to accelerate reform, progress resumed with a new vigor. Even though Deng’s exhortation led to a boom in fixed invest-

ment and the reemergence of inflationary pressures, it culminated in a new reform strategy, adopted during the Third Plenum of the Fourteenth Central Committee in 1993. The Third Plenum articulated the goal of creating a socialist market economy, envisaged as one in which market forces would play the primary role in resource allocation within the context of continued dominant state ownership. A key focus of the strategy was to strengthen the institutions and infrastructure for macroeconomic control and increase the market orientation of the economy through wide-ranging reforms of central banking and the financial sector, the fiscal system, and the exchange and trade system. In addition, the strategy provided a framework for the acceleration of state enterprise reform with the objective of converting state enterprises into modern corporations with independent managers (“corporatization”). In line with the strategy, progress in many areas has been made in the last few years.

In the financial sector, there has been legislation to strengthen the operational autonomy of the People’s Bank of China, commercialize the state banks, and encourage the development of new market-based financial institutions. Measures have also been taken to deepen financial markets and develop the tools for indirect monetary policy management; steps have also been taken to improve prudential supervision and oversight of the financial system. Recent initiatives include the gradual shifting of policy-directed lending to three newly created “policy banks,” the development of a nascent interbank money market with market-determined interest rates, and the initiation of open market operations on a limited scale. At the same time, China’s stock market—opened early in the decade—has been developing slowly.⁸

Major reforms have also been undertaken in the fiscal system to improve tax administration and introduce stable and transparent tax rates. In addition, the system of intergovernmental fiscal relations has been improved by replacing the complex system of contract-based revenue-sharing arrangements with one based on a clearer delineation of tax assignments and tax-sharing between central and local governments. The reforms have been accompanied by a new budget law to streamline budgeting procedures and to limit local governments’ ability to run budget deficits. As a result, there have been some improvements in the fiscal system, but difficulties remain, reflected in continued weakness in budget revenues and a large number of off-budget fiscal activities (see below).

⁷While foreign-funded enterprises were permitted to retain foreign exchange earnings, domestic enterprises were subject to a general surrender requirement but received “retention quotas” equivalent to a certain percentage of their foreign exchange earnings. Retained foreign exchange could be traded in swap centers at a market-determined exchange rate.

⁸Two broad categories of shares are traded on China’s stock market: “A” shares are intended for Chinese residents, while “B” shares are reserved for foreigners. At the end of 1996, the total market capitalization amounted to almost 15 percent of GDP.

Box 9. Hong Kong, China: Economic Linkages and Institutional Arrangements

Since the start of China's reform process in 1978, economic integration between Hong Kong, China and China has advanced steadily with the development of links in production, investment, trade, and financial flows. The increased integration has coincided with dramatic structural change of the Hong Kong, China economy from one that was based on manufacturing to one dominated by the services sector.

Investment from Hong Kong, China accounts for two-thirds of *foreign direct investment* in China since 1979 and provides employment for an estimated 4–5 million workers in southern China. As production facilities have relocated to China, cyclical fluctuations in Hong Kong, China's GDP and China's industrial production have become increasingly correlated.

Bilateral *trade flows* have also expanded steadily. Around 55 percent of Hong Kong, China's reexports are of Chinese origin and about 35 percent are destined to China. One-fourth of Hong Kong, China's domestic exports in recent years have gone to China, although only 6 percent of retained imports have originated in China.

While banking and financial links between the two economies have developed, the degree of financial integration remains limited. The claims on and liabilities to China of the banking system of Hong Kong, China account for a small share of total assets and liabilities.

The *constitutional framework* for the Hong Kong Special Administrative Region (HKSAR) following the

transition of sovereignty on July 1, 1997 is set out in the Sino-British Joint Declaration (1984) and the Basic Law of the HKSAR of the People's Republic of China (1990). The framework stipulates that the HKSAR's capitalist system and way of life shall remain unchanged for 50 years after July 1, based on the concept of "one country, two systems." During this period, the HKSAR is to remain autonomous in all but two areas—foreign affairs and defense. Key provisions of the constitutional framework with respect to the *economic and legal system* are:

- The rights of *private ownership* of property and investment shall be protected by the law.
- The HKSAR will enjoy freedom from taxation by the central government of China and will have an *independent tax system* and its own tax laws.
- The *monetary systems* of China and Hong Kong, China will remain separate, with two currencies and two mutually independent monetary authorities.
- The *Hong Kong dollar* will remain the legal tender and a freely convertible currency fully backed by foreign exchange.
- The HKSAR shall also retain autonomy in its *external economic relations*, including the status of a free port and a tariff-free zone, separate customs territory, and participation—in an appropriate capacity—in international organizations.

The last few years have also witnessed major reforms in the exchange system, including the unification of the exchange rate and lifting of remaining restrictions on payments for trade- and nontrade-related current transactions, culminating in the establishment of current account convertibility at the end of 1996. Since the unification of the exchange market in January 1994, the exchange rate of the renminbi has been kept broadly stable vis-à-vis the U.S. dollar and China's strong external position has been reflected in a sharp rise in international reserves. Progress has also been made in lowering tariff rates, easing nontariff barriers, and expanding foreign trading rights, although further reforms in all three areas will be required to establish a liberal and open trade regime. Reflecting the further expansion in the number and scope of open economic zones, there has been a sharp increase in foreign direct investment inflows and significant increases in the number of foreign funded and joint-venture companies. Other capital flows, however, have remained subject to controls and external debt has remained moderate.

Under the framework of the Third Plenum, state enterprise reform has been moved to the top of the agenda and directed toward establishing a modern enterprise system. This aim is to be achieved through a

clear separation of the state's ownership of enterprises from their management, accompanied by greater autonomy and accountability, and harder budget constraints. Moreover, enterprises are to be relieved of their heavy social functions.⁹ The strategy has subsequently been elaborated with the principle of "seizing the large and releasing the small." According to this approach, dominant, but not necessarily exclusive, state ownership is to be maintained for the 1,000 or so largest enterprises, while nonstate ownership and control will be permitted in the case of smaller ones.

Sources of China's Growth

Since the beginning of economic reforms, China's growth rates have been among the highest in the world and stronger than under the central planning regime.

⁹Dating back to the central planning system, many state enterprises provide a broad range of social services that would tend to be provided by governments in a market-based economy. These include housing, education, and medical care, and, less formally, the retention of redundant labor. For further discussion see *People's Republic of China, Recent Economic Developments*, IMF Staff Country Report No. 96/40 (May 1996).

This section examines the factors underlying the performance including the contribution of factor inputs (extensive growth) and improvements in productivity and efficiency (intensive growth). Whether growth is intensive or extensive has important implications for its sustainability, as growth based mainly on rapid capital accumulation will quickly run into diminishing returns.¹⁰

There has been a large literature on China's growth performance during the reform period.¹¹ These studies indicate that the main explanations for the rapid growth rate are relatively high saving and investment rates (averaging around 35 percent of GDP); improvements in the structure of incentives and ownership; a relatively well-trained labor force; and the gradual opening of the economy to foreign trade and investment, as well as linkages with Hong Kong, China and Taiwan Province of China, which account, in particular, for a large share of direct investment in mainland China (Box 9). China is also seen as having benefited from the "advantages" of backwardness, notably the potential for significant productivity improvements related to the transfer of resources out of low-productivity agriculture into manufacturing.

Growth accounting studies by staff at the IMF and the World Bank that have attempted to quantify the contributions of these factors have found that increases in labor and capital inputs made an important contribution to growth during the reform period, but that a relatively large proportion of growth (at least 40 percent) is explained by forces other than increases in factor inputs, such as improvements in productivity and efficiency¹² (Table 30). The apparently large growth "residual" that these studies find could reflect a number of possible factors.

Mismeasurement of output growth. One possibility is that there may have been an overstatement of China's real economic growth, owing to underdeflation of nominal output. One study, in particular, has suggested that China's growth during the reform period has been overstated, owing to the failure of official data to distinguish adequately between price and volume changes, especially in the nonstate sec-

¹⁰For a discussion of the significance of extensive and intensive growth in the Asian experience, see Paul Krugman "The Myth of Asia's Miracle," *Foreign Affairs*, Vol. 73, No. 6 (1994), pp. 62–78.

¹¹Recent contributions include Zuli F. Hu and Mohsin S. Khan, "Why Is China Growing So Fast?" *Staff Papers*, IMF, Vol. 44 (March 1997), pp. 103–31; *China 2020: Challenges in the 21st Century* (Washington, 1997); and Eduardo Borensztein and Jonathan Ostry, "Accounting for China's Growth Performance," *American Economic Review, Papers and Proceedings*, Vol. 86 (May 1996), pp. 224–28.

¹²An interesting implication of Table 30 is that China's capital stock has been growing less rapidly than output, implying a trend decline in the capital output ratio. This finding is not easy to reconcile with the normal process of economic development and suggests the possibility of an understatement of capital inputs or an overstatement of output.

Table 30. China: Alternative Estimates of the Sources of Economic Growth

	Hu and Khan (1996)		World Bank (1997)
	1953–78	1979–94	1978–95
(In percent a year)			
Growth rates			
Output	5.8	9.3	9.4
Physical capital input	6.2	7.7	8.8
Labor input	2.5	2.7	2.4
Human capital input	2.7
Residual	1.1	3.9	4.3
(In percent) ¹			
Proportions of output growth accounted for by			
Physical capital input	65.2	45.6	37.0
Labor input	16.8	12.8	7.5
Human capital input	8.6
Residual	18.0	41.6	46.0

Sources: Zuli Hu and Mohsin S. Khan, "Why Is China Growing So Fast?" *Staff Papers*, IMF, Vol. 44 (March 1997), pp. 103–31; World Bank, *China 2020: Challenges in the 21st Century* (Washington, 1997).

¹Numbers may not add to 100 because of rounding.

tor.¹³ However, using available estimates of the size of the possible error (around 1 percentage point a year), growth would still be relatively rapid by international standards, and there would continue to be an important role for influences other than increases in capital and labor inputs in accounting for growth. Moreover, any correction to the official GDP data for underdeflation would need to be accompanied by corresponding adjustments to the investment and hence the capital stock estimates, leaving the proportion of growth not explained by factor inputs broadly unchanged.

Sectoral reallocation of resources. Another potentially important explanation for the growth residual is productivity improvements related to the reallocation of resources from low to high productivity sectors. The key sectoral reallocation since the start of reforms has been from agriculture to manufacturing, with the share of employment in agriculture declining from around 70 percent in 1978 to 50 percent recently. According to World Bank estimates, the transfer of labor out of agriculture contributed on average around 1 percentage point a year to growth during 1978–95, with a particularly large contribution during the first wave of agricultural reform. Resource reallocation thus appears to account for a significant proportion of unexplained growth and, given the continued relatively large role of agriculture, is a potentially important source of future productivity gains.

¹³Wing Thyee Woo, "Chinese Growth: Sources and Prospects" (unpublished; Washington, 1996).

Table 31. China: Sources of Growth During the Reform Period*(In percent a year)*

	1979–84	1985–89	1990–94
Growth of			
Output	8.0	8.8	11.5
Physical capital input	7.1	8.6	7.5
Labor input	3.0	2.8	2.1
Residual	2.5	2.7	5.8

Source: Zuli Hu and Mohsin S. Khan, "Why Is China Growing So Fast?" *Staff Papers*, IMF, Vol. 44 (March 1997), pp. 103–31.

General improvements in productivity. Improvements in productivity related to the emergence of the nonstate sector and the increasing market orientation of the economy are other potentially important sources of China's rapid growth. Within the industrial sector, there has been a large decline in the state enterprises' share of output as the nonstate sector has emerged as the leading engine of growth. Studies have generally found that productivity growth in nonstate firms has been faster than in their state counterparts, implying that reallocation of resources to the nonstate sector could explain a significant share of growth.¹⁴ Preliminary results confirm the importance of such an effect, with resource reallocation from the state to the nonstate sector estimated to have contributed as much as ½ of 1 percentage point a year on average to growth. An interesting finding in this regard is that the share of China's growth not accounted for by factor inputs has tended to increase over time, rising to at least one-half in 1990–94 (Table 31). While the increase in the early 1990s may to some extent be due to cyclical factors, it may also reflect the gradual spread of market-oriented reforms and, in particular, the benefits of the opening of the economy. These are seen as boosting growth beyond the direct effects of sectoral reallocations, leading to a relatively large growth residual.

The main conclusion is that China's growth performance during the reform period, which remains impressive even after adjustment for possible underdeflation of the nominal data, has reflected a number of factors. While significant increases in capital and labor inputs have been very important, productivity gains resulting from sectoral reallocation, market-oriented reforms, technical progress, and external opening have

¹⁴See, for example, Jeffrey D. Sachs and Wing Thye Woo, "Understanding China's Economic Performance," Working Paper on Trade and Development (Canberra: Australian National University, February 1997), pp. 1–52. The role of resource reallocation from the state to the nonstate sector needs to be qualified because the official data suggest only a relatively small reduction in the use of capital and labor by the state sector. It is likely, however, that the data do not fully capture informal resource transfers to the nonstate sector through asset stripping and the redeployment of labor that formally remains on state payrolls.

also clearly played a key role. As growth has not been driven primarily by the rapid accumulation of capital, diminishing returns are not an immediate threat to sustainability. Indeed, the continued relatively large absorption of resources by the state sector and agriculture implies the possibility of significant further productivity advances as reforms are deepened.

The Unfinished Agenda

Notwithstanding impressive achievements in terms of growth and structural transformation, China's transition to a market-based economy has been marked by recurrent cycles in economic activity and inflation, weaknesses in state enterprises and the financial sector, and poorly performing budget revenues. In addition, despite initial progress, income disparities have tended to widen, contributing to internal migration pressures and the emergence of a "floating" population that is officially estimated at around 100 million. The problems have reflected in large measure the partial nature of reforms, in particular the failure to make significant progress in restructuring state enterprises; a tax system that has relied heavily on the shrinking state sector, while providing generous concessions to nonstate firms; and an uneven pattern of development, accentuated by the promotion of open economic zones. Addressing these challenges decisively is the key element of China's unfinished reform agenda.¹⁵

Macroeconomic cycles. Since the initiation of economic reforms, China has undergone four major cycles in economic activity during which inflation temporarily rose to relatively high levels (Figure 33).¹⁶ While differing in important respects, the cycles have tended to be generated by surges in aggregate demand (especially fixed investment), excessive credit creation, and price liberalization.¹⁷ The cycles have been accentuated by problems of macroeconomic management in an economy where local governments have exerted considerable influence over economic policies and the financial sector, and where the instruments of macroeconomic policy have been inadequate and blunt; in these circumstances, success in controlling inflation has tended to be accompanied by a sharp slowing of growth.

¹⁵For a discussion of the challenges China faces in its transition, see Barry Naughton, *Growing Out of the Plan: Chinese Economic Reform 1978–93* (New York; Cambridge: Cambridge University Press, 1995).

¹⁶Even though the cycles during the reform period have been relatively large by international standards, they have been smaller than the disruptions associated with the Great Leap Forward and the Cultural Revolution.

¹⁷For further discussion of the causes of China's macroeconomic cycles, see Wanda Tseng and others *Economic Reform in China: A New Phase* (Washington: IMF, 1994); and Barry Naughton, "China's Macroeconomy in Transition," *China Quarterly*, No. 144 (December 1995), pp. 1085–1104.

The institutional and economic reforms pursued in the last few years have sought partly to strengthen the effectiveness of central authorities' control over macroeconomic policy and to broaden the range and increase the market orientation of policy instruments. Much progress has been made in these areas, contributing to the recent success in reducing inflation from a peak of over 20 percent in 1994 to the low single digits early this year, without causing a major disruption of growth. Nevertheless, this successful stabilization has brought to the fore the pressures posed by a partially reformed state enterprise sector that has been experiencing rising losses in recent years. The challenge of sustaining appropriately restrained macroeconomic policies needs to be supported by further progress in market-orientated reforms, especially in the state enterprises, and by relieving banks of the implicit and explicit pressures to support loss-making state enterprises.

Financial sector reform. A safe, sound, and market-oriented financial system is a key objective of the authorities' reform program. A key component of the strategy is to commercialize China's state banks and provide them with greater autonomy in lending decisions. This is expected to lead to a more efficient allocation of credit and facilitate the use of indirect monetary control instruments. At the same time, the authorities are seeking to strengthen balance sheets; address the outstanding stock of nonperforming loans¹⁸ through appropriate provisioning and, where necessary, injection of public capital; and the development of an appropriate supervisory framework to ensure prudent lending practices and deal with troubled institutions. The authorities have designated 1997 as the year of supervision and are currently strengthening accounting and loan classification standards to better assess the health of the banking system and its capital adequacy. In addition, both off- and on-site supervision are being strengthened, including through the development of the necessary skills and manpower.

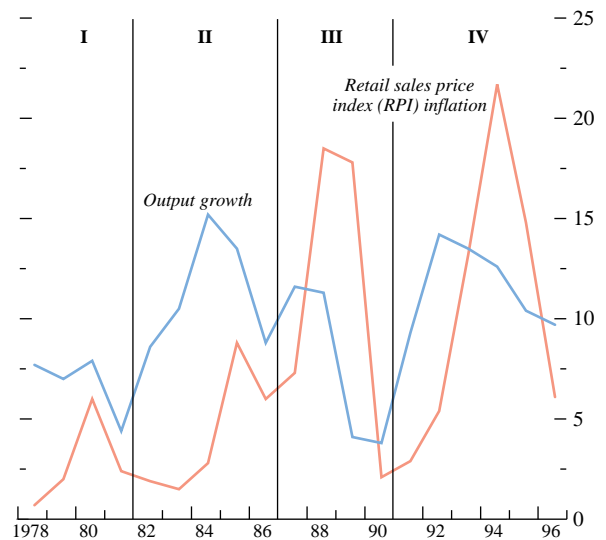
State-enterprise reform. An important outstanding issue in China's transition is the poorly performing state-enterprise sector. Although this sector has accounted for a shrinking share of GDP, it continues to absorb a disproportionately large share of bank credit—around two-thirds—and remains a major employer of urban labor.¹⁹ Progress in other areas, notably in the financial sector, hinges importantly on a breakthrough in state-enterprise reform and on tackling the chronic loss-making enterprises that have placed a burden on the financial sector. In this connection, the current ap-

¹⁸The authorities estimate that around 20 percent of bank loans are nonperforming. Of this total, however, only a small proportion are classified as nonrecoverable.

¹⁹The state sector's absorption of credit may be exaggerated by the official data, which do not take into account on-lending by state enterprises to the nonstate sector.

Figure 33. China: Macroeconomic Cycles in the Reform Period

(In percent)



Source: State Statistical Bureau, China.

proach goes significantly beyond earlier reform efforts by simultaneously addressing key issues such as corporate governance, alternative ownership forms, divestiture of social services, and mergers and bankruptcies. Moreover, the approach involves a potential downsizing of the overall scope of state activity to a limited number of areas that can feasibly remain under state control, and allows for a potentially significant increase in nonstate ownership, especially in smaller enterprises.

Lack of disaggregated data precludes a clear assessment of the progress under the new approach. However, anecdotal evidence suggests that there has been increased momentum in many areas, in particular in experiments involving small enterprises, with many of these becoming shareholding cooperatives. In addition, some headway has been made in divesting firms of social functions through the creation of local government social welfare units and unemployment and retraining programs. On the other hand, progress in the difficult area of hardening budget constraints and dealing with loss-making enterprises (especially larger ones) has continued to be slow. Although increasing somewhat, bankruptcies have remained limited and formal layoffs of redundant labor have been small.²⁰

Fiscal system. China's reform experience has been characterized by a marked weakening in budget revenues.²¹ In common with many other economies that are emerging from central planning systems, there has been a sharp and sustained decline in general government budgetary revenues since the initiation of reforms, from over 35 percent of GDP in 1978 to around 11 percent in 1996. The reduction has reflected not only the gradual separation of state enterprises from the budget, which is desirable, but also a worrying tendency to move genuine fiscal operations to extrabudgetary funds; in addition, the tax system has performed poorly on account of its heavy dependence on the declining state sector. Notwithstanding the weakness in revenues, however, China's fiscal deficit has remained relatively small (around 2 percent of GDP on average) as there has been a corresponding cutback in budgetary spending. The implications of the weakness in budget revenues have been difficult to assess owing to the large number of extrabudgetary funds²² and pol-

icy-directed lending through the banking system. The weakness appears nevertheless to have complicated macroeconomic control and may increasingly limit the public resources available for the reform process. Higher budget revenues are currently being sought through improvements in tax administration, efforts to capture more fully the dynamic nonstate sector in the tax net, including through the scaling back of tax exemptions and concessions, and bringing extrabudgetary funds into the budget. A strengthening of the tax system is also under consideration.

Regional disparities. Following improvements early in the reform period, income disparities have widened in a number of dimensions, most notably between rural and urban areas and across regions. Major contributing factors include the relatively weak performance of agriculture following initial gains early in the reform period, the concentration of some poorly performing state enterprises in rural areas, and longstanding restrictions on labor mobility. At the same time, generous tax concessions in open economic zones have accentuated disparities by encouraging an uneven pattern of development, particularly in coastal areas. In response, the authorities are seeking to increase public investment in rural areas, in particular in transportation and infrastructure, and are scaling back preferential policies in order to redirect foreign investment to interior provinces. Consideration is also being given to the development of a fiscal grants mechanism to redistribute income from richer to poorer provinces. A major poverty alleviation effort, initiated in 1993, is intended to lift the remaining 50–60 million rural poor out of poverty by the year 2000.

* * *

China's economic performance since the initiation of market-oriented reforms in the late 1970s has been impressive by any measure. In addition to achieving rapid growth, China has undergone significant structural transformation and opening to the world economy, and a dynamic nonstate sector has emerged as the leading engine of growth. The strong performance has reflected the interaction between the dynamic forces of economic liberalization, on the one hand, and those of economic development, on the other. Together, these have transformed China from a very poor country at the end of the 1970s to a much wealthier one today.

Needless to say, significant challenges remain in completing the transition to a fully market-based economy and achieving income levels comparable with those in the newly industrialized economies in Asia. The key requirement is a decisive breakthrough in state-enterprise reform, which will be an important determinant of whether China can continue to enjoy the rapid rates of productivity growth experienced during the first two decades of reform. State-enterprise restructuring will also influence importantly the

²⁰However, there have been numerous reports in recent years of increases in informal separations. These adjustments have not been reflected in the official (urban) unemployment rate, which has remained stable at around 3 percent.

²¹For an overview of China's public finances see Ehtisham Ahmad, Gao Qiang, and Vito Tanzi, eds., *Reforming China's Public Finances* (Washington: IMF, 1995); and World Bank, "China: Budgetary Policy and Intergovernmental Fiscal Relations," Report No. 11094-CHA (Washington: World Bank, 1993).

²²There is currently a range of estimates of the size of off-budget fiscal accounts. IMF staff estimates suggest that off-budget spending could amount to as much as 4–6 percent of GDP.

prospects for sustaining macroeconomic stability and the pace of reforms in other areas, especially the financial sector. A strengthening of budget revenues is also critical to ensure that adequate fiscal resources are available for the reform effort. The authorities' inten-

tion to address the widening disparities in income that have emerged during the reform period can help ensure that the benefits of prosperity are more widely shared and contribute to broader support for the reform effort.



Annex II

Implications of Structural Reforms Under EMU

This annex builds on the discussion in Chapter III and further explores the implications for Europe and the rest of the world of alternative assumptions about labor market reform, fiscal adjustment, and product market liberalization under EMU. While necessarily speculative in nature, the resulting scenarios are meant to illustrate the profound impact that EMU can have on macroeconomic performance depending on progress in these three policy areas.¹

The potential effects of structural reforms under EMU are analyzed using a version of the Fund's multicountry model, MULTIMOD. This version includes a model for each EU member country, except that Belgium and Luxembourg are modeled jointly. It is assumed that all present EU member countries participate in EMU from the start² and that the European Central Bank will use a monetary aggregate as an intermediate target. It is assumed that the credibility of monetary policy is established, and the focus is on the impact of structural reforms—or the lack thereof—with EMU firmly in place. Thus, the scenarios start in 2000, the baseline being an unchanged-policy scenario that extends the present World Economic Outlook database beyond its present horizon.

The basic structure of MULTIMOD³ has been preserved for this exercise except for the incorporation of EMU and a new treatment of labor markets. First, a modified Phillips curve was incorporated.⁴ This nonlinear Phillips curve was estimated separately for most

countries in the model. It captures the differential impact of large and small shocks on unemployment and inflation, while allowing for hysteresis effects. Second, an equation was added to capture the business cycle dynamics of unemployment around the natural rate. The natural rate itself feeds into the calculation of potential output, providing a direct channel for the impact of structural reforms in the labor market on long-term output and investment.

Alternative Reform Scenarios for EMU

This section expands on the discussion of the two alternative scenarios for fiscal consolidation and labor and product market reforms discussed in Chapter III. Box 10 summarizes the main assumptions underlying the simulations. It will be recalled that in the first scenario, EMU provides a positive impetus for structural reforms in Europe. With far-reaching labor market reforms, structural unemployment falls substantially. Moreover, it is assumed that government expenditures are reduced, leading to lower debt levels, and that product market reforms raise total factor productivity.

The results for Scenario 1 are presented in the top panel of Table 13 in Chapter III. For “EMU members,” all variables refer to EU-wide aggregates and averages. As is to be expected, the drop in structural unemployment and the improved fiscal position provide a powerful boost to the EU economy. Potential GDP expands by almost 3 percent by 2010; with a rise in the marginal productivity of capital and some decline in interest rates, investment expands significantly, and the increase in income provides a boost to consumption. The reduction in government spending allows the tax rate to be reduced despite a lower target level of debt: the long-run expansionary impact of the structural reforms, coupled with lower government spending, provides sufficient room for simultaneously reducing the debt ratio and the general level of taxation. After an initial decline, the EU trade surplus increases, relative to baseline, from some \$14 billion (0.1 percent of GDP) in 2001 to about \$28 billion (0.2 percent of GDP) in 2010.

These structural reforms in the EU have modest positive effects on the rest of the world. Potential GDP increases by 0.1 percent in the non-European G-7 countries, and by somewhat more in the smaller in-

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¹For an in-depth discussion of the impact of economic and monetary union in Europe, see the studies in Paul R. Masson, Thomas H. Krueger, and Bart G. Turtelboom, eds., *EMU and the International Monetary System* (Washington: IMF, 1997).

²Some countries have indicated that they will not join EMU from the start or that they are unlikely to do so. All EU countries are nevertheless included in the analysis since the focus is on structural reforms under EMU in the medium term, after the transition has been completed and initial credibility has been established.

³See Paul R. Masson, Steven Symansky, and Guy Meredith, *MULTIMOD Mark II: A Revised and Extended Model*, IMF Occasional Paper No. 71 (July 1990).

⁴See Peter B. Clark and Douglas Laxton, “Phillips Curves, Phillips Lines and the Unemployment Costs of Overheating,” IMF Working Paper 97/17 (February 1996); and Guy Debelle and Douglas Laxton, “Is the Phillips Curve Really a Curve? Some Evidence for Canada, the United Kingdom, and the United States,” *Staff Papers*, IMF, Vol. 44 (June 1997), pp. 249–82.

Box 10. Scenario Assumptions

Scenario 1: EMU as a Catalyst for Change

- Policies are introduced that reduce both the persistence of unemployment and inflation inertia, partly by increasing the responsiveness of inflation to unemployment in the short term. More specifically, inflation is modeled as a nonlinear function of the deviation of unemployment from its natural rate and incorporates a weighted average of lagged and expected future inflation as well. Increased labor market flexibility is captured through an increase in the parameter on unemployment by around one-third of the level currently observed. In addition, an increase in the weight of expected inflation captures a reduction in the inertia of the inflation process.¹
- As a result, from 2000 onward, structural unemployment is reduced by 0.125 of 1 percentage point annually, stabilizing in 2007 at 2 percentage points below the baseline.
- Government expenditures are cut by ½ of 1 percent of GDP annually during 2000–2003 and kept constant at 2 percentage points below the baseline from 2003 onward. The average rate of taxation is cut by ½ of 1 percent of GDP during 2000–2010 and the target level of debt is reduced by 10 percent of GDP.
- Total factor productivity grows by ¼ of 1 percent a year faster than in the baseline scenario in 2000–2001 and remains at ½ of 1 percent above the baseline thereafter.

Scenario 2: EMU Without Structural Reforms

- The natural rate of unemployment increases by ¼ of 1 percentage point a year from 2000 until 2007 when it stabilizes at 2 percentage points higher than the baseline value.
- Government expenditure rises by ¼ of 1 percent of GDP a year during 2000–2003, after which it stabilizes at 1 percent of GDP above the baseline.
- The target level of debt is raised by 10 percent of GDP from 2000 onward.
- The euro's risk premium rises by 10 basis points annually during 2000–2003; after 2003, the risk premium is kept constant at 40 basis points.

¹For details, see Peter B. Clark and Douglas Laxton, "Phillips Curves, Phillips Lines and the Unemployment Costs of Overheating," IMF Working Paper 97/17 (February 1996); and Guy Debelle and Douglas Laxton, "Is the Phillips Curve Really a Curve? Some Evidence for Canada, the United Kingdom and the United States," *Staff Papers*, IMF, Vol. 44 (June 1997), pp. 249–82.

dustrial countries outside the EU. The decline in the world stock of debt leads to a worldwide decline in interest rates, which boosts investment. Developing countries also benefit from these developments and

their GDP increases by ¼ of 1 percent. While the increase in productivity and the decline in structural unemployment boost supply in the EU more than in non-EU countries, fiscal consolidation dampens demand initially; equilibrium in the goods market is restored in part through an initial moderate depreciation of the euro, resulting in an increase in net exports from the EU and a corresponding deterioration in the trade balance of non-EU industrial countries.

In an alternative, "reform fatigue" scenario (Scenario 2), EMU goes ahead and inflation remains low, but labor and product markets do not become more flexible. The natural rate of unemployment rises gradually by 2 percentage points in all EU countries, that is, to about the current levels of actual unemployment in the EU, contributing to rising government spending, widening fiscal deficits, and increasing government debt. A risk premium on the euro starts to emerge, gradually growing to 40 basis points vis-à-vis instruments denominated in U.S. dollars.

The results are summarized in the second panel of Table 13 in Chapter III. Unemployment rises gradually during 2000–10, and potential output declines. The resulting decline in household income and wealth reduces consumption. Interest rates rise by about 1.5 percentage points in the first five years, partly because of the increase in the risk premium but, more importantly, because of the increase in government deficits and debt. The trade balance improves slowly during 2000–10, as domestic demand weakens and the euro depreciates.

The effects on output in other industrial countries are quite small. The increase in EU deficits and debt raises the world interest rate and has a negative impact on output in the rest of the world. However, this is counterbalanced by effects emanating from the increase in the euro risk premium, which drives a wedge between the interest rate in the euro area and the rest of the world, leading to lower interest rates abroad while pushing up interest rates in the euro area. On balance, the risk premium effect marginally dominates the effect of the lack of fiscal consolidation in Europe, and interest rates in the rest of the world decline moderately. This contributes to a small rise of output in the rest of the industrialized world. This result is very sensitive, however, to the specification of the risk premium. In developing countries, the weakening of industrial country demand and rise in world interest rates lead to a decline in GDP of about ¼ of 1 percent over the medium term.

Sensitivity Analysis I: Aggregate Demand Shocks Under EMU

Structural reforms in the euro area will have a critical impact on the ability of the EU economy to absorb business cycle fluctuations. Under the reform Scenario

Table 32. Simulation Results for Euro-Area Demand Shock*(Deviations from respective baselines; in percent, unless otherwise noted)¹*

	2000	2001	2002	2003	2010
Scenario 1a: EMU with Additional Fiscal Consolidation and Labor Market Reforms					
EMU members					
Real GDP	-0.8	-2.1	-1.3	-0.6	-0.2
GDP deflator	-0.6	-1.5	-2.2	-2.4	-0.6
Long-term real interest rate	-0.9	-1.3	-1.5	-1.3	-0.1
Unemployment rate	0.2	0.5	0.5	0.3	0.1
General government balance (in percent of GDP)	-0.5	-1.0	-0.4	0.2	0.1
Net revenue	-0.4	-0.9	-0.3	0.3	0.1
Expenditure	0.1	0.1	0.1	0.1	—
General government debt (in percent of GDP)	1.3	3.6	3.8	3.1	-0.4
Trade balance (in billions of U.S. dollars)	11.6	48.9	47.8	41.5	1.0
Non-European G-7²					
Real GDP	-0.1	-0.2	—	0.2	0.1
Trade balance (in billions of U.S. dollars)	-9.5	-36.9	-34.9	-29.4	-1.7
Other industrial countries³					
Real GDP	-0.3	-0.6	-0.3	0.1	0.2
Trade balance (in billions of U.S. dollars)	-3.9	-9.1	-9.3	-7.9	-1.4
Developing countries⁴					
Real GDP	-0.1	-0.3	-0.1	0.1	—
Trade balance (in billions of U.S. dollars)	1.8	-2.9	-3.6	-4.2	2.1
Scenario 2a: EMU with Neither Additional Fiscal Consolidation Nor Labor Market Reforms					
EMU members					
Real GDP	-1.3	-2.9	-1.4	-0.5	-0.6
GDP deflator	-0.5	-1.3	-2.0	-2.4	-0.3
Long-term real interest rate	-0.9	-1.3	-1.5	-1.4	—
Unemployment rate	0.3	0.8	0.6	0.3	0.2
General government balance (in percent of GDP)	-0.3	-0.7	-0.3	0.3	-0.2
Net revenue	-0.6	-1.3	-0.2	0.4	-0.5
Expenditure	-0.3	-0.6	0.1	0.1	-0.4
General government debt (in percent of GDP)	1.4	3.6	3.3	2.5	-1.1
Trade balance (in billions of U.S. dollars)	17.6	58.2	41.9	33.9	-0.2
Non-European G-7²					
Real GDP	-0.2	-0.3	0.1	0.2	0.2
Trade balance (in billions of U.S. dollars)	-13.6	-42.6	-30.1	-24.3	—
Other industrial countries³					
Real GDP	-0.4	-0.7	-0.2	0.2	0.2
Trade balance (in billions of U.S. dollars)	-4.5	-10.5	-8.9	-7.1	-1.0
Developing countries⁴					
Real GDP	-0.2	-0.4	—	0.2	—
Trade balance (in billions of U.S. dollars)	0.5	-5.1	-2.9	-2.5	1.2

¹The baselines in Scenarios 1a and 2a refer to panels 1 and 2 in Table 13 in Chapter III. It is assumed that all current EU member countries participate in EMU from the start and that all participants adhere to the Stability and Growth Pact.

²Canada, Japan, and the United States.

³Australia, New Zealand, Norway, and Switzerland.

⁴Rest of the world excluding transition economies.

1, there generally will be sufficient room for the automatic fiscal stabilizers to operate during a typical business cycle downturn. Moreover, the enhanced flexibility of the labor market will reduce price and wage inertia and keep the economy closer to its long-term growth path.

Table 32 reports the results of an illustrative business cycle shock. The shocks—modeled as negative shocks to consumption and investment—are calibrated to il-

lustrate business-cycle-type swings in GDP and unemployment; the ultimate impact of these demand shocks obviously depends on the degree to which structural reform is being implemented in the EU.⁵ In the reform

⁵Over a four-year period, private consumption is assumed to fall 1½ percent in the first year, 3 percent in the second year, 2 percent in the third year, and 1 percent in the fourth year. For investment, the annual changes are 1, 2, 1½, and 1 percent, respectively.

Table 33. Simulation Results for Asymmetric Demand Shock in the Euro Area
(Deviations from respective baselines; in percent, unless otherwise noted)¹

	2000	2001	2002	2003	2010
Scenario 1b: EMU with Additional Fiscal Consolidation and Labor Market Reforms					
EMU members: Group 1²					
Real GDP	—	—	0.2	0.3	0.1
GDP deflator	0.1	0.2	0.3	0.5	-0.5
Long-term real interest rate	-0.5	-0.6	-0.5	-0.3	-0.1
Unemployment rate	—	—	—	-0.1	—
General government balance (in percent of GDP)	—	—	0.2	0.3	-0.1
Net revenue	—	-0.1	0.2	0.3	-0.1
Expenditure	—	—	—	—	—
General government debt (in percent of GDP)	-0.1	-0.1	-0.5	-1.0	-0.7
Trade balance (in billions of U.S. dollars)	-14.7	-26.7	-20.4	-13.6	-4.7
EMU members: Group 2³					
Real GDP	-0.8	-1.9	-1.7	-1.3	-0.1
GDP deflator	-0.6	-1.4	-2.2	-2.6	-0.1
Long-term real interest rate	-0.2	-0.5	-0.8	-0.8	—
Unemployment rate	0.2	0.4	0.4	0.3	—
General government balance (in percent of GDP)	-0.4	-0.9	-0.6	-0.3	0.1
Net revenue	-0.4	-0.8	-0.5	-0.2	0.1
Expenditure	—	0.1	0.1	0.1	—
General government debt (in percent of GDP)	1.5	3.8	4.7	4.8	0.5
Trade balance (in billions of U.S. dollars)	19.5	47.2	39.4	29.0	4.4
Non-European G-7⁴					
Real GDP	-0.1	-0.1	—	0.1	—
Trade balance (in billions of U.S. dollars)	-4.0	-16.1	-14.4	-11.3	-0.3
Other industrial countries⁵					
Real GDP	-0.1	-0.2	-0.1	0.1	0.1
Trade balance (in billions of U.S. dollars)	-1.5	-3.5	-3.7	-3.0	-0.4
Developing countries⁶					
Real GDP	—	—	—	—	—
Trade balance (in billions of U.S. dollars)	0.7	-0.9	-0.9	-1.1	1.0

(Continued on next page)

Scenario 1a, the EU economy copes relatively well with this downturn. GDP falls by 2.1 percent (relative to baseline) up to the low point of the downturn and recovers gradually afterwards. The drop in investment leads to a decline in long-term real interest rates. Government transfers rise to cope with the increase in unemployment, which contributes to a fall in net revenue, as shown in Table 32. The general government balance worsens correspondingly, falling to 1.0 percent of GDP below the baseline in 2001. Spillover effects from the downturn in the euro area lead to falling output in industrial and developing countries alike. Their trade balance worsens to accommodate a larger decline in investment than in saving in Europe.

The second panel reports the results for a shock of the same magnitude for the reform fatigue scenario in Europe, so that Scenario 2 above serves as the relevant baseline. In this scenario, many countries in the euro zone have deficits in the baseline close to 3 percent. When experiencing the downturn, they thus have less room to allow automatic stabilizers to operate; in fact, as revenues fall in the business cycle downturn, several countries have to cut expenditures to satisfy the Stability and Growth Pact. Correspondingly, the fall in output is substantially larger than in the previous sce-

nario. The Stability and Growth Pact limits the government deficits to 3 percent of GDP, and the overall EU deficit rises by only 0.7 percent of GDP in 2001. It is assumed that, to stay within the 3 percent limit, government expenditures are adjusted; and they drop by over 0.6 percent of GDP during the downturn. While the long-term impact on the rest of the world of a downturn in the euro area is not significantly different from that in the reform scenario, the immediate negative effect is somewhat larger reflecting the larger decline in EU output.

Sensitivity Analysis II: Asymmetric Demand Shocks Under EMU

As a further illustration of the importance of structural reforms in the euro area, Table 33 reports the effects of a demand shock of similar magnitude but only in part of the euro area.⁶ In this scenario, the lack of structural reforms—as evidenced by the differences

⁶For illustration, France, Italy, Portugal, and Spain were chosen to represent the part of the euro area hit by an adverse demand shock.

Table 33 (concluded)

	2000	2001	2002	2003	2010
Scenario 2b: EMU with Neither Additional Fiscal Consolidation Nor Labor Market Reforms					
EMU members: Group 1²					
Real GDP	-0.2	-0.4	0.6	0.6	0.1
GDP deflator	—	0.1	0.1	0.3	-0.7
Long-term real interest rate	-0.6	-0.6	-0.5	-0.2	—
Unemployment rate	—	0.1	-0.1	-0.2	0.1
General government balance (in percent of GDP)	-0.1	-0.1	0.4	0.5	-0.3
Net revenue	-0.1	-0.1	0.4	0.5	-0.3
Expenditure	—	—	—	—	—
General government debt (in percent of GDP)	0.2	0.4	-0.6	-1.2	—
Trade balance (in billions of U.S. dollars)	-21.4	-39.1	-8.8	-0.2	-2.5
EMU members: Group 2³					
Real GDP	-1.5	-3.4	-1.5	-0.7	-0.3
GDP deflator	-0.5	-1.3	-2.0	-2.4	0.6
Long-term real interest rate	-0.2	-0.5	-0.7	-0.8	0.1
Unemployment rate	0.3	0.8	0.6	0.3	—
General government balance (in percent of GDP)	—	—	-0.3	0.1	0.1
Net revenue	-0.7	-1.5	-0.3	0.2	-0.3
Expenditure	-0.7	-1.5	—	0.1	-0.4
General government debt (in percent of GDP)	1.5	3.5	2.8	2.2	-1.6
Trade balance (in billions of U.S. dollars)	31.7	67.9	16.0	2.3	-3.2
Non-European G-7⁴					
Real GDP	-0.1	-0.2	0.1	0.1	—
Trade balance (in billions of U.S. dollars)	-7.7	-21.0	-5.7	-2.1	3.4
Other industrial countries⁵					
Real GDP	-0.3	-0.5	—	0.2	0.1
Trade balance (in billions of U.S. dollars)	29.6	63.1	13.6	1.0	-2.6
Developing countries⁶					
Real GDP	—	—	—	—	—
Trade balance (in billions of U.S. dollars)	-0.5	-3.0	0.9	1.3	1.7

¹The baselines in Scenarios 1b and 2b refer to panels 1 and 2 in Table 13 in Chapter III. It is assumed that all current EU member countries participate in EMU from the start and that all participants adhere to the Stability and Growth Pact.

²Austria, Belgium, Denmark, Finland, Germany, Greece, Ireland, Luxembourg, the Netherlands, Sweden, and the United Kingdom.

³France, Italy, Portugal, and Spain.

⁴Canada, Japan, and the United States.

⁵Australia, New Zealand, Norway, and Switzerland.

⁶Rest of the world excluding transition economies.

between Scenarios 2a and 2b—has an even larger impact on the countries facing the adverse negative shock since EU monetary policy is geared toward euro area conditions and takes the asymmetric shock only partly into account. Hence, interest rates fall less than in the case of a symmetric shock. This adverse effect is, however, partly offset by the positive impact of declining interest rates in the rest of the euro area, which does not experience a downturn. On balance, GDP in

the part of the euro area facing the downturn drops 1½ percentage points more in the reform fatigue scenario than in the scenario with structural reforms. While fiscal policy is able to cushion, via the automatic stabilizers, the effects of the downturn in the structural reform scenario, this is largely precluded in the reform fatigue scenario where the limits imposed by the Stability and Growth Pact result in declining government expenditures during the downturn.