I

The Evolving Global Role of the IMF

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World Without Walls: The Global Economy and the IMF, 1990–1999

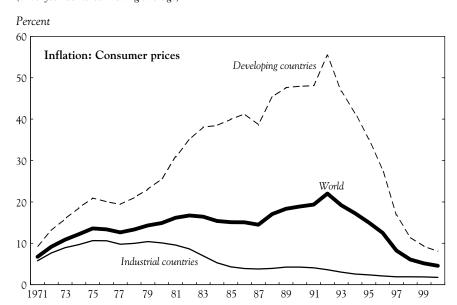
The humorist Mark Twain is often quoted as writing that Richard Wagner's music was "better than it sounds." That ironic judgment might apply more aptly to the world economy of the 1990s. In much of the commentary of the time and in the near-term memories of most who lived through that decade, one heard the drumbeat of crises, unequal distribution of growth, and the pressures many economies felt from the surge in globalization of markets. The financial excesses of the late 1990s would lead to even greater problems a decade later. But when the century ended in an orgy of global celebrations of the arrival of the new millennium, one could have heard above the beating a chorus of achievements: not outstanding by historical standards, but better than they sounded.

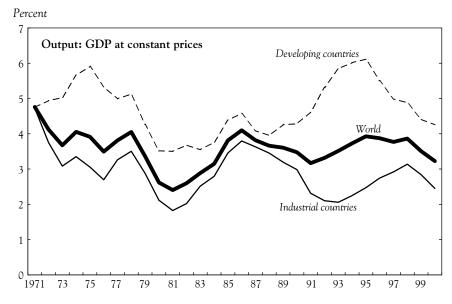
The Global Economy in the 1990s

In the last 10 years of the twentieth century, world economic output per capita grew at an annual rate of more than 1.5 percent, a rate well below the first three postwar decades but higher than that of the 1980s (Figure 1.1). By some measures, global income inequality declined, as did inflation, continuing trends that began in the 1980s. Newly emergent economic powers China and India raced ahead, several Latin American countries managed to stabilize their economies after decades of failure, and the Baltic states and other Eastern European countries successfully managed remarkable economic and political transitions. In contrast, the Russian Federation and some of its neighbors found the transition more difficult, much of sub-Saharan Africa recorded little or no growth, and the East Asian "miracle" of the first half of the decade deflated in the second half.² In the

¹Twain ([1924] 2003), p. 338. Twain was quoting Edgar Wilson (Bill) Nye, who originated the quip. ²For broad analyses of these trends, see Fischer (2003) and Rhode and Toniolo (2006).

Figure 1.1. World Inflation and Output Growth, 1971–2000 (Five-year centered moving average)





Source: International Financial Statistics.

advanced economies, the gains of the 1990s proved hard to sustain, as a bubble in the valuation of technology companies presaged other major imbalances in the years that followed.

Globally, it was not the best of times, but neither was it the worst. It may have been, in a popular phrase of the era, the "Goldilocks economy": neither too hot nor too cold.

What accounted for the successes? What accounted for the failings? Those questions will continue to occupy economic historians long after this book is complete, because the causes are complex and controversial. The shibboleth that became the focus of this controversy was the "Washington Consensus" (see the Prologue to this book) because it captured clearly and succinctly the popular notion that the world economy was being herded onto a narrow path by a cabal comprising the U.S. Treasury at 15th Street in northwest Washington and the "Bretton Woods twins"—the IMF and the World Bank—just four streets farther west along Pennsylvania Avenue. The serious policy debates, however, were both more specific and broader in scope than the list of issues encapsulated in that inapt phrase.

In discussions about the global economy of the 1990s, four major controversies dominate: the welfare implications of open trade, the wisdom of open capital flows, the strategy for helping low-income countries develop, and the prioritization of reforms in transition countries.

Globalization of Trade

Growth in world output (3.5 percent annually in the 1990s) was driven by growth in international trade (6.8 percent). The growth in trade was driven partly by the increasing openness of international finance (see below) and partly by the success of a widely shared policy agenda to liberalize trading opportunities. At the global level, the great success was the conclusion of the Uruguay Round of trade negotiations in 1994. Begun in 1986 at a ministerial meeting of the General Agreement on Tariffs and Trade (GATT) in Punte del Este, the Uruguay Round was the most comprehensive liberalization of international trade ever undertaken. Although it did not meet all the original goals, the final accord covered trade in manufactured goods, agriculture, services, and intellectual property. Overall, the weighted average tariff rate declined from 7.5 percent in 1990 to 6 percent in 1999. The success of the Uruguay Round also paved the way for the formation of the World Trade Organization (WTO) as a permanent body to oversee compliance with trade agreements and to conduct further negotiations on the remaining unresolved issues.

Also of great importance was the spread of regional trade agreements in all parts of the globe. In Europe, the Maastricht Treaty of 1991 set in motion a process that built on the existing free trade zone to establish the European Union (EU) and totally integrate the economies of most member countries. In Africa, the creation of the West African Economic and Monetary Union in 1994 built on the existing currency union

to work toward establishing a free trade area among the seven (later eight) participating countries. In Asia, the Association of South-East Asian Nations (ASEAN) signed an accord in 1992 committing members to establish the ASEAN Free Trade Area (AFTA). The following year, the seven member states of the South Asian Association for Regional Cooperation (SAARC) set up the SAARC Preferential Trading Arrangement (SAPTA). In South America, four countries—Argentina, Brazil, Paraguay, and Uruguay—established the Southern Common Market (MERCOSUR) in 1991 and began the development of a common external tariff. Four members of the Andean Pact—Bolivia, Colombia, Ecuador, and Venezuela—established a free trade area in 1992. Farther north, Canada, Mexico, and the United States established the North American Free Trade Agreement (NAFTA) in 1994. Altogether, the number of active regional trade agreements reported to the GATT and then the WTO roughly tripled from 1989 to 1999, to about 150 agreements (Fiorentino, Verdeja, and Toqueboeuf, 2006, p. 3).

These regional agreements stirred up their own controversies, as economists debated whether the dominant effect was to stimulate trade or to divert trade away from global competition. In theory, a regional agreement could be welfare improving or reducing, depending on how it was designed and implemented and what assumptions were made about the counterfactual situation. Empirical studies of agreements operating in the 1990s generally found positive but mostly small net effects. In any case, these agreements were proliferating rapidly. The WTO, and by extension the IMF, sought first to encourage nondiscriminatory global trade agreements, but they did not discourage countries from entering into regional arrangements as long as the agreements met certain standards.³

The fact that international trade was a stimulus to growth in world output and incomes did not mean that it was necessarily welfare improving. Trade skeptics argued that openness was weakening labor standards, undercutting environmental protection, benefiting strong economies at the expense of the weak, and widening income disparities within countries. Although the evidence for these criticisms was weak,⁴ the popular appeal was undeniable. By the late 1990s, a massive backlash was gathering steam and was pulling in an array of protestors ranging from environmentalists and labor activists to neo-Marxists and anarchists. The movement climaxed in November 1999, when several thousand protestors succeeded in severely disrupting and curtailing the annual ministerial meeting of the WTO in Seattle, Washington (United States). Public policy, however, was undeterred, and the decade produced major gains in the globalization of trade.

³For a good sample of the debate, see the papers in Ito and Krueger (1997). For a subsequent empirical study of the 1990s, see Soloaga and Winters (2001). The WTO website (http://www.wto.org) has a comprehensive list of regional trade arrangements and an explanation of the rules governing the acceptance of such arrangements.

⁴For a thorough and passionate critique, see Bhagwati (2004).

Liberalization of Financial Markets

Emerging markets saw a major resumption of inflows of financial capital after the resolution of the debt crisis of the 1980s and in response to a general strengthening of macroeconomic policies in many developing countries. These inflows fueled a resurgence of growth in Latin America, helped generate the "Asian miracle," and enabled development in several countries in sub-Saharan Africa. The drive to open financial markets to foreign investors became irresistible. In the second half of the decade, however, inflows essentially stopped, causing great suffering in many emerging markets.

Much of the inflow of private sector capital to emerging markets in the early 1990s took the form of short-term liquid debt instruments issued by large international financial institutions, including "shadow banks" and other nonbank institutions. Those flows were particularly heavy to receiving countries with exchange rates pegged to a key currency or managed with limited flexibility. Because interest rates in such countries were almost certainly much higher than in advanced economies, the returns would be higher as long as the peg held and the borrower did not default or demand a restructuring. Borrowers would then use this short-term capital to finance fiscal deficits or private investment, usually through open currency and maturity positions in which the money was borrowed in U.S. dollars or another key currency and then spent or on-lent for longer-term commitments in domestic currency. On the supply side, the flow of capital was further stimulated by the availability of inexpensive credit in low-interest-rate markets such as Japan. In this "carry trade," speculators could borrow yen at very low rates and invest the proceeds in other currencies at much higher yields.

These capital flows were inherently unstable unless both macroeconomic policies and the overall economic and financial environment in the recipient country remained fully consistent with the established exchange rate. The continued availability of short-term capital thus depended on the preservation of strong confidence on the part of investors. As events throughout the decade would make abundantly clear, investor confidence in these circumstances was inherently capricious and volatile, and the reaction was magnified because many investments were highly leveraged. A modest weakening in initial conditions or even the fear of such a weakening was sufficient to trigger a financial crisis.

None of the apparent solutions to this systemic instability would work reliably or without serious adverse consequences. Imposing capital controls would make it harder for the country to attract the capital it needed to foster economic growth. Tightening monetary and fiscal policies was likely to generate an even larger inflow of capital and increase the prospects for a subsequent collapse. Floating the exchange rate could well

⁵In the vernacular, a shadow bank is a financial institution that performs some of the functions of a commercial bank but is not subject to the same regulations.

have the same effect, first generating an appreciation and then a sudden large depreciation once confidence in continuing stability began to wane.

Because of the difficulty of reforming or controlling international capital flows, the burden of adjustment fell heavily on the very countries that initially benefited from the capital inflows. Cycles in policymaking in the major advanced economies, the short-run nature of capital flows to emerging markets, and institutional and policy weaknesses in the recipient countries all interacted to create a volatile and combustible mix. The second half of the decade, therefore, was characterized by a large number of financial crises and subsequent painful macroeconomic adjustments in emerging markets.

The problem arguably began when the U.S. Federal Reserve began pushing short-term interest rates upward in the early months of 1994 to contain inflationary pressures. As investor interest started to shift from emerging markets to domestic opportunities, developing countries reacted by bidding more aggressively for foreign capital and by loosening policies domestically. Within months, Mexico was in dire financial trouble and in need of a multinational rescue, as detailed here in Chapter 10. Nervousness in international capital markets intensified throughout 1995 and 1996 and erupted into a global "sudden stop" of flows to emerging markets in 1997 and 1998. Thailand, Indonesia, and the Republic of Korea bore the brunt of the withdrawal in 1997, then Russia and Brazil in 1998, but the cessation and its effects were widespread.

By the late 1990s, analysts were debating whether financial markets were characterized by bubbles, a debate spurred by U.S. Federal Reserve Chairman Alan Greenspan when he asked rhetorically in December 1996 whether markets were being driven by "irrational exuberance." The most obvious bubble was in technology stocks, for which a belief in a "new economy" pushed equity values far out of range of historical experience in relation to corporate earnings. As enthusiasm for "growth stocks" accelerated, conventional valuation models no longer worked as expected. The first major casualty was a highly leveraged hedge fund known as Long-Term Capital Management or LTCM. Based in the United States and run by well-regarded financial economists (two of whom were Nobel laureates in economics), LTCM used sophisticated mathematical models to invest in arbitrage opportunities in bond markets, including in emerging markets. When the Russian government defaulted on a large portion of its bonds in August 1998, LTCM had to deleverage its positions in an unfavorable market. Because the fund had borrowed heavily from major banks, the Federal Reserve had to organize a rescue of LTCM in September to prevent a general collapse of international capital markets.⁷ The resulting panic affected emerging markets from Brazil to Malaysia to Turkey.

⁶The term was originated in this context in Dornbusch, Goldfajn, and Valdés (1995) and was employed and popularized in a series of papers by Guillermo Calvo dating from 1998; see Calvo (2005), especially Chapter 9.

⁷For an inside account of the crisis and the role of the U.S. authorities in resolving it, see Rubin and Weisberg (2003), pp. 285–87.

Development of Low-Income Countries

The decade witnessed spectacular growth in the world's two largest low-income countries, but the dominant region of extreme poverty—sub-Saharan Africa—had only limited and mixed success.

In China, some 680 million people—60 percent of the population—were living in extreme poverty in 1990.8 During the next 10 years, China's economy grew at an average annual rate of more than 10 percent, and the incidence of extreme poverty fell from 60 percent to less than 35 percent of the population. This success was directly due to globalization of trade—China's exports grew even faster, at 15 percent a year, than its overall economy. By directing production toward manufacturing for export more than for domestic consumption, China took greater advantage of the opportunities for trade in goods than did any other country. However, because growth was concentrated particularly in major cities in eastern China, high levels of poverty remained in the more remote areas.

India also began the decade with a very high level of extreme poverty, estimated at 435 million people, more than half the population. Taking a different route toward development from that of China, India took advantage of its large number of well-educated professionals to compete for the global delivery of services. India's growth accelerated sharply after the successful resolution of a fiscal crisis in 1991 and the adoption of outward-oriented economic policies (Chapter 9 herein). For the next eight years, the Indian economy grew at an average annual rate of 6 percent, exports of goods and services grew twice as rapidly, and the incidence of extreme poverty fell below 45 percent of the population.

Growth in China and India was sufficient by itself to put within reach the goal of cutting the rate of extreme poverty in the world by half from its 1990 level by 2015 (the first of the UN Millennium Development Goals). In the rest of the developing world, however, progress in reducing poverty was much weaker in the 1990s. The most entrenched difficulties were seen in sub-Saharan Africa.

Several African countries did enjoy significant economic progress, especially in the second half of the decade (Chapter 14). In East Africa, Tanzania and Uganda experienced good growth in the late 1990s following a strengthening of policies and intensification of international support. In the west, Côte d'Ivoire and other francophone countries experienced a resumption of growth and increased economic stability after the devaluation of their common currency, the CFA franc, in January 1994. South Africa's prospects improved greatly after the end of apartheid in 1994. Also in the south, Botswana continued its record of stability and growth, though progress there—as throughout the region—was held back by the devastating effects of illnesses and death associated with HIV and AIDS.

⁸These estimates are based on the poverty line adopted by the World Bank in 2008, which is an income of US\$1.25 a day at 2005 prices; see Chen and Ravallion (2008).

Many other African countries, including some of the largest and those with apparently great potential, experienced persistently disappointing economic performance. In Kenya, widespread corruption offset the advantages of an otherwise well-developed economic system and infrastructure. In the Democratic Republic of the Congo, civil wars negated the expected boost from the overthrow of the kleptocratic dictator Mobutu Sese Seko. In Nigeria, mismanagement and corruption dissipated wealth from oil production and export. For much of the decade, Liberia, Sierra Leone, Somalia, and Sudan were mired in internal and external conflicts, saddled with unpayable external debts, and isolated from the international community (Chapter 16). The sub-Saharan region as a whole consequently showed little overall economic progress.

Globally, even though some very poor countries began to make progress, the potential gains were limited by a falloff in net official development assistance (ODA) resulting from the emergence of "aid fatigue" as a major issue in many donor countries. These declines resulted in part from budget difficulties, in part from the end of the Cold War (which weakened the argument that aid would help stem the spread of communism), and in part from growing disillusionment with the effectiveness of past aid efforts. To a small extent, the drop in bilateral assistance was compensated for by the expansion of multilateral programs such as the IMF's concessional lending programs and the IMF–World Bank debt relief effort known as the Heavily Indebted Poor Countries (HIPC) Initiative. The net inflow of official aid to low-income countries still fell.⁹

Reform of Centrally Planned Economies

Geopolitically, the biggest story of the decade was the collapse of the Soviet Union and the end of its influence on many other countries. Bogged down by its occupation of Afghanistan, economically weakened by a prolonged slump in oil prices, and internally conflicted about how best to reform its disastrously inefficient systems of agriculture, manufacturing, and distribution of goods, the Soviet Union at the end of the 1980s had but a shadow of its once fearsome status as an empire and superpower. Through the Warsaw Pact, it still controlled a vast system of military security that stretched through Eastern and Central Europe and divided the northern hemisphere cleanly into two camps separated by what Winston Churchill famously called the Iron Curtain. Through the Council on Mutual Economic Assistance (CMEA), it still controlled a vast system of production and distribution: internally; across its western, southern, and eastern borders; and as far away as Vietnam and Cuba. All of it was about to end.

⁹The Development Assistance Committee of the OECD estimated that from 1992–93 to 1997–98 (the period of major decline), net ODA fell from \$58.3 billion to \$50.3 billion. During the same period, other official flows, including from multilateral institutions, rose from \$8.6 billion to \$9.9 billion. See Table 2 of the statistical annex of the 2010 Development Co-operation Report; accessed at http://www.oecd.org/dac/stats/dac/dcrannex.

In fact, the Soviet empire was never as monolithic as it seemed when viewed from farther west. Romania, though a member of the Warsaw Pact, refused to accept a Soviet military presence on its territory, and it pursued an independent foreign policy while participating in the economic system of the CMEA. Hungary was also a member of both groups but oriented its economic policies more toward the European market than did most other members of the bloc. Yugoslavia guarded its independence while allying itself loosely with the Soviet system. The rest of the bloc was more tightly controlled from the center, with all major policy decisions being at least tacitly subject to approval in Moscow. The Berlin Wall was symbolic of a much wider system of control over emigration through the Iron Curtain. The restrictions, however, did not dampen the yearning for freedom and independence palpable throughout the postwar era. Aided by a shift toward glasnost (openness) initiated by Soviet leader Mikhail Gorbachev, this yearning gained strength throughout the 1980s.

Gaps in the economic divide gradually widened as early as the 1970s. Romania became a member of the IMF in 1972, joining Yugoslavia as the lone Soviet allies in the still largely capitalist club. Hungary defied Soviet opposition to become a member in 1982. Poland applied for Fund membership in 1980 and was accepted in 1986. In each case, participation in the work of the IMF helped to reduce the country's economic dependence on the Soviet Union and strengthen trade links with western market economies.

The real breakthrough came in 1989, as revolutionary impulses gained strength all along the western rim of the empire. Poland held democratic elections in June; German citizens tore down the Berlin Wall in November; Romanians overthrew the dictator Nicolae Ceauşescu in December; and the "velvet revolution" brought the dissident playwright Václav Havel to power in Czechoslovakia. Each of these countries was poised to convert its economy from central planning to a market system and shift its economic energies toward the west.

Meanwhile, Gorbachev was trying to reform the Soviet economy within the confines of the system Joseph Stalin had perfected in the 1930s. Since becoming president of the country in 1985, Gorbachev had gradually dismantled the most oppressive elements of the system and had tried to open the economy to trade with the west. In retrospect, as detailed in Chapter 6, the sequence of this *perestroika* (restructuring) was all wrong. Without a market structure to lead prices toward a stable equilibrium, the dismantling of a pure rationing system led instead to empty shelves and a dysfunctional production pattern. By 1990, the Soviet economy was weaker than it had been for decades.

Once the revolutions in central Europe were complete, it was only natural that the Baltic republics would insist on breaking free as well. Estonia, Latvia, and Lithuania

¹⁰Earlier, the trend had been in the other direction. Poland withdrew from the Fund in 1950; Czechoslovakia was expelled in 1954; and Cuba withdrew in 1964. Yugoslavia was an original member. On Hungary and Poland joining in the 1980s, see Boughton (2001), Chapter 19.

had never accepted their forced integration into the Soviet Union. In 1991, each unilaterally declared its sovereign independence, and Moscow no longer had the will to try to stop them. When Ukraine, the largest of the republics other than Russia, followed suit, the union was no longer viable. The dissolution of the Soviet Union in December of that year formally conceded what was already a reality.

Independence was only the beginning. The CMEA was dissolved; central planning was abandoned; and each country had to devise a new economic system and find a way to compete in global markets and avoid economic collapse. The transition was not pretty. Every country, whether a newly independent former Soviet republic or a former member of the CMEA bloc, experienced a substantial decline in output before stabilizing and turning the economy around. The most rapid recoveries came in countries that had histories of experience with markets and citizenries prepared to accept an abrupt switch to market pricing and private enterprise. Less-prepared countries, especially the former Soviet republics, typically underwent more gradual transitions, suffered more horrendous output and employment declines, and began to recover only later in the decade. By the end of the 1990s, however, almost all countries of the former Soviet bloc were experiencing positive economic growth.¹¹

The transition away from central planning in the 1990s was nearly universal. To the southeast of Russia, Mongolia embraced capitalism and open markets as strongly as any western country. Vietnam became a strong global competitor. In Africa, Angola, Mozambique, and Tanzania were only the most prominent examples of countries shifting from state socialism to systems with less pervasive government control and more openness to international competition. In the end, only Cuba and the Democratic People's Republic of Korea (North Korea) remained aloof from the crowd of countries making this immensely challenging transition. The nature of the challenges, and the path of the transition, varied from country to country, but the goal was general. Global capitalism, it seemed at the time, had triumphed. It was not just the end of the second millennium. In one view at least (Fukuyama, 2006), it was the "end of history."

The IMF in the 1990s

The 1990s were for the IMF the most challenging and by far the busiest decade in its history. (For a detailed chronology, see the Appendix to this chapter.) The institution was called upon time and again, not only to help a large number of countries stabilize their economies and meet their payments obligations, but also to respond quickly and forcefully to manage international financial crises as they developed, and even to advise countries on the transition from a closed and

¹¹For an interim assessment of the first few years of transition by Fund staff who were working on the region, see Banerjee and others (1995). For subsequent assessments at the end of the 1990s, see EBRD (1999) and the papers in Haas, Havrylyshyn, and Sahay (2001).

centralized system to one based on open markets. As an inevitable corollary, this decade was also the most controversial and troubling for the IMF since its founding. The challenges and the controversies affected every aspect of the Fund's role and of its work, from surveillance to lending and from Europe to Africa, from the Americas to Asia.

Ironically, the Fund's decision to become a more open and "transparent" institution (Chapters 3 and 4) further stimulated public criticism of the IMF's role. It opened its archives to the public and began publishing selected reports in 1994, established a public website in 1996, began publishing summaries of consultation reports in 1997, and experimented with publishing complete staff reports on surveillance in 1999. For an institution that had always closely guarded the confidentiality of its deliberations and its relations with member countries, this was a dramatic turnaround. These moves were welcomed by journalists, academic researchers, and nongovernmental organizations, but they also exposed the Fund's decisions and actions to closer scrutiny, much of which led to negative reporting. The resulting criticism was clearly beneficial, inducing the Fund to examine its own thinking and processes more closely, but the adjustment was often difficult.

More generally, the challenges of the 1990s posed a major quandary for the IMF. To be effective, any institution must stay focused on the limited tasks for which it was designed. This dictum is particularly important for the International Monetary Fund, which has deliberately remained small and monocultural to be able to respond nimbly to financial shocks wherever and whenever they occur. 12 This highly concentrated intellectual culture, however, was ill suited to the shocks of the 1990s. The opening of Russia and its neighbors to western trade and finance, the burgeoning burden of official debt in sub-Saharan Africa, and the financial crises that spread across East Asia in 1997–98 all required a much broader field of vision and action.

The ideal solution to this dilemma would have been for the several multilateral agencies to work together with each affected country to design and implement a master plan of reforms leading to a sustainable resolution of the country's problems. Such an approach was not unthinkable, but it was often not practical. For example, as the Soviet Union began to unravel in 1990, a joint task force was formed comprising the IMF, the European Bank for Reconstruction and Development (EBRD), the Organization for Economic Cooperation and Development (OECD), and the World Bank. At the request of the major industrial countries, this task force quickly produced the first comprehensive independent study of the Soviet economy (see Chapter 2). But when the union was dissolved and all the successor states joined the IMF and asked for financial assistance and policy advice, joint or coordinated responses became much less

 $^{^{12}}$ Monoculture is used here to mean a singular focus on monetary and financial issues by a staff consisting largely of Ph.D. economists specializing in macroeconomics. In other senses, of course, the IMF is a broadly multicultural organization.

feasible. In most cases, the can-do and must-do-now culture of the IMF clashed badly with the must-get-it-right-even-if-it-takes-longer culture of the World Bank and other agencies.

Consequently, the IMF's purview expanded—gradually, but quite perceptibly and ultimately substantially. "Structural" lending conditions—those requiring policy changes other than macro-level monetary, fiscal, and exchange rate policies—had previously been used only exceptionally but now were applied with increasing frequency and extent. Governmental corruption in financial matters, previously viewed as a political issue outside the Fund's ambit, now became a legitimate reason for withholding financial support. Similarly, the Fund's policy advice in its annual consultations with member countries occasionally extended to issues such as curtailing military spending and other "unproductive" activities, avoiding deforestation and other actions detrimental to the environment, and restructuring financial and other regulatory systems.

The architect and champion of this expanding role was the Managing Director, Michel Camdessus. He argued tirelessly that these changes were needed if the IMF was to help countries solve their macroeconomic problems sustainably. The goal was not only to achieve or restore financial stability; it was not only to achieve or restore economic growth while maintaining financial stability. The goal was "high-quality" growth: economic growth consistent with environmentally sustainable development, good governance, and an equitable distribution of income and wealth.

Camdessus introduced the concept of high-quality growth as an objective for the IMF in his 1989 speech to the UN Economic and Social Council (ECOSOC) in Geneva. A year later, in his 1990 ECOSOC speech, he asserted a strong role for the IMF in helping countries achieve high-quality growth: "Our [the IMF's] primary objective is growth... high-quality growth... growth that is sustainable." Over the next several years, he attempted to define the term more specifically. For example, in a speech given in Malaysia in 1996, he averred that "the words 'high-quality growth' define our actions." He characterized the phrase as "a demanding concept, with at least four dimensions. I believe that growth, to be sustainable, must maintain macro stability, benefit all sections of the community (especially the poorest), and respect national cultures and political freedom."¹³

This ambitious agenda stirred controversy inside the IMF as well as outside. Many on the staff worried that the Fund could not possibly deliver on such aspirations. The staff had a clear sense of the elements of good overall economic policy—the misnamed and much derided, but solidly serviceable, Washington Consensus—but it did not have a model that credibly and reliably linked the specific elements to economic growth, let

¹³The two ECOSOC speeches were MD/Sp/89/5 (July 13, 1989) and MD/Sp/90/13 (July 11, 1990). The 1996 speech was "Challenges Facing the IMF and Malaysia," delivered at a meeting of financial and business leaders in Kuala Lumpur, MD/Sp/96/15 (July 15, 1996); accessed at http://www.imf.org/external/np/sec/mds/1996/mds/9615.htm.

alone high-quality growth. Which elements were the most critical, and how could the policy recommendations be prioritized, sequenced, and quantified? At what point did the ooze of corruption or other institutional weaknesses cross the threshold from nuisance to obstacle?

The primary fact remained that the IMF was being asked to try, and it was rightly expected to do its best. The limitations of other institutions are beyond the scope of this History, but—whether real, exaggerated, or imaginary—they were keenly felt by staff in the Fund who had to devise holistic solutions to complex problems not entirely within their own or the Fund's areas of competence and experience. The process was far from ideal, and the outcomes were not always favorable. On the whole, however, even if the Fund allowed its mission to "creep" too much, it usually handled its expanding responsibilities with some caution and not without effect. At the end of this most difficult decade it was still the world's leading institution for macroeconomic surveillance, balance of payments financing, and financial crisis management. It had not gone too far to be able to pull back to a more sustainable mission.

Surveillance

Surveillance—the Fund's oversight of the international financial system and of the exchange rate policies of its member countries—took on its modern form in the mid-1970s, when the major industrial countries indicated clearly they were not going to revive the Bretton Woods system of fixed exchange rates. The intention and the hope was that regular consultations between the Fund and each member country would ensure that countries took seriously their obligations under the newly rewritten Article IV to maintain their exchange rates consistently with fundamental economic conditions. As experience showed, however, defining those fundamentals required as much art as science, and the consequent ambiguities gave every country—whether it had a fixed rate, a floating rate, or some intermediate regime—plenty of room to dispute any allegation about its compliance with the principles of surveillance.

Although the Fund made a concerted and sustained effort to treat every member country alike in conducting Article IV consultations, practical considerations made that premise difficult to maintain. By the end of the 1980s, the effectiveness of surveil-lance could be characterized by reference to four unofficial but distinct groups of countries. First, for the large industrial and developing countries whose economic policies had significant global or regional consequences, consultations became a way of urging those countries to take proper account of international spillovers and to adopt appropriate and responsible macroeconomic policies. Second, for other developing countries not actively borrowing from the Fund but in some danger of needing to borrow in the near future, annual consultations provided an opportunity for the staff to keep abreast of the situation and to offer advice on ways the country should adapt its policies to avoid a crisis. Third, for countries that were actively borrowing from the Fund,

Article IV consultations were usually folded into reviews of their adjustment and reform programs, with little substantive distinction or independence. Fourth, for smaller industrial countries and for developing countries with strong finances and relatively small spillover effects on their neighbors, consultations were often held less frequently than annually and became primarily a means of offering advice on selected economic policy issues.

The evolution of Fund surveillance in the 1990s is detailed in Chapter 4. Four key issues dominated the process in this period.

First and foremost, the Fund continued to refine its practices to strengthen its potential to identify major problems before they erupted into crises. In the early 1990s, management reestablished a high-level surveillance committee that met regularly to discuss potential crisis situations. The Executive Board also began holding frequent informal and confidential discussions of world economic and market conditions. At the end of 1994, the Mexican peso crisis revealed that stunning gaps in surveillance persisted despite these endeavors. That occurrence spurred a more intensive effort to strengthen surveillance, notably by persuading countries to produce and disseminate more-comprehensive and timely financial data and by establishing standards for financial transparency.

Second, the Fund had to try to strike the right balance between comprehensive and uniform coverage of its consultations—treating every member country the same—and focusing on the countries and the issues that really mattered. In the early 1990s, the Fund had to pull staff away from work on smaller nonborrowing countries to put more resources into analyzing the problems of the large number of new members, especially those from the former Soviet Union. The Mexican crisis forced a reconsideration of this tactic, revealing gaps in the continuity of coverage and demonstrating that well-performing countries might have latent problems that the Fund was unable to discover. The scope of surveillance expanded in the second half of the decade with regard to both countries and issues.

Third, regional issues became more important. Traditionally, surveillance had focused on the policies and performance of each country individually. As the world economy became more integrated, that approach became less effective. Again, the Mexican crisis was a catalyst, because it raised the specter of contagion throughout Latin America. Even more pertinent, the Fund had to find effective ways to analyze regional trade and monetary areas such as the European Monetary System (EMS) and the CFA franc zone. Separate consultations with France, Germany, Italy, and other EMS members were an essential part of the Fund's routine, but they were not the right way to understand the policy issues affecting the monetary union as a whole. Similarly, while Cameroon, Côte d'Ivoire, Gabon, and other members of the CFA franc zone in central and western Africa had distinct economic structures and issues to be analyzed, the monetary union had to be viewed and understood as a whole.

Fourth, the drive to establish international standards for economic policies picked up steam. One direction this drive took was through a series of declarations endorsed by the IMF's ministerial committee, known then as the Interim Committee (see Chapter 17). That series culminated in what Camdessus took to calling the "eleven commandments." Essentially, those declarations gave an official and global blessing to the Washington Consensus. That movement also engendered practical initiatives for the Fund and the World Bank, notably the preparation of country-specific Reports on Observance of Standards and Codes (ROSCs) and Financial Sector Assessment Program (FSAP) reports. Another direction was an attempt to broaden the Fund's mandate to cover capital flows. Had that attempt succeeded, it would have charged the IMF with guiding a process of orderly liberalization of capital account transactions. The practical outcome of both efforts was a widening of the Fund's surveillance activities to include greater encouragement of more openness and more market- and growth-oriented economic policies.

Lending

To a much greater extent than the earlier Histories of the IMF did, this book focuses on relations between the Fund and its borrowers. In the 1990s, more than 100 countries undertook stabilization programs supported by stand-by, extended, or other Fund lending arrangements. Although the total number of borrowers as a portion of the Fund's member countries was not larger than in some previous periods, the importance of lending in the work of the Fund was significant in the 1990s. In the first few years of the decade, lending to the transition economies and other new members was providing critical life support to countries that could not have coped otherwise. In the second half, large loans—including the largest in IMF history, to Korea—to help manage and resolve a devastating series of financial crises were the dominant feature of the Fund's work. Surveillance and technical assistance were also of great importance, but lending was the lead narrative.

The real story about Fund lending in the 1990s was not an expansion of the amounts or the number of borrowers. The real story was the broadening and deepening of program design and conditionality. From the inception of formal policy conditionality in the early 1950s through the 1980s, the Fund gradually increased and expanded its reliance on this particular tool to ensure that its loans were used effectively. It began when the Fund first offered stand-by arrangements and asked borrowers to promise not to alter exchange rate policies or impose new exchange restrictions while the arrangement was in effect. By the late 1960s, the practice of imposing policy conditions on stand-by arrangements was in general use, and the Fund issued its first conditionality guidelines. In the 1970s, however, the "oil shocks"—two rounds of major increases in world petroleum prices—contributed to general chaos in international trade and finance, in response to which the Fund shifted the majority of its lending into low-conditionality forms by setting up new "Oil Facilities," increasing usage of the Compensatory Financing Facility, and establishing a Trust Fund for lending on

concessional terms to low-income countries. None of those options required countries to make policy commitments beyond a general promise to cooperate with the Fund. In the 1980s, the pendulum swung back: the Oil Facilities had expired, the Fund reduced reliance on the Compensatory Financing Facility, and new trust funds for concessional lending required conditionality similar to that on stand-by arrangements. ¹⁴

By the beginning of the 1990s, policy conditionality was well established and was based on a set of revised guidelines adopted in 1979. Those guidelines generally limited conditionality to macroeconomic policies. The Executive Board repeatedly declined to extend conditions to structural policies, although it allowed exceptions in cases such as Yugoslavia where extensive government intervention in markets made the usual levers of macroeconomic policy less relevant. As explained in Chapter 5, that reluctance then eroded.

The introduction of new member countries making a transition from central planning to market economics meant that structural reform became a priority for much of the Fund's lending. More generally, the broad international acceptance of a market-oriented paradigm—openness to trade and financial flows, transparency in fiscal accounting, avoidance of corruption, acceptance of market-determined pricing, and privatization of production and distribution—made structural conditionality more palatable. More controversially, the Fund occasionally ventured into structural issues less central to macroeconomic stability and growth, including the avoidance of policy actions that might degrade the natural environment and the redirection of government spending away from the military following the end of the Cold War. The main theme, however, was to help countries participate fully in the global marketplace.

In 1994, the Interim Committee—meeting in Madrid immediately after the commemoration of the fiftieth anniversary of the Bretton Woods conference—recommended an increase in Fund lending to countries willing to implement strong reform programs.¹⁵ Shortly afterward, Camdessus summarized the prevailing view in terms that clearly described the confidence the Fund had gained in its own determination of appropriate and even requisite policies for all of its borrowers. As recorded in the minutes of an Executive Board meeting on access policy, the Managing Director

observed that it was probably a common view of members of the Board that any weakening of conditionality was a disservice to the countries concerned. The necessity of implementing stronger programs underlay the philosophy of the decisions taken in Madrid by the Interim Committee, in his view. Through persuasiveness in its negotiations with its members, the Fund would catalyze stronger programs, thus enabling increased access for member countries commensurate with the strength of their programs. ¹⁶

Camdessus's confidence in the wisdom and viability of Fund conditionality was not universally shared, and it became increasingly controversial as the decade progressed.

¹⁴This history is described in more detail in Boughton (2001), Chapter 13.

¹⁵Interim Committee communiqué of October 2, 1994.

¹⁶Minutes of EBM/94/95 (October 25, 1994), p. 14.

Nongovernmental advocacy groups accused the Fund of interfering with sovereign decision making and of forcing austerity on countries whose circumstances left them little choice but to comply. Officials from borrowing countries generally were more understanding of the need for conditionality but complained that it was becoming too intrusive. Both groups suspected that at least some structural conditions demanded by the Fund were instigated by major industrial countries to further their own economic interests. Academic research began to focus on the potential conflicts between conditionality and national "ownership" of policy decisions.

Simmering controversies over Fund lending practices burst into the open when the Fund was called upon to manage the resolution of financial crises in Thailand, Indonesia, and Korea in 1997 (Chapter 11). In each case, the crisis resulted from a variety of interrelated problems that were mostly structural rather than macroeconomic. In each case, the Fund tried to persuade the authorities to put in place a long list of reforms, some of which were aimed at the root causes of the crisis and some of which were aimed at putting the economy on a more sustainable course over the longer run. In each case, the reform programs ultimately succeeded but only after a traumatic adjustment and a change in government through national elections. Questions about whether the Fund-supported programs were overly ambitious, too broadly structured, and too insensitive to country-specific conditions came to dominate the public discourse. The horrendous initial conditions that caused the crises, the necessity of undertaking deep reforms, and the broad success that the effort finally achieved got lost in the noise.

Following the East Asian crises, the Fund took on board a number of lessons. An internal staff review and another by the Fund's Independent Evaluation Office both pointed to specific failings on the part of the Fund as well as of the national authorities. In the near term, the prime lesson was that balance sheet vulnerabilities in these and other emerging-market countries made the economic downturn from a financial crisis much more severe. The standard macroeconomic remedies, especially through tightening fiscal policies, would excessively exacerbate the downturn and unnecessarily delay recovery. Over the longer term, the broader lessons were that structural policy conditions had to be more tightly focused on the financial imbalances and rigidities that caused the crisis and that policy recommendations had to take full account of spillover and feedback effects between countries. In the following decade, these lessons would lead to a gradual redirection and scaling back of conditionality.

In parallel with the evolution of lending practices, the Fund moved to strengthen its assistance to low-income countries. The general principles were established in 1985, with the creation of the Structural Adjustment Facility (SAF). Loans to low-income countries would be made on concessional terms, with relatively long maturities, using contributed funds other than the Fund's own general resources, and with loan conditions similar to those for other borrowers but with an emphasis on structural reforms aimed at jump-starting economic development and reducing poverty. In 1987, the Fund tripled the funds available for this purpose by creating the "enhanced" SAF

(ESAF). Even so, the amounts the Fund could lend to poor countries were quite small, and the ESAF was still a temporary facility scheduled to lapse in a few years so the contributed funds could be returned.

In the 1990s, the Fund repeatedly extended the life of the ESAF, enlarged its pool of resources, and eventually converted it into a permanent facility (Chapter 13). In 1999, in recognition of the fundamental purposes of the Fund's lending to low-income countries, the ESAF was redesigned and renamed the Poverty Reduction and Growth Facility. Meanwhile, a popular movement was growing worldwide to persuade bilateral and multilateral creditors to forgive the debts of the poorest countries. After several years of resisting calls to include obligations to the IMF in the list of debts to be forgiven, the Fund agreed in 1996 to establish a new program, together with the World Bank, known as the Heavily Indebted Poor Countries (HIPC) Initiative. The program got off to a slow start, but by the end of the decade it began to show results for a few countries with particularly great needs and a track record of relatively good economic policies.

Technical Assistance and Training

In addition to surveillance consultations and financial assistance, the IMF helps its member countries by providing technical assistance. This activity takes several forms, including economics and statistics training for officials; staff missions to assist countries in establishing treasury systems, central banks, national statistics, and other financial arrangements and methods; and the assignment of external experts to countries to provide longer-term guidance. Most of this assistance is provided free of charge and is financed either from the Fund's own administrative budget or from donated resources.

Technical assistance took on greatly increased importance for the Fund in the 1990s. One reason was the influx of new members, many of which were starting from scratch in establishing the institutions of a market economy. They needed expert assistance from many sources. The IMF's role was relatively small in the grand scheme of the transition, but for many countries it was crucially important in the areas in which the Fund's expertise was most relevant. Similarly, as the Fund became more deeply involved in helping a number of developing countries recover from internal or external conflicts, the role of technical assistance in the rebuilding effort was particularly important. As detailed in Chapter 5, the Fund devoted more than twice as much staff time to technical assistance activities in the 1990s than it had in the preceding decade.

A central issue in the provision of technical assistance was whether it should be aimed primarily at institution building and at strengthening a government's general capacity to run the economy or at the more immediate challenges of carrying out a reform program. The expansion and intensification of policy conditionality in the Fund's lending in the 1990s gave rise to a need for technical assistance to help the

authorities carry out the required reforms. That had the advantage of focusing the assistance in areas in which it was most needed, but at the cost of diverting resources from capacity building. To some extent, the Fund's training programs—which also were expanding rapidly—filled this gap. At the end of the decade, the Fund turned its attention more directly to developing a comprehensive plan for providing its assistance more effectively.

Financial Architecture in the 1990s

In July 1994, the Group of Seven (G7) major industrial countries held its annual summit meeting in Naples, Italy. It was the fiftieth anniversary of the international monetary conference in Bretton Woods, New Hampshire (United States), at which the IMF and the World Bank were created. The rallying cry of critics of the Bretton Woods institutions—"Fifty years is enough!"—was very much in the air. As the leaders met, U.S. President Bill Clinton proposed to them that their next summit (which would be held a year later in Halifax, Nova Scotia, Canada), be devoted to reviewing the "international architecture." The institutions set up at Bretton Woods, he suggested, had to be refined to meet the challenges of the twenty-first century. 17 When the G7 finance ministers and central bank governors met in Washington the following April, they "exchanged views on current global economic and financial conditions and issues related to the review of the international economic architecture initiated at the Naples Economic Summit."18 The Halifax summit communiqué called specifically for a review of the international financial institutions, and "international financial architecture" entered the lexicon of public policy discussions.

As these discussions unfolded, they focused on several interrelated topics, but more on how to tackle problems rather than on how to restructure institutions. One topic was the role of exchange rate policy. The original Bretton Woods system (until 1973) had focused on establishing and preserving stability of exchange rates and anchoring those rates to gold through the convertibility of the U.S. dollar. A more eclectic system had evolved subsequently, and the question naturally arose as to whether it could be made more stable and effective. A second issue concerned the conduct of macroeconomic policies. Specifically, could a rules-based system help stabilize price levels without destabilizing output? Third, should the international flow of financial capital be harnessed, or allowed to roam free? Fourth, what more could be done financially to strengthen the development prospects of the poorest countries?

¹⁷See remarks by Karin Lissakers (U.S. Executive Director in the Fund) at a meeting of the Overseas Development Council (March 16, 1995); IMF archives, OMD-AD, Box 11518, "Mexico 1995" (Accession 1998-0106-0006).

¹⁸G7 statement (April 25, 1995), paragraph 1; accessed at http://www.g8.utoronto.ca/finance/g7dcfin.htm.

Exchange Rate Policy

Several issues arose in the 1990s as countries struggled to devise exchange rate policies that could be sustained in a world of open and volatile capital markets. The overarching issue, as it had been since the advent of generalized floating in the 1970s, was whether to attempt to fix or manage the rate or to let it respond freely to market pressures. If circumstances seemed to favor a fixed exchange rate, a variety of options presented themselves, including use of a currency board, dollarization, or joining a currency union. Rather than advocating a single policy for all countries, the IMF took a case-by-case approach that favored pragmatism over ideology or consistency.

Fix or Float?

The quintessential debate in exchange rate policy is whether a country should anchor its currency's exchange value to something, allow it to float freely in response to market pressures, or take an intermediate approach by managing the rate to attenuate fluctuations. Until the twentieth century, anchoring to a commodity was the only viable or sustainable option. Gold, of course, was the commodity of choice, but many others were tried. Millennia of experimentation culminated in the international gold standard that prevailed from 1879 until the outbreak of the First World War in 1914. The collapse of the gold standard ushered in 30 years of confusion, during which the goal for most countries was to return eventually to gold. The system set up at Bretton Woods in 1944 envisaged a "gold exchange" standard with a strong, gold-anchored U.S. dollar at its center and with "fixed but adjustable" exchange rates providing both the stability of a commodity standard and the flexibility of intelligent management. The end of that system in 1973 led to an era of choice in which management finally triumphed over what John Maynard Keynes famously called the "barbarous relic" of the gold standard. On the supplies the gold standard.

Early enthusiasm that floating exchange rates would be self-stabilizing and would help equilibrate international trade were dashed by massive swings in key currency rates and increasing trends in current account imbalances in the 1970s and 1980s. A generalized return to fixed exchange rates was unfeasible, owing to the marked differences in growth rates, productivity trends, and susceptibility to shocks across countries. The principal characteristic of exchange rate policy in the 1980s and early 1990s,

¹⁹The dating of the international gold standard is arbitrary because countries adhered to it and abandoned it at different times. This span begins when the United States resumed the convertibility of dollars into gold and ends when the United Kingdom terminated the convertibility of the pound sterling.

²⁰"Barbarous relic" is from Keynes ([1923] 1971), p. 138. For a comprehensive study of the way advances in monetary theory led to the evolution from gold to managed currencies, see Cesarano (2006).

therefore, was a preference for managed floating, soft pegs, or other intermediate regimes.

A major shock hit this limited-flexibility system in 1992 when the exchange rate mechanism (ERM) of the European Monetary System (EMS) came under attack. The sequence began in June after a referendum in Denmark rejected the Maastricht Treaty setting out the process that was to lead to Economic and Monetary Union (EMU) across Europe. That rejection reinforced a market view that European policymakers might not be prepared to take the difficult economic and political steps needed to preserve the existing parities in a monetary union. It also added to speculation that French voters would also reject the treaty in a referendum scheduled for September. On September 8, Finland floated the markka, which had been pegged to the European currency unit, the ECU. Less than a week later, Italy devalued the lira by 7 percent. The first crisis culminated on September 16, which became known as "Black Wednesday," when the British authorities withdrew the pound sterling from the ERM. Italy quickly followed suit.

Calm returned temporarily to the EMS when France narrowly approved the Maastricht Treaty on September 20. Although the Edinburgh agreement of December 1992 enabled Denmark to ratify the Maastricht Treaty in a second referendum in May 1993, speculation against the ERM parities resumed in July. Finally, on August 1, 1993, EMS officials agreed to widen the intervention bands drastically, from \pm 2.25 percent to \pm 15 percent.²¹

The ERM crisis abruptly shifted the conventional wisdom away from flexible management of exchange rates. Countries participating in the ERM had been committed to a fixed-rate policy, but speculators understood that the option still existed to change parities in cases of duress. That offered an opportunity to test the resolve of participating central banks by placing a one-way bet against the current parities. In fact, speculators made huge profits at the expense of central banks, especially the Bank of England. Although the ERM survived with the widening of intervention bands, confidence in that type of system was badly damaged. In its place, a new predominant paradigm arose: the "bipolar" view, also known as the "corner hypothesis." Floating would work; irrevocably fixed rates would work; but in the bipolar view, any regime in between would be tested by markets and would ultimately collapse.²²

²¹For a more detailed chronology and analysis, see Buiter, Corsetti, and Pesenti (1998).

²²An even more extreme view was that only floating rates were sustainable; see Obstfeld and Rogoff (1995). That view had adherents in the IMF in the 1980s—see Quirk and others (1987)—but less so in the 1990s. At the other extreme was the argument for a single world currency. Robert Mundell, in his 1999 speech accepting the Nobel prize in economics, suggested that "the absence of an international currency" was a major "piece of unfinished business" in the international monetary system. In a subsequent speech a few months later, he concluded that a single world currency was politically unrealistic, but he called for a system with just three currencies (the U.S. dollar, the euro, and the Japanese yen) and fixed exchange rates among them; see Mundell (1999, 2000).

In the IMF, the chief advocate of the bipolar view was the First Deputy Managing Director, Stanley Fischer. He applied the logic of the argument to the financial crises that hit Mexico, Thailand, Indonesia, Korea, Russia, and Brazil, all of which had crisisprone soft pegs. Although an extreme form of the bipolar view concluded that the only viable regimes were pure floating and firmly fixed rates (currency unions, currency boards, or dollarization), Fischer eventually softened his position to exclude only soft pegs from this list. A country might be able to sustain a policy of managing the exchange rate to limit volatility or large swings, but only if it avoided committing to a central rate or a narrow band.²³ Although the Fund as an institution did not take an official view in favor of any specific regime, the bipolar view influenced the general tone of the Fund's policy advice in the second half of the 1990s and for a few years afterward. Gradually, acceptance of intermediate regimes then returned.

For a number of countries in the 1980s, the IMF had advocated targeting the real exchange rate. The logic was that a country with a high initial inflation rate could maintain international competitiveness by steadily depreciating the nominal exchange rate at the same rate as the inflation differential relative to major trading partners. If the country also gradually tightened monetary policy to eliminate the inflation differential, the "real exchange rate rule" could lead to a stable equilibrium while avoiding the loss of competitiveness associated with a fixed rate during the transition. Although both the theory and the practicality of this type of policy had been called into question by the mid-1980s, it still had a certain appeal, especially for countries in Latin America that were trying to overcome persistently high inflation.²⁴

Real exchange rate rules generally fell out of favor in the 1990s, as a growing body of cross-country evidence confirmed the inflationary bias of this type of policy (Calvo, Reinhart, and Végh, 1994). Fischer, however, remained cautiously receptive. In his view, the way to escape the inflation trap was to use tight *fiscal* policy to control it. When the South African authorities proposed adopting a real exchange rate rule in 1996, Fischer did not discourage them and cited Chile's experience as a good example. However, the policy did not restore confidence in South Africa's prospects, and a financial crisis ensued (see Chapter 13).

The one great sustained shift toward fixity in the 1990s was Economic and Monetary Union (EMU) in the European Union. With the wide bands established in 1993,

²³In Fischer's definitive statement on this topic, he admitted that he and other advocates of the bipolar view "probably have exaggerated their point for dramatic effect" (Fischer, 2001, p. 5).

²⁴In a widely cited 1986 paper, Charles Adams and Daniel Gros demonstrated the difficulty of conducting tight monetary policy while pursuing a real exchange rate rule and concluded that such a policy was likely to lead to escalating inflation. The IMF's experience in designing stabilization programs for Yugoslavia in the 1980s provided evidence that the Adams and Gros argument was empirically relevant; see Boughton (2001), pp. 573–78.

²⁵Letter from Fischer to Trevor Manuel (minister of finance in South Africa), June 18, 1996; IMF archives, DMD-AD (Accession 1999-0275-0008). In a later paper, Le Fort (2005) concluded that Chile's experience with a real exchange rate rule was not so positive.

the ERM (minus Italy and the United Kingdom) survived its crisis and remained as the anchor for the drive toward full currency unification. ²⁶ Even a major recession throughout the ERM area in 1995–96 did not derail momentum. The EU adopted the Stability and Growth Pact in June 1997, setting ceilings on acceptable fiscal deficits and government debt ratios and specifying convergence criteria for the coordination of policies across the region. That laid the final cornerstone for the introduction of the euro as a currency for all but cash transactions on January 1, 1999, and as a full replacement for 11 European currencies a year later—a move that the Interim Committee called "one of the most important international monetary developments in the post-Bretton Woods era." The euro floated independently relative to other currencies, but all the countries in the euro area were irrevocably committed to the use of this one currency.

Dollarization

For countries that wanted to move to a "hard peg" exchange regime and establish credibility that the peg would not change, the most extreme option was to abandon the local currency altogether. At the outset of the 1990s, a few countries had taken this route. The leader, and the prototype, was Panama, which adopted the U.S. dollar as its currency when it became an independent country in 1904. Many small island states used an internationally accepted currency, such as the Australian, New Zealand, or U.S. dollar; or a major European currency, replaced in 1999 by the euro. Throughout Europe, small states, principalities, and other territories adopted the national currencies of larger contiguous neighbors. Except for Liechtenstein, which used the Swiss franc, they also switched to the euro. Lesotho, Namibia, and Swaziland used the South African rand alongside an interchangeable local currency.

In the late 1990s, interest in dollarization was piqued by the perceived dangers of trying to peg in more normal ways. As noted above, the financial crises in the EMS, Mexico, East Asia, and elsewhere suggested that soft pegs could be broken by large-scale speculation. If floating was not an option because of the risk of instability, then a harder peg might offer a solution.²⁸ The largest country to consider this possibility seriously was Argentina in 1999 (Chapter 12). The IMF broadly supported Argentina's ambition, but the effort bogged down because of a lack of enthusiasm in the United States. Following the establishment of independence (from Indonesia) in East Timor, Fund staff advised the authorities to delay introducing their own currency and to use

²⁶Detragiache and Hamann (1999) presented evidence that a key factor enabling the success of exchange rate–based stabilization in Europe, in contrast to the general experience in Latin America and other emerging markets, was that high-inflation European countries (Greece, Ireland, Italy, and Portugal) had more moderate initial inflation than the comparator countries. Italy rejoined the ERM in November 1996.

²⁷Interim Committee communiqué (April 28, 1997), paragraph 6.

²⁸For an analysis of "fear of floating," see Calvo and Reinhart (2002), Section III.

the U.S. dollar instead. That recommendation was accepted and became the policy of the new country (Timor-Leste) through the next decade. Also in 1999, Ecuador began making plans to dollarize. The Fund supported that decision and approved a stand-by arrangement for Ecuador shortly after the currency conversion in 2000.

Currency Boards

Several countries introduced currency boards or similar systems in the 1990s as a way to anchor monetary policy against a strong external currency without giving up the seigniorage and other advantages of a domestic currency. In a pure currency board scheme, a country has no central bank as a currency-issuing body. Instead, the currency board holds foreign exchange equal to its monetary liabilities, which serve as the monetary base. The exchange rate between the domestic currency and a key international currency is fixed by law. A legal prohibition on issuing monetary liabilities in excess of exchange reserves should prevent high inflation and strongly discourage speculation against the peg.

In the postwar period before the 1990s, most currency boards were implemented by very small countries with close financial ties to the larger countries whose currencies they were mimicking.²⁹ The most important example, and somewhat of an exception to that rule, was Hong Kong,³⁰ which set up a currency board in 1983 to peg the Hong Kong dollar to the U.S. dollar. Then, starting with Argentina in 1991, several countries introduced schemes that were variants on the pure currency board model in which the country retained its central bank but placed legal restrictions on the scope of its activities. Estonia pegged its currency to the deutsche mark by this method in 1992, as did Bulgaria and Bosnia and Herzegovina in 1997. Lithuania introduced a similar scheme in 1994 to peg its currency to the U.S. dollar.³¹ In each case, the aim was to overcome weaknesses in the domestic financial market and a record of instability and a concomitant lack of credibility for monetary management by the government.

²⁹For a comprehensive list, see Hanke (2002). In the 1990s, the list included Bermuda and the Cayman Islands, linked to the U.S. dollar; Brunei, linked to the Singapore dollar; the Falkland Islands, linked to the pound sterling; and the Faroe Islands, linked to the Danish krone. More-independent currency board arrangements included Argentina, Djibouti, Hong Kong, and Lithuania, linked to the U.S. dollar; and Bosnia and Herzegovina, Bulgaria, and Estonia, linked to the deutsche mark. On that list, the oldest arrangement was Djibouti (1949), followed by Hong Kong (1983), Argentina (1991), Estonia (1992), Lithuania (1994), Bosnia and Herzegovina (1997), and Bulgaria (1997). In the pre–Second World War period, the most prominent examples were in groups of British colonies, notably the countries using the West African pound, the East African shilling, the Southern Rhodesian pound, and the Malayan dollar. For comprehensive studies, see Greaves (1953) and Newlyn (1952). After gaining independence, most formerly colonized countries established central banks.

³⁰At the time, Hong Kong was administered by the United Kingdom. After July 1, 1997, the territory was officially designated Hong Kong Special Administrative Region (SAR) of China.

³¹For histories of currency boards, see "Experiences with Currency Board Arrangements," SM/96/302, Suppl. 1 (December 20, 1996), and Hanke (2002).

In most instances in which a country planned to establish a currency board system, both the IMF and the countries with key internationally used currencies responded positively. In 1992, consideration was given to the possibility of using currency boards in the former Soviet Union as a way to preserve the ruble area. In 1998, Camdessus tried to persuade Russian officials to adopt a currency board in the wake of the financial meltdown that summer. He tried again with Brazil in 1999, also to no avail. For other countries, notably Indonesia in 1998, the international reaction was decidedly negative.

In general, the Fund viewed such schemes as desirable in limited circumstances and with certain preconditions in place (see Bennett, 1994; Baliño and Enoch, 1997; and Enoch and Gulde, 1997).³² Argentina and Bosnia and Herzegovina were clear cases, which the Fund supported from the outset. So was Bulgaria, where the authorities introduced a currency board on the advice of the Fund. In the Baltic countries, Fund staff were initially skeptical, mainly because they thought that an even more rigid scheme—continuing to use the Russian ruble—would be more likely to succeed. Once it became clear that these countries were determined to introduce their own currencies, the Fund supported their decisions to use currency boards as a stabilizing device. Fund advice was favorable to currency boards in a few other cases but not in all. In Indonesia, staff and management feared that the central bank lacked the financial resources to manage a currency board effectively and that the scheme would serve only to help well-connected individuals get their money out of the country at a good rate before the system collapsed.

As the Fund gained experience in examining currency boards, the central dilemma emerged more clearly—other than in small economies with very close links to the host country, eventually (once credibility was well established), the currency board would become a straightjacket preventing the authorities from adjusting to country-specific shocks. The political burden of maintaining tight fiscal and monetary policies during a cyclical downturn would be too great to bear, and the regime would almost surely collapse. As discussed in Chapter 12, the Fund raised this issue with Argentina as early as 1995, but took no further action. Otherwise, the question of how to devise an effective exit strategy from a currency board was not brought to the fore until the end of the decade.³³

Currency Unions

Another way to gain international credibility for a fixed exchange rate was to enter into a currency union with several other countries. The major currency

³²For more on the cases discussed here, see Chapters 6 (Bosnia and Herzegovina and Bulgaria), 7 (Russia), 8 (Estonia, Lithuania, and the ruble area), 9 (Argentina), 11 (Indonesia), and 12 (Argentina again, and Brazil).

³³See, in particular, "The Baltics: Exchange Rate Regimes and External Stability," SM/99/282 (December 29, 1999). For the Baltic countries and for Bulgaria, the intended exit strategy was to adopt the euro as the national currency.

union story of the 1990s was the creation of the euro as the world's second most important currency, discussed above. The applicability of such a system was limited to groups of countries with strong economic ties through trade, and preferably through migration as well. As a result, very few currency unions were formed, and no other new groupings coalesced in the 1990s.³⁴

The most enduring currency union was the CFA franc zone in central and western Africa. Created in 1945, the CFA franc was pegged at a single fixed rate to the French franc from 1948 to 1994. As explained in Chapter 14, the IMF supported the preservation of the zone, but staff and management became increasingly worried about the viability of the peg in the late 1980s and early 1990s. After a few years of quiet diplomacy, the Fund helped arrange a devaluation in January 1994 that succeeded in restoring economic growth and the credibility of the currency arrangement. At the time, the zone had 13 member countries. In 1997, Guinea-Bissau became the fourteenth member.

Inflation Control

Modern post-Keynesian macroeconomic theory was developed largely in the 1970s and 1980s with the introduction of expectations-consistent and time-consistent models and state-contingent policy rules. By the end of the 1980s, these ideas formed an integral part of mainstream macroeconomic policy analysis.³⁵ Much of the policy debate at that time concerned the extent to which rules could be applied without transforming nominal shocks into real instability in national economies. Early proposals for simple rules, such as aiming for steady growth in the stock of money, proved unreliable, and that engendered a spate of research on moreflexible policy models.

Two important ideas entered the mainstream in the 1990s, both of which were directed at linking monetary policy decisions closely to the stabilization of inflation rates at low levels.

The first major idea was inflation targeting. A few countries had experimented with aiming monetary policy solely at price stability, one of the first examples being Sweden in the early 1930s. This tactic was not really practical, though, owing in part to the lack of a reliable model of feedback from expected inflation to current conditions. In 1989, the Reserve Bank of New Zealand achieved a breakthrough when the governor made a contractual commitment (as required by a law enacted by parliament) to keep inflation in a low narrow range. Because the governor's job depended on meeting the target, the policy rule gained a level of credibility that had previously proved elusive. Although it would take a few years before the New Zealand experiment would succeed

³⁴Other than those mentioned in the text, the only established currency union (as distinct from the dollarization cases discussed above) was the eight-country Eastern Caribbean Currency Union.

³⁵For overviews, see Chari and Kehoe (2006) and Mankiw (2006).

well enough to allow output to rise without raising inflation above the target, it proved that if a central bank could establish a credible inflation target as an anchor for the public's expectations and could set interest rates consistently with that target, then it could use that relationship as an effective basis for conducting monetary policy.³⁶

As the decade unfolded, a growing number of central banks adopted inflation targeting. Among the advanced economies, these included Canada (1991), the United Kingdom (1992), Australia (1993), Finland (1993), Sweden (1993), and Spain (1995). Emerging-market countries adopting inflation targeting in the 1990s included Chile (1991), Israel (1997), the Czech Republic (1997), Poland (1999), and Brazil (1999) (see Bléjer and others, 2000; Schaechter, Stone, and Zelmer, 2000; and Bernanke and others, 2001).³⁷ In most cases, inflation targeting was carried out against the backdrop of a floating exchange rate, as an alternative way to anchor expectations and stabilize the monetary system. As an exception, Chile maintained a crawling-band exchange rate policy and used capital controls to preserve consistency between the two policies.³⁸

The popularity of inflation targeting forced a rethinking of the Fund's policy advice and its model of program design. The traditional approach in stand-by arrangements of setting a ceiling on net domestic assets of the monetary authorities or a floor on net international reserves was not as relevant when the central bank was implementing an inflation-targeting regime. Those variables were endogenous and could not be controlled independently of the inflation target (Bléjer and others, 2002). For the Fund, the problem was not that inflation targeting rendered conditionality moot. The problem was just that the Fund had to adapt its program design so that it was specifying conditions on the right instruments. After Brazil adopted an inflation-targeting regime in 1999 in the context of a Fund stand-by arrangement (see Chapter 12), the Executive Board adopted a formal policy on how to handle such cases in the future.³⁹

The second, closely related, idea was a monetary rule that used feedback from output gaps to supplement deviations from the inflation target to determine the appropriate adjustments to a short-term interest rate or the monetary base. The Stanford University economist John B. Taylor introduced the rule in an influential paper in 1993. In its simple and widely used formulation, the Taylor Rule suggested that central banks should lower interest rates when output was below its equilibrium level or when

³⁶For analyses of inflation targeting in New Zealand, see Archer (1997), McCallum (1997), and Sarel (1999).

³⁷The list of countries given here is not definitive or exhaustive; a few other countries also implemented policies closely related to inflation targeting.

³⁸For analyses of Chile's policies, see Le Fort (2005); and Ötker-Robe and Vávra (2007), pp. 33–38. Also see Chapter 9, p. 432.

³⁹See "Inflation Targeting—Implications for IMF Conditionality," SM/99/296 (December 14, 1999); "IMF Conditionality in the Context of Inflation Targeting: The Case of Brazil," SM/99/296, Suppl. 1 (December 16, 1999); and the Summing Up by the Acting Chairman at EBM/00/1 (January 5, 2000). All three documents may be accessed at http://www.imf.org/external/np/pp/eng/1999/121499.pdf.

inflation was below its target, with the response rates determined by algebraic coefficients. The rule thus allowed for automatic feedback from shocks to policy changes to minimize the real effects. The idea was intuitive, elegant, and easy to apply, either as a supplement to inflation targeting or in a more traditional monetary policy regime. By the late 1990s, it was being widely used both as an analytical tool and as a benchmark for policy decisions by central banks.

Regulation and Control of International Capital Flows

With the liberalization of international capital flows, the question of whether and how to regulate those flows arose. Throughout the decade, liberalization went hand in hand with a general attitude against regulation of financial institutions and markets. That trend was most pronounced in the United States, where a market-friendly approach to regulation culminated in November 1999 with the repeal of the Glass-Steagall Act. Glass-Steagall was adopted in 1933, in the early days of the Franklin D. Roosevelt administration, as a central element—along with a federal insurance program for commercial bank deposits—in the government's effort to protect the public from speculative behavior by banks. It prohibited commercial banks from owning nonbank financial institutions such as investment banks or insurance companies. Repeal was aimed at enhancing the global competitiveness of U.S. banks, but it led ultimately to a wave of speculative investments and loans that collapsed in 2007–08 and set off a global downturn that would come to be known as the "Great Recession." In the 1990s, however, few were warning about the dangers of repeal or of the ensuing speculation.

The Fund adopted a nuanced and not always clearly articulated view of international capital flows. Emerging markets could benefit from inflows of private capital if they had well-developed domestic capital markets and sound macroeconomic policies, but they had to be aware of the risk of instability. In 1993, the IMF staff began warning that short-term capital flows to emerging markets could hit a "sudden stop," with serious consequences for financial stability in the affected countries. In 1995, the Fund revised its policy on surveillance to include a specific warning about unsustainable capital flows, and over the next two years management tried to win approval for an amendment to the Articles of Agreement to give the Fund jurisdiction over the capital account. The aim was to ensure that liberalization would occur in an orderly way and not outpace the development of domestic financial institutions and markets, but the Fund did not make that case very effectively. The campaign was widely interpreted as an effort by the Fund and major industrial countries to push developing countries to open their economies to inflows of foreign capital. The onset of the Asian financial crisis in 1997 effectively killed the effort.

⁴⁰For a more detailed discussion, see "Oversight of Capital Flows," in Chapter 4, pp. 131–41.

The Asian crisis restored interest in the possibility of requiring involvement by private financial institutions in the workout of emerging-market financial crises. Private sector involvement (PSI) in debt workouts first became a major issue for the IMF in 1982, when both Argentina and Mexico were unable to repay their debts to foreign commercial banks. The Managing Director at the time, Jacques de Larosière, informed those countries' bank creditors that the Fund would not lend to the countries unless the banks collectively and simultaneously agreed to increase their own loan exposure. This ploy, which became known as "concerted lending," worked for only a few relatively large and heavily indebted countries, and only for a few years. Its success required the banks to be so heavily exposed that a default would threaten their own solvency, and it required creditors to be homogeneous enough to be identifiable and capable of organization. By the late 1980s, most major international banks had reduced or diversified their exposure to developing countries to the extent that they could resist calls for concerted lending. By the early 1990s, most emerging-market countries had sufficiently diversified their sources of external financing that their creditors and investors were no longer identifiable or homogeneous enough to be easily corralled into collective action.

The Mexican crisis of 1994–95 was resolved without PSI, and the workout enabled most holders of Mexico's short-term debt instruments to be repaid in full at the old, undepreciated exchange rate (Chapter 10). The sudden cessation of capital flows to Thailand, Indonesia, and other countries in East Asia in 1997 laid bare the gaps in the international financial system associated with the absence of an effective way to induce PSI. PSI might have become vastly more difficult than in the 1980s, but it was no less important as a way to limit moral hazard, ensure that official lending would not simply enable private creditors to pull out costlessly, and create the preconditions for an economic recovery.

The Korean financial crisis in December 1997 offered an opportunity to resuscitate PSI, because the bulk of the short-term inflows to Korea were channeled through international banks (Chapter 11). Initially, some major creditor countries—notably the United States—were reluctant to endorse a workout in which commercial banks would be required to participate. After a few weeks of chaos, Fund officials and the G7 finance deputies settled on a somewhat market-friendly solution in which treasuries or central banks would persuade, not force, their banks to participate, and the Fund would help monitor the extent of cooperation and involvement. That became a prototype for operations in other crisis-hit countries, including Indonesia a few months later and Brazil at the end of 1998. At the same time, the Fund began developing a general policy on PSI in the context of Fund-supported programs.

The essence of the staff view on PSI after the Korean crisis was that the first line of defense should always be for the emerging-market country to try to prevent a sudden withdrawal of private credit by developing the institutions of a market economy, providing accurate and comprehensive information to the public, and carrying out a "careful sequencing of capital account liberalization." If those efforts failed, consideration should be given to ways to "overcome coordination failure," for example, by

establishing "creditor councils" to negotiate sovereign bond restructurings; and to strengthening corporate bankruptcy procedures to provide the right incentives for orderly debt workouts. In more extreme crisis situations, the Fund could consider options such as a Korean-style monitoring exercise or lending into nonsovereign arrears. The staff also suggested the possibility of amending the Articles of Agreement to enable the Fund to prevent litigation by vulture funds and other dissident creditors while a country was implementing a Fund-supported program.⁴¹

The G7 lent its support to this effort at the Cologne summit in June 1999. As part of the summit documentation, the G7 finance ministers and central bank governors set out a detailed agenda for involving the private sector in both the prevention and the resolution of financial crises. Much of the agenda was similar to the IMF staff agenda, but it went further, for example, by calling for "broadening the use of collective action clauses in sovereign debt contracts" and for taking account in workout discussions of a "country's underlying capacity to pay and its access to the markets." The statement concluded by asking the IMF "to develop and define the legal and technical questions involved in implementing the specific approaches identified in the framework agreed here."⁴² That led to an adoption of principles by the Fund in the spring of 2000.⁴³

The wave of crises that permeated the late 1990s, including the collapse of the LTCM hedge fund in the United States in addition to the shocks that hit emerging markets, also led to the establishment of the Financial Stability Forum (FSF) in February 1999 (Chapter 3). That group brought together financial supervisory officials from major countries to discuss issues related to potentially destabilizing forces such as hedge funds, volatile capital flows, and offshore financial centers where money laundering and other illegal activities could thrive. The FSF, however, was designed to foster cooperation and information sharing, not to devise or implement new regulations.⁴⁴

Assistance to Low-Income Countries

Despite the onset of aid fatigue, donor countries were not entirely neglectful of the needs of low-income countries. In particular, the issue of debt relief, which was put

⁴¹These options were set out in "Involving the Private Sector in Forestalling and Resolving Financial Crises," EBS/98/139 (August 12, 1998). The staff then produced a series of papers with increasingly specific recommendations, culminating in "Involving the Private Sector in the Resolution of Financial Crises—Further Considerations," EBS/99/194 (October 19, 1999).

⁴²"Report of G7 Finance Ministers to the Köln Economic Summit, Cologne, Germany, 18–20 June, 1999"; accessed at http://www.g8.utoronto.ca/finance/fm061999.htm. For a comprehensive overview of the evolution of thinking about and work on PSI in the late 1990s, see Chapter 11 in Rieffel (2003).

⁴³For a summary, see *Annual Report 2000*, pp. 45–47; accessed at http://www.imf.org/external/pubs/ft/ar/2000/eng/index.htm. For an example of the Fund's approach to PSI at that time, see the discussion of Ecuador in Chapter 12, pp. 611–16.

⁴⁴For a report on the initial work of the FSF, see the statement by its first chairman, Andrew Crockett, to the International Monetary and Financial Committee in April 2000; accessed at http://www.financialstabilityboard.org/press/st 000416.pdf.

on the table by French President François Mitterrand and others in the late 1980s, was still in an embryonic state at the outset of the 1990s. Under the "Toronto terms" agreed upon at the G7 summit meeting in 1988, official creditors working through the Paris Club were prepared to offer eligible low-income countries reschedulings that would reduce the present value of outstanding claims by a modest percentage. Although better than nothing, it left many countries well short of the capacity to service their debts.⁴⁵

The limited but obvious benefits of adopting the Toronto terms gave rise to a regular exercise throughout much of the 1990s in which official bilateral creditors offered evermore generous terms for debt relief to heavily indebted poor countries (Chapter 13). The steady parade of summit announcements culminated in 1996 with the Lyons terms, which offered reductions in present values of up to 80 percent. (Later, in 2005, official creditors decided to offer total forgiveness.) As that process neared its conclusion, the process of similarly reducing the claims of the IMF and other multilateral institutions got under way, including through the HIPC Initiative (discussed above).

Debt forgiveness thus was a key theme of public discussions and decisions on poor countries through much of the 1990s. The challenge of helping those countries break out of the poverty trap and begin developing more consistently and effectively was, however, much greater than debt relief alone could overcome. A resurgence of ODA, delivered in steadier, more predictable, and more effective ways, was especially important, as were a durable strengthening of economic policies in the affected countries and a more receptive environment for poor countries' exports. This final decade of the twentieth century did not produce the necessary breakthroughs in any of these broader areas, but the approach of the millennium did focus the world's attention on the magnitude of the problem.

In September 2000, at UN headquarters in New York, 189 heads of state or government endorsed the Millennium Development Goals, with specific targets—notably a 50 percent reduction in the incidence of extreme poverty from 1990 levels—to be achieved by 2015. The new Managing Director of the IMF, Horst Köhler, promptly announced the Fund's support for the initiative and pledged the institution to help "make globalization work for the benefit of all."46 The agreement on the Millennium Development Goals was a real advance, leading to more concrete plans for achieving the goals in the following years. It did not elevate poverty reduction to the top of the agenda for the IMF or for the world's major advanced economies, but it did at least create a framework for ensuring that the needs of the poorest countries would not be neglected.

⁴⁵Before 1988, Paris Club reschedulings typically stretched out maturities and grace periods but left the outstanding present values unchanged. Although the unofficial membership of the Paris Club was much broader than the G7, the official creditors in the Paris Club generally followed the recommendations of the summit declarations.

⁴⁶Opening address to the IMF/World Bank Annual Meetings in Prague (September 26, 2000); accessed at http://www.imf.org/external/np/speeches/2000/092600.htm.

Appendix: Chronology, 1990–1999

Date	World Events	IMF
1990		
January	Poland launches its "big bang" economic reform program.	
February	In South Africa, Nelson Mandela is released from prison.	
March	Estonia and Lithuania declare their independence from the Soviet Union.	
April	China and the United Kingdom ratify an agreement to transfer control of Hong Kong to China in 1997.	
May	Latvia declares its independence from the Soviet Union.	
	Forty countries sign a treaty establishing the European Bank for Reconstruction and Development (EBRD).	
	East and West Germany sign a treaty establishing the deutsche mark as the single currency for the two countries, effective in July.	
June	U.S. President George H.W. Bush announces the Enterprise for the Americas Initiative, aimed at establishing free-trade areas throughout the continent.	
July	European Economic Community (EEC) abolishes restrictions on capital flows among member states, as the first stage of Economic and Monetary Union (EMU).	
	Group of Seven (G7) heads of state and government hold a summit meeting in Houston, Texas (United States). The communiqué calls on the IMF to convene a study (with participation by the International Bank for Reconstruction and Development, the EBRD, and the OECD) of the Soviet economy.	
August	Iraq invades Kuwait, initiating a regional political crisis that will culminate in the Gulf War of 1991.	

Appendix (continued)

Date	World Events	IMF
September	Paris Club adopts Houston terms, providing for more flexible rescheduling of debts of lower- middle-income countries.	
October	Full unification of East and West Germany. The United Kingdom joins the Exchange Rate Mechanism (ERM) of the European Monetary System (EMS), effectively pegging the pound sterling to the European Currency Unit.	Fund staff conduct the first Article IV consultation discussions with Hong Kong.
November		Modification of lending policies to assist countries affected by the regional crisis in the Middle East.
December	Haiti holds its first democratic elections for president, won by Jean- Bertrand Aristide.	
1991		
January	Onset of the six-week Gulf War.	
February	Initial Executives' Meeting of East Asia-Pacific Central Banks (EMEAP), held at the Bank of Japan in Tokyo. The group will meet semiannually as a regional "Group of Ten."	
March	Argentina, Brazil, Paraguay, and Uruguay sign the Treaty of Asunción, which will lead to the creation of MERCOSUR in 1995.	
May	The EBRD begins operating, with headquarters in London.	The Bureau of Statistics is elevated to the Statistics Department.
	Rajiv Gandhi, former prime minister of India, is assassinated while campaigning to return to office.	
June	Chile introduces controls on short-term capital inflows.	

Appendix (continued)

Date	World Events	IMF
July	 G7 summit in London. U.K. Prime Minister John Major invites Mikhail Gorbachev of the Soviet Union to participate in part of the meetings. The summit recommends adoption of the London terms for debt rescheduling. (See below, in December 1991.) 	
August		The Asian Department is replaced by the Central Asia Department and the Southeast Asia and Pacific Department.
September	Soviet Union recognizes the independence of Estonia, Latvia, and Lithuania. In Haiti, President Aristide is overthrown in a military coup.	Michel Camdessus is elected to a second five-year term as Managing Director.
	Lewis T. Preston becomes President of the World Bank Group, replacing Barber Conable.	
October	Cambodia begins to emerge from conflict and international isolation when a peace agreement is signed in Paris.	Signing of Special Association agreement with the Soviet Union.
November	China, Hong Kong, and Taiwan Province of China join Asia-Pacific Economic Cooperation (APEC), raising the group's membership to 15.	
December	Paris Club replaces the 1988 Toronto terms with London terms, under which official creditors will reduce debts owed by low-income countries by up to 50 percent (previously 33 percent).	Creation of the European II Department, with responsibility for Russia, the Baltic countries, and other countries of the former Soviet Union.
	Dissolution of the Soviet Union.	
	Russian Federation, Ukraine, and Byelorussia (Belarus) establish the Commonwealth of Independent States.	
	In Maastricht, the Netherlands, European leaders sign a treaty estab- lishing the European Community as the successor to the EEC and specify- ing a process leading to EMU by 1999.	

Date	World Events	IMF
1992		
January	Association of South-East Asian Nations (ASEAN) member states sign an accord to establish the ASEAN Free Trade Area.	
February	Civil war in El Salvador ends with the signing of a peace accord in Chapultepec, Mexico.	
April		Eligibility for concessional loans is extended to 11 more countries, bringing the total to 72.
May		The Central Banking Department is replaced by the Monetary and Exchange Affairs Department.
July	G7 summit in Naples, Italy. Russian President Boris Yeltsin attends as a special guest.	The Exchange and Trade Relations Department is replaced by the Policy Development and Review Department.
September	Speculative pressures force Italy and the United Kingdom to withdraw from the ERM.	
October		Opening of the Joint Vienna Institute.
		Establishment of the Office of Budget and Planning.
November	Bill Clinton elected president of the United States, to replace George H.W. Bush in January 1993.	A 50 percent quota increase takes effect, concluding the Ninth General Review of Quotas.
		Third Amendment to the Articles of Agreement takes effect, providing for sanctions against countries that fail to cooperate in resolving payments arrears to the Fund.
1993		
April	Seven countries in South Asia establish the South Asian Association for Regional Cooperation (SAARC) Preferential Trading Arrangement (SAPTA).	Establishment of the Systemic Transformation Facility (STF).
May		Kyrgyz Republic is the first country to draw on the STF.

Date	World Events	IMF
July	G7 summit in Tokyo urges the IMF and Russia to reach agreement on a stand-by arrangement and endorses the renewal of the Enhanced Structural Adjustment Facility (ESAF) as part of a strategy for aiding low-income countries.	
August	In response to a resumption of speculative pressures, EMS members widen the ERM intervention bands from ± 2.25 percent to ± 15 percent.	
September	Former IMF Managing Director Jacques de Larosière becomes president of the EBRD (1993–98).	
November	European Union (EU) comes into being as the successor to the European Communities.	Eligibility for concessional loans is extended to four more countries, bringing the total to 76.
	The first APEC summit meeting is held on Blake Island, Washington (United States).	
1994		
January	The North American Free Trade Agreement takes effect in Canada, Mexico, and the United States.	
	Establishment of the European Monetary Institute to guide the transition toward EMU.	
	Devaluation of the CFA franc, the currency of 13 countries in central and west Africa.	
	Seven of the CFA franc countries form the West African Economic and Monetary Union (WAEMU).	
February		Enlargement and extension of the ESAF, formally establishing a successor to the original facility.
March	APEC finance ministers hold their first formal meeting, in Honolulu, Hawaii (United States).	

designated the First DMD. July Prabhakar R. Narvekar and Alassan D. Ouattara assume office as DMI serving until January 1997 (Narvekar) and July 1999 (Ouattara). September Stanley Fischer assumes office as Fir DMD, serving until August 2001.	Date	World Events	IMF
Morocco, to sign agreements concluding the Uruguay Round of trade negotiations. May Mexico becomes a member of the OECD. Agreement on Palestinian self-rule in the West Bank and Gaza. Inauguration of Nelson Mandela as president of South Africa. June Revision of management structure, replacing the single Deputy Managing Director (DMD) with three deputies, one of whom is to designated the First DMD. July Prabhakar R. Narvekar and Alassan D. Ouattara assume office as DM serving until January 1997 (Narvekar) and July 1999 (Ouattara). September Stanley Fischer assumes office as Fin DMD, serving until August 2001. October A UN military force restores Aristide to power in Haiti. Jordan becomes the first Arab country to sign a peace treaty with Israel. December Paris Club adopts Naples terms, under which official creditors will reduce debts owed by low-income countries	April	Burundi and Rwanda is shot down, touching off a genocidal civil	
OECD. Agreement on Palestinian self-rule in the West Bank and Gaza. Inauguration of Nelson Mandela as president of South Africa. Bevision of management structure, replacing the single Deputy Managing Director (DMD) with three deputies, one of whom is to designated the First DMD. July Prabhakar R. Narvekar and Alassan D. Ouattara assume office as DMI serving until January 1997 (Narvekar) and July 1999 (Ouattara). September Stanley Fischer assumes office as Fir DMD, serving until August 2001. October A UN military force restores Aristide to power in Haiti. Jordan becomes the first Arab country to sign a peace treaty with Israel. December Paris Club adopts Naples terms, under which official creditors will reduce debts owed by low-income countries		Morocco, to sign agreements concluding the Uruguay Round of	
Inauguration of Nelson Mandela as president of South Africa. June Revision of management structure, replacing the single Deputy Managing Director (DMD) with three deputies, one of whom is to designated the First DMD. July Prabhakar R. Narvekar and Alassan D. Ouattara assume office as DM serving until January 1997 (Narvekar) and July 1999 (Ouattara). September September A UN military force restores Aristide to power in Haiti. Jordan becomes the first Arab country to sign a peace treaty with Israel. December Paris Club adopts Naples terms, under which official creditors will reduce debts owed by low-income countries	May		
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D. Ouattara assume office as DMI serving until January 1997 (Narvekar) and July 1999 (Ouattara). September Stanley Fischer assumes office as Fir DMD, serving until August 2001. October A UN military force restores Aristide to power in Haiti. Jordan becomes the first Arab country to sign a peace treaty with Israel. December Paris Club adopts Naples terms, under which official creditors will reduce debts owed by low-income countries	June		replacing the single Deputy Managing Director (DMD) with three deputies, one of whom is to be
October A UN military force restores Aristide to power in Haiti. Jordan becomes the first Arab country to sign a peace treaty with Israel. December Paris Club adopts Naples terms, under which official creditors will reduce debts owed by low-income countries DMD, serving until August 2001. Interim Committee adopts the Mad Declaration, setting standards for macro and structural economic policies.	July		(Narvekar) and July 1999
to power in Haiti. Jordan becomes the first Arab country to sign a peace treaty with Israel. December Paris Club adopts Naples terms, under which official creditors will reduce debts owed by low-income countries Declaration, setting standards for macro and structural economic policies.	September		Stanley Fischer assumes office as First DMD, serving until August 2001.
December Paris Club adopts Naples terms, under which official creditors will reduce debts owed by low-income countries	October	,	Interim Committee adopts the Madrid Declaration, setting standards for
which official creditors will reduce debts owed by low-income countries		•	
	December	which official creditors will reduce debts owed by low-income countries	
Mexican peso crisis begins.		Mexican peso crisis begins.	

Date	World Events	IMF
1995		
January	Uruguay Round agreements reforming the international trading system take effect.	
	World Trade Organization (WTO) is established as the successor to the General Agreement on Tariffs and Trade.	
	Austria, Finland, and Sweden join the EU.	
	MERCOSUR comes into effect.	
February		Approval of a stand-by arrangement for Mexico, the largest financial commitment in Fund history to this date.
April		Final date for initial drawings under the STF.
May	Jacques Chirac is elected president of France, replacing François Mitterrand.	
June	James D. Wolfensohn becomes President of the World Bank Group, succeeding the late Lewis T. Preston.	
July	Vietnam joins ASEAN, raising its membership from six states (Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore, and Thailand) to seven.	
	The South Centre is established as a Geneva-based intergovernmental organization of developing countries.	
September		Establishment of the Emergency Financing Mechanism and the policy on Emergency Post-Conflict Assistance.
November	Signing of the Dayton (Ohio, United States) peace agreement ending the conflict in Bosnia and Herzegovina.	
	Assassination of Israeli Prime Minister Yitzhak Rabin.	

Date	World Events	IMF
December	Czech Republic becomes a member of the OECD.	Termination of the Structural Adjustment Facility, which has been fully utilized.
		Expiration of the STF.
1996		
May	Hungary becomes a member of the OECD.	Camdessus is elected to an unprecedented third term as Managing Director.
June	Chile signs a free trade agreement with MERCOSUR.	
July	EMEAP central banks meet at the governors' level for the first time, establishing an annual practice.	
September		Approval of IMF participation in the Heavily Indebted Poor Countries Initiative.
November	Italy rejoins the ERM.	
	Poland becomes a member of the OECD.	
December	Republic of Korea becomes a member of the OECD.	IMF and WTO sign a cooperation agreement.
	Bolivia signs a free trade agreement with MERCOSUR.	Commitment period for ESAF loans extended by four years, to end-2000.
1997		
January		Adoption of the New Arrangements to Borrow (NAB).
		CTA and SEA are merged into the new Asia and Pacific Department.
February		Decision that countries completing a three-year ESAF arrangement under the successor facility can apply for a further arrangement.
April		To enhance transparency, the Fund approves issuance of Press Information Notices on Article IV consultations.
May	Guinea-Bissau joins the WAEMU and adopts the CFA franc as its currency.	

Date	World Events	IMF
June	Adoption of the Stability and Growth Pact by the European Council.	
July	Sovereignty over Hong Kong SAR is transferred from the United Kingdom to China.	
	Bank of Thailand devalues the baht, initiating a financial crisis that will spread across East Asia in the coming months.	
	The Lao People's Democratic Republic and Myanmar join ASEAN.	
August		Approval of stand-by arrangement with Thailand.
September		The Board of Governors gives preliminary approval to the Fourth Amendment to the Articles of Agreement, which would provide for a special allocation of special drawing rights.
October	The Asian financial crisis spreads to Indonesia.	
November	The Asian crisis spreads to Korea.	Approval of stand-by arrangement with
	Formation of the Manila Framework Group, an assembly of 14 countries involved in managing the Asian crisis.	Indonesia.
December		Establishment of the Supplemental Reserve Facility (SRF).
		Opening of the Regional Office for Asia and the Pacific in Tokyo.
		Approval of the largest stand-by arrangement in IMF history, with Korea.
1998		
April	First meeting of the Group of 22 (G22), a forum for the major industrial and emerging-market countries.	
May	India and then Pakistan conduct tests of nuclear bombs, triggering financial outflows and international sanctions.	

Date	World Events	IMF
July		The Fund activates the General Arrangements to Borrow for the first time in 20 years, to finance augmentation of an extended arrangement with Russia.
August	Russia devalues and defaults on a portion of its sovereign debt.	
September	Near default and central bank rescue of Long-Term Capital Management, a major hedge fund.	
	Future IMF Managing Director Horst Köhler becomes president of the EBRD (1998–2000).	
December		Activation of the NAB to finance a stand-by arrangement for Brazil.
1999		
January	Eleven European countries irrevocably fix exchange rates among their	The European Central Bank is granted observer status in the Fund.
	currencies in preparation for the adoption of the euro as a single currency in January 2000.	A 45 percent quota increase takes effect, concluding the Eleventh General Review of Quotas.
February	Establishment of the Financial Stability Forum (FSF) by the G7.	
	Olusegun Obasanjo is elected president of Nigeria, ending 15 years of military rule.	
	King Hussein of Jordan dies. He is succeeded by his son, King Abdullah II.	
March		The Fund issues its first transparency report, the prototype for Reports on the Observance of Standards and Codes.
April	First meeting of the FSF, chaired by Andrew Crockett.	The SRF is expanded to provide for Contingent Credit Lines for
	Cambodia joins ASEAN, raising the organization's membership to 10 states.	countries with strong policies.
May		IMF and World Bank launch the Financial Sector Assessment Program.

Date	World Events	IMF
June	Formal establishment of the Central African Economic and Monetary Community.	
July		The Administration Department is replaced by the Human Resources Department and the Technology and General Services Department.
October		Enhancement of the HIPC Initiative.
November	Paris Club adopts Cologne terms, under which official creditors will reduce debts owed by low-income countries by up to 90 percent. Kenya, Tanzania, and Uganda sign a treaty reestablishing the East African Community, which had lapsed in 1977. U.S. Congress repeals the 1933 Glass-Steagall Act, which had prevented commercial banks from engaging in speculative activities.	Establishment of the Poverty Reduction and Growth Facility as the successor to the ESAF. Brazil becomes the last major country to accept the Article VIII obligations to refrain from imposing exchange restrictions on current account transactions. Camdessus announces his intention to resign as Managing Director as soon as a replacement is named. He will leave office in February 2000,
December	First meeting of the Group of Twenty (G20), the successor to the G22.	concluding 13 years in office. The Interim Committee is replaced by the International Monetary and Financial Committee. Revaluation of a portion of the IMF gold stock to help finance the Enhanced HIPC Initiative.

Source: Author's compilation.

References

- Adams, Charles, and Daniel Gros, 1986, "The Consequences of Real Exchange Rate Rules for Inflation: Some Illustrative Examples," *Staff Papers*, International Monetary Fund, Vol. 33 (September), pp. 439–76.
- Archer, David, 1997, "The New Zealand Approach to Rules and Discretion in Monetary Policy," *Journal of Monetary Economics*, Vol. 39, No. 1 (June), pp. 3–15.
- Baliño, Tomás J.T., and Charles Enoch, 1997, Currency Board Arrangements: Issues and Experiences, IMF Occasional Paper No. 151 (Washington: International Monetary Fund).
- Banerjee, Biswajit, Vincent Koen, Thomas Krueger, Mark S. Lutz, Michael Marrese, and Tapio O. Saavalainen, 1995, Road Maps of the Transition: The Baltics, the Czech Republic, Hungary, and Russia, IMF Occasional Paper No. 127 (Washington: International Monetary Fund).
- Bennett, Adam G.G., 1994, "Currency Boards: Issues and Experiences," in *Frameworks for Monetary Stability: Policy Issues and Country Experiences*, ed. by Tomás J.T. Baliño and Carlo Cottarelli (Washington: International Monetary Fund), pp. 186–212.

- Bernanke, Ben S., Thomas Laubach, Frederic S. Mishkin, and Adam S. Posen, 2001, *Inflation Targeting: Lessons from the International Experience* (Princeton, New Jersey: Princeton University Press).
- Bhagwati, Jagdish, 2004, In Defense of Globalization (New York and Oxford: Oxford University Press).
- Bléjer, Mario I., Alain Ize, Alfredo M. Leone, and Sérgio Werlang, eds., 2000, Inflation Targeting in Practice: Strategic and Operational Issues and Application to Emerging Market Economies, Proceedings of a Seminar held in Rio de Janeiro, Brazil, May 3–5, 1999 (Washington: International Monetary Fund).
- Bléjer, Mario I., Alfredo M. Leone, Pau Rabanal, and Gerd Schwartz, 2002, "Inflation Targeting in the Context of IMF-Supported Adjustment Programs," Staff Papers, International Monetary Fund, Vol. 49, No. 3, pp. 313–38.
- Boughton, James M., 2001, Silent Revolution: The International Monetary Fund 1979–1989 (Washington: International Monetary Fund).
- Buiter, Willem H., Giancarlo M. Corsetti, and Paolo A. Pesenti, 1998, Interpreting the ERM Crisis: Country-Specific and Systemic Issues, Princeton Studies in International Finance No. 84 (Princeton, New Jersey: Princeton University Press).
- Calvo, Guillermo A., 2005, Emerging Capital Markets in Turmoil: Bad Luck or Bad Policy? (Cambridge, Massachusetts: MIT Press).
- ——, and Carmen M. Reinhart, 2002, "Fear of Floating," Quarterly Journal of Economics, Vol. 117, No. 2 (May), pp. 379–408.
- ———, and Carlos Végh, 1995, "Targeting the Real Exchange Rate: Theory and Evidence," Journal of Development Economics, Vol. 47, No. 1 (June), pp. 97–133.
- Cesarano, Filippo, 2006, Monetary Theory and Bretton Woods: The Construction of an International Monetary Order (Cambridge, England: Cambridge University Press).
- Chari, V.V., and Patrick J. Kehoe, 2006, "Modern Macroeconomics in Practice: How Theory Is Shaping Policy," *Journal of Economic Perspectives*, Vol. 20, No. 4 (Fall), pp. 3–28.
- Chen, Shaohua, and Martin Ravallion, 2008, "The Developing World Is Poorer Than We Thought, But No Less Successful in the Fight Against Poverty," World Bank Policy Research Working Paper No. 4703 (Washington: World Bank). Accessed at http://go.worldbank.org/V2XURNT500.
- Detragiache, Enrica, and A. Javier Hamann, 1999, "Exchange Rate-Based Stabilization in Western Europe: Greece, Ireland, Italy, and Portugal," Contemporary Economic Policy, Vol. 17, No. 3, pp. 358–69.
- Dornbusch, Rudiger, Ilan Goldfajn, and Rodrigo O. Valdés, 1995, "Currency Crises and Collapses," *Brookings Papers on Economic Activity*, Vol. 26, No. 2, pp. 219–94.
- Enoch, Charles, and Anne-Marie Gulde, 1997, "Making a Currency Board Operational," IMF Paper on Policy Analysis and Assessment 97/10 (Washington: International Monetary Fund).
- European Bank for Reconstruction and Development (EBRD), 1999, *Transition Report 1999: Ten Years of Transition* (London: EBRD). Accessed at http://www.ebrd.com/downloads/research/transition/TR99.pdf.
- Fiorentino, Roberto V., Luis Verdeja, and Christelle Toqueboeuf, 2006, "The Changing Landscape of Regional Trade Agreements: 2006 Update," WTO Discussion Paper No. 12 (Geneva, Switzerland: World Trade Organization). Accessed at http://www.wto.org/english/res_e/reser_e/discussion_papers_e.htm.
- Fischer, Stanley, 2001, "Exchange Rate Regimes: Is the Bipolar View Correct?" *Journal of Economic Perspectives*, Vol. 15, No. 2 (Spring), pp. 3–24.

- ——, 2003, "Richard T. Ely Lecture: Globalization and Its Challenges," *American Economic Review*, Vol. 93, No. 2 (May), pp. 1–30.
- Fukuyama, Francis, 2006, The End of History and the Last Man (New York: The Free Press).
- Greaves, Ida, 1953, "Colonial Monetary Conditions," Colonial Research Studies No. 10 (London: Her Majesty's Stationery Office).
- Haas, Richard, Oleh Havrylyshyn, and Ratna Sahay, eds., 2001, *Transition Economies: How Much Progress?* Special issue, *Staff Papers*, International Monetary Fund, Vol. 48.
- Hanke, Steve, 2002, "Currency Boards," in Exchange-Rate Regimes and Capital Flows, Special issue, Annals of the American Academy of Political and Social Science, ed. by George S. Tavlas and Michael K. Ulan, (January), pp. 87–105.
- Ito, Takatoshi, and Anne O. Krueger, eds., 1997, Regionalism versus Multilateral Trade Arrangements (Chicago, Illinois: University of Chicago Press).
- Keynes, John Maynard, 1923, A Tract on Monetary Reform. Reprinted in The Collected Writings of John Maynard Keynes, Vol. IV (London and Basingstoke: The Macmillan Press, Ltd.) 1971.
- Le Fort, Guillermo, 2005, "Capital Account Liberalization and the Real Exchange Rate in Chile," IMF Working Paper 05/132 (Washington: International Monetary Fund).
- Mankiw, N. Gregory, 2006, "The Macroeconomist as Scientist and Engineer," *Journal of Economic Perspectives*, Vol. 20, No. 4 (Fall), pp. 29–46.
- McCallum, Bennett, 1997, "Inflation Targeting in Canada, New Zealand, Sweden, the United Kingdom, and in General," in *Towards More Effective Monetary Policy*, ed. by Iwao Kuroda (New York: St. Martin's Press), pp. 211–41.
- Mundell, Robert, 1999, "A Reconsideration of the Twentieth Century," revised draft of his Nobel lecture delivered in Stockholm (December 10). Accessed at http://www.columbia.edu/~ram15/.
- ———, 2000, "Currency Areas, Exchange Rate Systems and International Monetary Reform," speech delivered at Universidad del CEMA, Buenos Aires, Argentina (April 17). Accessed at http://www.columbia.edu/~ram15/.
- Newlyn, W.T., 1952, "The Colonial Empire," in Banking in the British Commonwealth, ed. by R.S. Sayers (Oxford: Oxford University Press).
- Obstfeld, Maurice, and Kenneth Rogoff, 1995, "The Mirage of Fixed Exchange Rates," *Journal of Economic Perspectives*, Vol. 9, No. 4 (Fall), pp. 73–96.
- Organization for Economic Cooperation and Development (OECD), 2010, "Statistical Annex," in *Development Co-operation Report 2010* (Paris: OECD Publishing).
- Ötker-Robe, Inci, and David Vávra, 2007, Moving to Greater Exchange Rate Flexibility: Operational Aspects Based on Lessons from Detailed Country Experiences, IMF Occasional Paper No. 256 (Washington: International Monetary Fund).
- Quirk, Peter J., Benedicte Vibe Christensen, Kyung-Mo Huh, and Toshihiko Sasaki, 1987, Floating Exchange Rates in Developing Countries, IMF Occasional Paper No. 53 (Washington: International Monetary Fund).
- Rieffel, Lex, 2003, Restructuring Sovereign Debt: The Case for Ad Hoc Machinery (Washington: Brookings Institution Press).
- Rhode, Paul W., and Gianni Toniolo, eds., 2006, The Global Economy in the 1990s: A Long-Run Perspective (Cambridge, England: Cambridge University Press).
- Rubin, Robert E., and Jacob Weisberg, 2003, In an Uncertain World: Tough Choices from Wall Street to Washington (New York: Random House).

- Sarel, Michael, 1999, "New Zealand's Evolving Approach to Inflation Targeting," in *New Zealand: Selected Issues and Statistical Appendix*, ed. by Jahangir Aziz, Jaewoo Lee, and Michael Sarel (Washington: International Monetary Fund). Accessed at http://www.imf.org/external/pubs/cat/longres.cfm?sk=3270.0.
- Schaechter, Andrea, Mark R. Stone, and Mark Zelmer, 2000, Adopting Inflation Targeting: Practical Issues for Emerging Market Countries, IMF Occasional Paper No. 202 (Washington: International Monetary Fund).
- Soloaga, Isidro, and L. Alan Winters, 2001, "Regionalism in the Nineties: What Effect on Trade?" North American Journal of Economics and Finance, Vol. 12, No. 1, pp. 1–29.
- Taylor, John B., 1993, "Discretion versus Policy Rules in Practice," Carnegie-Rochester Conference Series on Public Policy, Vol. 39, No. 1, pp. 195–214.
- Twain, Mark [Samuel L. Clemens], 2003 [1924], Mark Twain's Autobiography, Part 1 (Whitefish, Montana: Kessinger Publishing).