Economic Myths Explained
National Prosperity Is No Mystery

by Alan Reynolds

Throughout the twentieth century, many countries have recovered suddenly from rapid inflation and economic stagnation, and have then begun to enjoy years of noninflationary prosperity. The results have often been called "economic miracles"—the Poincaré miracle in France, the Erhard miracle in postwar Germany, the Mauritius miracle, the Bolivian miracle, and so on. But economic miracles are no mystery. They all had two or three features in common.

Germany in the 1920s

In 1923, overnight interest rates in Germany averaged 10,950 percent. On November 15, 1923, Germany fixed the exchange rate of the new mark at the prewar parity of 4.2 per dollar. The newly independent central bank stopped discounting treasury bills and instead discounted only sound commercial paper (or "real bills"). Interest rates fell as low as 13 percent in late 1924.

Tax receipts increased dramatically, but that was the result of monetary stability, not the cause. Monetary reform fixed the government fiscal crisis, not the other way around. Tax policy did contribute to Germany's hyperinflation, but that was because tax rates were too high, not because they were too low. In 1920, Germany had adopted a graduated income tax with tax rates as high as 40 percent. During a rapid inflation, a graduated income tax is much worse than taxing a percentage of sales, because it is impossible to collect an income tax fast enough to prevent revenues from shrinking in real terms.

Measured in gold marks, total German tax receipts collapsed from 5.2 billion in fiscal 1921–22 to an annual rate of only 758 million by November 1923. After the exchange rate was fixed in November 1923, tax revenues immediately rebounded to an annual rate of over 6 billion by January 1924. Two years after the currency reform, revenues were 40 percent higher (measured in gold) than the Dawes committee had anticipated in its plan for reorganizing

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German finances after World War I. That unexpected windfall allowed tax rates to be reduced in 1926, which helped bring about a brisk recovery. "By the middle of 1926 the economy began to show signs of marvelous recuperative powers," notes Amos Simpson. "The internal tax burden had been decreased and was in the process of being more completely reformed."1

**The Poincaré Miracle**

The next economic miracle occurred in France, where wholesale price inflation peaked in 1926 at about 100 percent. The new Poincaré government first instituted a rule prohibiting the central bank from issuing any new currency without new reserves of gold or gold-convertible foreign currencies. That turned out to be too deflationary, resulting in falling prices and a brief recession. The franc was then pegged to the gold dollar and pound, and later made directly convertible into gold. Inflation stopped and the economy prospered.

Poincaré cut the highest income-tax rate from 60 percent to 30 percent, with the explicit aim of encouraging entrepreneurship and repatriating flight capital. In doing so, wrote Charles Kindleberger, "Poincaré reversed the [Committee of Experts'] recommendation on taxes. . . . The purpose was to appeal to the capitalist class in France, to persuade it to repatriate its money."2

**The Erhard Miracle**

After World War II, the first economic miracle was brought about by Ludwig Erhard's reforms in West Germany, which began in 1948. Tariffs were greatly reduced, price controls were abolished, and the exchange rate of the new deutschmark was fixed to the dollar, which in turn was tied to gold. Income-tax rates were slashed from 95 percent on incomes above $15,000 at the time of the Allied occupation to a maximum of 53 percent on incomes of $250,000 by the early 1950s. Inflation stopped immediately, shortages vanished, trade flourished, and, for more than a decade, the West German economy grew much faster than that of the United States.

**Japan**

The other early postwar miracle was Japan in the 1960s and 1970s. Japan ran large trade deficits with the United States from 1945 through 1965, largely as a result of importing machinery and materials. That caused considerable anxiety among U.S. economists. A 1958 Rockefeller Foundation study, *Japan's*...

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Postwar Economy, made the following plea for an austerity program in Japan, in order to restrict imports:

The growth of prosperity in Japan seems inevitably to set in motion forces which tend to widen the trade gap. . . . If, however, the import component of Japan's gross national product can be reduced . . . then a smaller volume of both imports and exports will be sufficient. . . . It is also possible to put aside the goal of full employment and to economize in some sectors of imports.  

From 1960 to 1965, Japan ignored such protectionist advice, eliminated import quotas (except on agriculture and chemicals), lifted most restrictions on foreign investment, and began to make deep cuts in tariffs. This first wave of liberalization (which was unprecedented at the time for such a poor country) resulted in Japan's membership in the General Agreement on Tariffs and Trade (GATT), the International Monetary Fund (IMF), and the Organization for Economic Cooperation and Development (OECD). Alfred Ho notes that "in years when large [current-account] deficits occurred, for instance, 1961, 1964 and 1967, a tight monetary policy was resorted to by the Bank of Japan."  

The U.S. occupation had imposed confiscatory tax rates of 85 percent in Japan, and these remained in effect until September 1951, when Japan began to set its own policies. From 1951 through 1978, Japan either cut tax rates or increased deductions every year, despite the objections of the Rockefeller study and other Western advisors. Income-tax rates were reduced again in 1985 and 1987. But Japan later imposed a new tax on securities transactions, as well as a small value-added tax (VAT), with apparently unfavorable results.

The Asian NICs

The expression "export-led growth"—often used to describe Japan and Asia's newly industrialized countries (NICs)—is quite misleading. In reality, Asian export-promotion schemes were scaled back sharply after the mid-1970s, when most "Asian tigers" began a growth led by imports. From 1976 to 1985, for example, current-account deficits averaged 3.3 percent of GDP in South Korea, 5.3 percent in Thailand, and 6.6 percent in Singapore. Malaysia, Thailand, and South Korea have continued to run sizable current-account deficits in the 1990s. Hong Kong ran trade deficits in all but four years between 1975 and 1992.  

South Korea. South Korea had a foreign debt in excess of 50 percent of GNP by 1980, when the current-account deficit reached 8.4 percent of GDP. Briefly, in 1980, South Korea adopted an "austerity plan" with a 17 percent devaluation and higher tax rates. As a result, inflation jumped to 35 percent, and real GDP fell by 5 percent (which did, of course, cut imports). A 1987 IMF report notes: "During 1981–82, structural policies were aimed at increasing the productivity and efficiency of the economy. These policies encompassed . . . a comprehensive tax reform, and trade liberalization." The highest income-tax rates were immediately reduced by 20 percentage points in 1981 and by another 20 points in later years, with the result that tax revenue rose considerably. "Average tariff rates were also lowered from 35 percent in 1980 to 23.7 percent in 1983 and to 12.7 percent by 1988." Lower tax rates and tariffs greatly invigorated the real economy by reducing costs and improving incentives.

"Between 1983 and 1988, the rate of growth of real GNP averaged 10.2 percent, whereas domestic inflation averaged 3.8 percent." South Korea's prolonged current-account deficits briefly turned to surpluses in 1986–89, as savings grew faster than investment, but South Korea experienced additional current-account deficits in 1990–94. However, the foreign debt accumulated after more than three decades of almost continuous current-account deficits is now easily financed as a result of a much larger economy. From 1981 to 1992, economic growth averaged 8.9 percent a year.

Hong Kong. Other newly industrialized Asian countries either always had low tax rates and tariffs or embraced such policies during the 1980s. Hong Kong has maintained a fixed exchange with the dollar since 1983, has no trade barriers, and imposes a maximum income tax of 15 percent, with no VAT or payroll tax. From 1983 to 1992, tax revenues increased by 409 percent in Hong Kong dollars, which are equivalent to U.S. dollars. Indeed, the Hong Kong economy has been so miraculous that many have come to take it for granted. The economy doubled in size from 1979 to 1992, with average growth of 7.1 percent a year. Since 1987, unemployment has been below 2 percent.

The PRC. China began its remarkable renaissance by granting farmers secure property rights (long-term transferable leases) and by allowing them to sell all produce above a fixed quota on the open market. This was essentially a zero marginal tax rate—anything produced above quota was tax free. China, like Hong Kong, has no VAT and no social-security taxes (although there are some turnover taxes, usually about 3 percent). The income-tax rate on foreigners working in China is half the normal rate, a maximum of 22.5 percent. The tax on foreign corporations and joint ventures is 30 percent. Many economic zones

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7 Ibid.
8 See Asian Development Bank, Key Indicators.
were established from 1980 to 1989, with special tax breaks and tariff exemptions that have attracted huge investments from Hong Kong, Taiwan, and elsewhere. Outside the free-trade zones, tariffs have also been sharply reduced to conform with GATT rules. Half of China’s industrial output is private, and over 90 percent of prices are free of controls.

Singapore. In 1985, Singapore found itself in recession and responded by reducing the top income tax from 45 percent to 30 percent. Singapore also reduced the percentage of payrolls required to be devoted to mandatory savings plans. Economic growth from 1987 to 1994 averaged 8.5 percent a year, with recent inflation of only 2 to 4 percent.

As each new Asian country emulated the successful policies of its neighbors, economic miracles proliferated. Malaysia, Indonesia, and Thailand, like Singapore, have all reduced their highest tax rates to 30–35 percent during the past ten years and have lowered tariffs. A similar process is starting to spread throughout Latin America, as the following five case studies suggest.

Bolivia

In mid-1985, Bolivia’s inflation rate reached 23,000 percent. Real GDP fell dramatically every year from 1978 through 1986. In 1987, however, annual inflation suddenly dropped to 14.5 percent. As Jeffrey Sachs observed:

The exchange rate stabilized almost immediately, and with a stable exchange rate, the price level stopped rising. . . . The remarkable break in the hyperinflation began no more than one week after the inception of the program! Inflation fell from a rate of more than 50 percent per month to price stability almost immediately. . . . The stabilization program eschewed all wage and price controls.10

The Bolivian economy began to grow for the first time in a decade, with real GNP increasing by 3.4 percent annually over the seven years from 1987 to 1993.11

This modern “miracle,” like many others, began with a remarkable reduction of tax rates. The highest income-tax rate in Bolivia was slashed from 45 percent to a flat rate of 10 percent. A 30 percent corporate tax was replaced with a 2 percent tax on net worth. Average tariffs were cut from 80 percent to 20 percent. Over four hundred sales taxes were combined into a 10 percent value-added tax.

One rarity of the Bolivian miracle was that payments of the VAT could be entirely offset against the income tax. As a result, Bolivians began demanding

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11 GDP growth figures from the late 1980s to early 1990s, for this country and others, are from International Monetary Fund, World Economic Outlook, Oct. 1993, Table A-6; Inter-American Development Bank, Economic and Social Progress in Latin America (Baltimore, Md.: Johns Hopkins University Press, 1994); World Bank, World Tables (Washington, D.C.: World Bank, 1994); and Asian Development Bank, Key Indicators.
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receipts in order to claim the tax credit for VAT payments, and suddenly the underground economy became visible—and taxable. Tax receipts soared from 3.5 percent of GDP in 1984 to 14.7 percent in 1986.

In Bolivia, then, tax reform came first and exchange-rate stabilization second. Although the increased tax receipts resulting from lower tax rates were critical in minimizing the need to print money to cover budget deficits, the later commitment to avoid significant currency devaluations was essential to creating credibility for the new currency.

The key change in Bolivian monetary policy, explains Juan-Antonio Morales, has been that "stabilization has focused explicitly on the exchange rate." The central bank restrains the supply of domestic credit whenever it is running short of foreign-exchange reserves. In 1993, consumer price inflation was 8.5 percent.

Colombia

Economists often observe an increase in tax receipts and assume that it has occurred because of higher, not lower, tax rates. Thus, Michael Urrutia of the Inter-American Development Bank wrote that "Colombia was the only country in Latin America that adjusted successfully after 1982. It did it . . . not only by decreasing expenditures, but also by increasing taxation." In fact, tax rates in Colombia were greatly reduced—from 56 percent to 49 percent in 1984, and then to 30 percent in 1986. The corporate tax was also cut from 40 percent to 30 percent in 1986. The VAT was later reduced from 15–25 percent to 14 percent (except on cars). Revenues rose from 7.8 percent of GDP in 1983 (before tax rates were reduced) to more than 10 percent from 1986 through 1990, and 12–13 percent since then.

What is far more important than the share of GDP, however, is that real tax receipts have increased year after year because of prolonged growth in real GDP—4.2 percent per year from 1986 to 1993. Inflation has been kept around 30 percent through a crawling peg.

Chile

"In 1973," notes Sebastian Edwards of the World Bank, "Chile faced initial conditions as close as they can possibly be to those of Eastern Europe. Chile had severe repressed inflation [1000 percent] . . . an incredibly large fiscal deficit [27 percent of GDP], and a very large public sector in which all sorts of

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public and government owned enterprises were operating at a very inefficient level.\textsuperscript{14} Average tariffs were 94 percent. What happened next was that "Chile implemented policies of stabilization, liberalization and privatization at the same time." Many policies were tried and discarded, however, including floating exchange rates.

The Chilean peso was allowed to go into free fall in June 1982—an experiment that resulted in a 15 percent drop in real GDP and a doubling of unemployment to 20 percent. The budgetary crunch following the devaluation provoked the unfortunate expedient of increasing tariffs from 10 percent to 35 percent. Just after this experiment with letting the currency "float," and with higher tax rates and tariffs, Chile had the highest per capita foreign debt in Latin America.

Starting in 1984, tariffs were reduced once again, to 10–20 percent.\textsuperscript{15} In 1985, income-tax rates were reduced at most income levels, and from 65 percent to 50 percent at the top. Gerardo Sicat and Arvind Virmani of the World Bank calculated that by the mid-1980s, marginal tax rates on those earning twice the average family income were only 13 percent in Chile—even lower than the 17 percent tax rate in Hong Kong.\textsuperscript{16} Chile's income-tax rates still rise as high as 45 percent (down from 75 percent in 1979), but saving is favored because only "real" (above inflation) interest income is taxed. The corporate tax rate was also deeply cut in 1985, from 47.5 percent to 32.5 percent, and later to 15 percent. The VAT was reduced from 30 percent to 20 percent, and later to 18 percent. Tax revenues rose from 7.8 percent of GDP to 10.6 percent just after the tax reform.

In Chile, there have been virtually no limits on the privatization of state enterprises, which has mostly occurred through shares sold to Chilean pension funds, workers, and investors. Even schools were partly privatized, with the government reimbursing private schools for what the cost would otherwise be of educating a child in public schools. Chile also privatized the social-security system in May 1981, replacing it with a system in which workers must pay 10 percent of their salaries into a tax-free, private mutual fund. The private pension fund has resulted in a very high rate of savings and helped to develop capital markets, while greatly reducing a previously onerous social-security tax on work in the formal economy. (That payroll tax had absorbed more than 51 percent of wages in 1975.)

The Chilean economy grew at an impressive annual rate of 5.3 percent from 1986 through 1992—up from 1.8 percent in 1975–1984. Real fixed investment


increased by 24 percent in 1992 alone, and by another 16 percent in 1993. Such expanding investment opportunities help explain why Chile has run a current-account deficit in nine out of the past ten years, despite a high savings rate. That is nothing new. From 1976 to 1985, Chile's annual current-account deficit averaged 7 percent of GDP, even higher than Singapore's.

Inflation—which hit 350 percent in the mid-1970s and averaged 64 percent from 1975 to 1984—was held to about 9 percent in 1994 through a system that ties the Chilean peso to a basket of currencies.

**Peru**

In Peru, real GDP fell by more than 25 percent from 1988 to 1990, and inflation reached 7,483 percent in the latter year. Government revenues dropped from 14.1 percent of GDP in 1985 to 6.5 percent in 1989. The falling economy and collapsing real tax revenues were both a cause and effect of Peru's hyperinflation.

In 1992, the highest income-tax rates in Peru were cut from 50 percent to 30 percent, with an extremely generous personal exemption. VAT rates of up to 55 percent were brought down to a unified rate of 18 percent, and excise taxes were eliminated in 1993. Tariffs have been repeatedly reduced, to 15 percent by June 1993 for almost all goods and to 25 percent on a few others. Revenues increased from 6.5 percent of GDP in 1989 to 10.2 percent in 1992–93. In addition, there has been substantial privatization, notably in petroleum and mining.

Since 1992, foreign exchange has been "largely the only source of monetary base growth," bringing inflation below 40 percent by the end of 1993. From the end of 1993 to the end of 1994, the exchange rate was virtually fixed, falling from 2.16 soles per dollar to 2.18, while inflation fell further. Real economic growth in Peru was 7 percent in 1993 and even greater in 1994.

**Argentina**

No country has experimented with more "adjustment programs" than Argentina. In 1990, following the failed "ustral" scheme, inflation was above 2000 percent, and real GDP fell once again, after falling by 1.9 percent in 1988 and 6.2 percent in 1989.

In 1991–92, the new president, Carlos Menem, surprised everyone by adopting policies similar to those of, say, Singapore. Argentina reduced the highest income tax to 30 percent. Export taxes were eliminated. Tariffs were eliminated on capital goods and reduced to no more than 20 percent on almost everything else. Following these changes, government revenues rose from 13.1

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17 Inter American Development Bank, *Economic and Social Progress in Latin America*, p. 146.
percent of GDP in 1988 to 17.7 percent of GDP in 1992–93. And that understates the revenue gain, because real GDP rose by 25 percent in three years. Between the first quarters of 1991 and 1994, government revenues in Argentina more than doubled, rising from 2 billion to 4.2 billion new pesos (equivalent to U.S. dollars).

The telephone company and many other enterprises were wholly or partly privatized, including (as in Mexico) construction of private toll roads. The government is now moving toward privatizing social-security pensions, as in Chile, which could reduce the still onerous payroll tax.

The most astonishing change in Argentina involved the adoption of a currency board. Instead of merely slowing the rate of devaluation, as Mexico and others have done, Argentina pegged the new peso at one to the dollar in April 1991 and required that any new issue of currency be 100 percent backed by foreign exchange or gold, and convertible into dollars on demand. Inflation, which had been 3,079 percent in 1989 and 2,314 percent in 1990, promptly dropped below 25 percent in 1992 and to 4 percent by 1994.

Real GDP growth was nearly 9 percent in both 1991 and 1992, and 6 percent in 1993, making the economy 25 percent larger than it had been in 1990. Real investment increased by 23 percent per year from 1990 to 1993, measured in 1988 U.S. dollars.18

Any economy that is growing by 6 to 9 percent a year needs to sell at home some of the industrial goods it might otherwise export, and needs to import materials and machinery. Argentina’s imports rose from $3.7 billion in 1990 to $15.4 billion in 1993. Investment opportunities in such vibrant economies usually outrun domestic savings, requiring a net inflow of foreign investment. The ratio of investment to GDP rose from 14 percent in 1990 to 21 percent in 1993. Argentina soon began repatriating some of the huge Argentine investments that had flowed abroad to avoid taxes and inflation (about $60 billion), and the country attracted considerable foreign direct and equity investment as well. The result was a large net inflow of private capital—$9.6 billion in 1992 and over $14 billion in 1993. Fears that the Mexico crisis would spread to Argentina eventually dried up the capital inflow, but the government has held firm against devaluation, despite the risk of some bank failures. Better to suffer a recession than an inflationary recession.

Two African Miracles

Another economic renaissance has taken place on the island country of Mauritius, which has become known as the “Hong Kong of Africa.” Mauritius suffered a major devaluation back in 1980, accompanied by a 10 percent drop in real GDP, price controls, and 30 percent inflation. By 1982, Mauritius had

18 Ibid., p. 241.
an unemployment rate of 22 percent, and one fifth of its people were attempting to emigrate.

After 1983, however, the economy began to take off. Real GDP growth leaped to 9.3 percent per year from 1986 to 1988, and has been above 5 percent ever since. Inflation averaged 4.4 percent from 1983 to 1987—after price controls were removed. The budget deficit was cut from 14 percent of GDP in 1982 to 1 percent by 1988.

What caused this switch from despair to ambition? At a 1992 World Bank conference, the "new growth" theorist Paul Romer emphasized that "income and corporate tax rates were halved in 1983 (from about 70 to about 35 percent)." Romer also observed that free-trade zones were set up, which allowed "unrestricted, tariff-free imports of machinery and materials, no restriction on ownership or repatriation of profits, [and] a ten-year income tax holiday for foreign investors." Income-tax rates in Mauritius have since been reduced again, to 30 percent.

The other African economic miracle is Botswana, whose economic growth has long been the fastest in the world, averaging 13 percent per year since achieving independence in 1967 (although starting from a very low income level, of course). Botswana's progress has not been confined to diamond mining but has been broadly based in agriculture and manufacturing.

The government of Botswana has repeatedly reduced its highest income-tax rates—from 60 percent in 1979 to 35 percent in recent years—with the higher tax rates applying only at an increasingly high real income. The currency is linked to a basket of currencies, and inflation is about 11 percent. Trade is open, and Botswana is a secure, multi-racial democracy.

The Case of Israel

Before July 1985, Israel was suffering one of many unsuccessful experiments with currency devaluation and price controls (like Mauritius in 1980–82, or the United States in 1973). Israel adopted wage and price controls from November 1984 through April 1985. Controls made inflation worse by stimulating demand, discouraging supply, and thus creating shortages. By early 1985, the inflation rate was approaching 1000 percent.

Inflation, in turn, reduced real tax receipts. Wage controls also cut government revenues because they resulted in the substitution of benefits for taxable cash and greater underreporting of income. "Tax receipts fell sharply in 1984 [by more than 11 percent of GDP] as inflation eroded the value of tax payments . . . but recovered with the 1985 stabilization plan."
Yakir Plessner, former deputy governor of the Bank of Israel, says that before the 1985 reform “the exchange rate was . . . used for balance of payments corrections, with complete disregard of the monetary effects.” After the reform, Stanley Fischer confirms, “the Bank of Israel would conduct monetary policy with the exchange rate as its main nominal target.”

A study of Israel and Argentina by Peter Montiel of the IMF came to the following conclusion:

The case of Israel also does not provide support for the fiscal view [that inflation is caused by budget deficits]. . . . The recent inflationary episodes . . . seem to have been much more closely associated with nominal exchange rate movements than with base money growth. . . . The pursuit of external adjustment through nominal exchange rate devaluation may be associated with a substantial, sustained, and . . . extremely stubborn increase in the rate of inflation.

Like nearly all other successful stabilizations—those in which the real economy expands as inflation declines—Israel’s reform also included a reduction in tax rates. In 1986–87, marginal tax rates on individuals were reduced from 60 percent to 48 percent. The VAT was cut from 17 percent to 15 percent, an import deposit fee was reduced by 15 percent, and an employment tax in commerce and services was also cut from 7 percent to 4 percent. Effective tax rates on business income fell by six percentage points. Projections had been that tax revenue would not change much. In the event, however, all categories of tax revenue increased, and especially income-tax revenue. “The rising revenues,” an IMF survey explained, “stemmed mainly from the positive effect of declining inflation and buoyant wages, consumption and imports.” Economic growth averaged 6.2 percent from 1990 to 1992, and inflation was down to about 11 percent by 1993, belying once again the notion that lower inflation requires “austerity,” or that rapid real growth raises inflation.

Backsliding

Miracle cures are not permanent. Like some people, some countries have discovered the path to health and prosperity only to wander off it.

The Philippines. An example of how changes in the policy mix can turn things around quickly—for better and for worse—is offered by the Philippines. In 1983, the peso was “floated,” and its value was quickly cut in half. Inflation jumped from 10 percent to 50 percent. Because the tax system was not indexed, taxpayers suddenly found that higher tax brackets now applied at half as much real income as previously. Business tax rates were increased by more than 30 percent.
percent in 1984, with a new top rate of 60 percent on any earnings above $23,000.

Real GNP fell by 7.3 percent a year in both 1984 and 1985, followed by revolution. Shortly thereafter, the new Aquino government stabilized the peso and reduced tariffs and tax rates. "In June 1986, a bold new program of tax reform was adopted . . . including a sharply reduced tax rate at the highest income ranges . . . [and] reform of import tariffs."25 The highest income-tax rate was slashed from 60 percent to 35 percent. Economic growth quickly rebounded to 4.8 percent in 1987, 6.3 percent in 1988, and 6.1 percent in 1989. Real tax receipts rose more than 50 percent in four years.

The Philippine government again resorted to a sizable devaluation of the peso in 1990, which was followed by an inflation of 21 percent in 1991.26 Interest rates on treasury bills rose from 11.5 percent in 1987 to 23.7 percent in 1990, contributing to a near doubling of the budget deficit in 1990. A new 10 percent VAT was introduced, and "the government imposed a 9 percent import levy."27 Real GDP growth suddenly slowed to 2.4 percent in 1990, less than zero in 1991–92, and only 2.1 percent in 1993.

Jamaica. In Jamaica, real output and income began falling in 1974 and continued to drop almost every year through 1986, for a total decline of 23 percent. From 1978 to 1986, the currency was repeatedly and deeply devalued. Tax brackets were not adjusted for inflation, so the top tax rate of 57.5 percent eventually fell on incomes as low as $700 a year. More than a third of Jamaica's professionals and managers left the country.

In 1986, Prime Minister Edward Seaga cut the highest tax rate to 33 percent and reduced tariffs. Revenues rose from 26.8 percent of GDP in 1985 to 31.9 percent in 1986. Real GDP growth averaged 5.7 percent a year from 1987 through 1990. Inflation dropped from 27 percent in 1984–85 to 6.6 percent in 1987.

However, the currency was again devalued by 69 percent in 1991, pushing interest rates on treasury bills to 49 percent by mid-1994 (up from 18–19 percent in 1987–89). A 10 percent VAT became fully effective in 1992 and was increased and broadened in 1993. Although there was additional revenue in 1993, this was due mainly to a reduction in tariffs. Meanwhile, GDP slowed to little more than 1 percent in 1992–93, as the currency fell and tax rates rose, with inflation reaching 77 percent in 1992. Jamaica then cut the flat tax to 25 percent, and growth resumed.

Mexico. But the question that interests U.S. citizens most is, undoubtedly, what happened to Mexico?

Briefly, Mexico abandoned a fairly successful currency stabilization in December 1994, which makes the country a fascinating example of what goes right when a currency is strong, and what goes wrong when it is not.

In 1989, the Mexican peso was put on a crawling peg, initially allowed to depreciate by only one peso per day, later a half peso, then 20 centavos, and so on. Mexico's maximum income-tax rate was reduced from 55 percent to 40 percent, then to 35 percent. Revenues rose from 16 percent of GDP in 1986 to 20.5 percent in 1990, with the share of those revenues coming from direct (income) taxes rising from 23.8 percent in 1987 to 29.4 percent in 1989 and 35 percent by 1993. Tariffs that had commonly been 50–100 percent were reduced to no more than 20 percent (and an average of 10 percent).

Inflation fell from 132 percent in 1987 to 20 percent in 1989, and to 7 percent by 1994. Growth of real GDP rebounded to 3.5 percent a year from 1989 to 1992 but then slowed to less than 1 percent in 1993. Before 1994, there was a massive infusion of foreign investment, mostly owing to repatriation of Mexican capital and to foreign portfolio investment in Mexican stocks and treasury bills. The budget swung into surplus from 1990 to 1994, even aside from privatization revenues, largely for reasons that are not widely understood.

As inflation fell, short-term interest rates also fell from 103 percent in 1987 to 16 percent by 1992. The Mexican government's cost of debt service thus fell from 19.8 percent of GDP to 3.9 percent in those five years—lower interest rates reduced government spending by nearly 17 percent of GDP. Interest expense fell from more than 57 percent of government outlays in 1988 to only 15 percent in 1993, mostly as a result of lower interest rates on domestic debt. This is a powerful example of just one way in which good monetary policy can produce good budgetary results, rather than the other way around.

Unfortunately, in 1994, facing a massive hemorrhage of foreign exchange, the Banco de Mexico did not act in the way a currency board would have been compelled to act. The loss of reserves was instead "sterilized" by adding pesos through open market operations, even as pesos were being purchased with dollar reserves in the foreign-exchange market. The peso devaluation immediately pushed inflation up to at least 40 percent; short-term interest rates jumped from 14 percent to 100 percent; and the recession shrank revenues, thus creating a budget crisis. The VAT was raised from 10 percent to 15 percent, and some tariffs were increased. By inflating the price of imports, the falling peso eroded the real incomes and wealth of Mexican families and firms, forcing a sharp contraction of imported components, machinery, and materials that are

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28 Inter-American Development Bank, Economic and Social Progress in Latin America, Table C-1, p. 252. The "top" tax rates serve here as a rough proxy for the tax schedule. This is not always accurate, because some countries follow the Japanese practice of appearing to have high tax rates at high incomes but offering numerous "loopholes" that reduce taxable income. The income thresholds at which high tax rates apply are obviously important, as are sales and social-security taxes. For countries that have reduced the top tax rate to 10–35 percent, though, it is almost certain that marginal tax rates at lower incomes are modest too.

29 Banco de Mexico, Annual Report (Mexico City: Banco de Mexico, 1993).
essential to production. Just as currency stabilization often creates miracles, destabilization creates crises.

Conclusion

As suggested by this sample of economic miracles (and lapsed miracles), all successful economic turnarounds in this century have had at least two of the following three features in common: (1) tariffs and other trade barriers were reduced; (2) exchange rates were tied to a stronger currency or to gold; and (3) high marginal tax rates on capital and human capital were sharply reduced.

Economic miracles illustrate, in a particularly dramatic way, some of the basic building blocks of prosperity that are common to all successful economies.

First, secure property rights must exist. Every asset must have an owner, or group of owners, who can transfer title to others as they see fit. This includes privatization, but also a predictable “rule of law,” and a legal system to enforce contracts and settle civil disputes.

Secondly, there must be sound, honest money—money whose value is reasonably predictable over fairly long periods of time, and which is therefore accepted in both international and domestic commerce. The October 1993 IMF Outlook notes that rapid inflation in the former Soviet Union is no different from many other cases, “with inflation being fueled by devaluations intended to improve competitiveness. . . . Typically, ending hyperinflation has involved . . . establishing currency convertibility, often at a fixed exchange rate.”

Thirdly, wages, prices, and interest rates must be completely free of government control, so that the price system can give the correct signals to producers and consumers.

Fourthly, there must be vigorous competition, so that producers are under constant pressure to improve quality, create new products and services, and minimize costs. This requires very low trade barriers, because foreign products define world-class competition and force domestic producers to be efficient. As a corollary, competition also requires effective bankruptcy laws—enterprises must be allowed to fail. Lower tariffs also reduce the cost of living and the cost of production.

Lastly, there must be a tax system that yields sufficient revenue to sustain essential government functions and does so without creating capital flight and a brain drain, or undermining incentives for productive work, saving, and entrepreneurship.

Many “transition” plans lose sight of such basic principles or focus on only one at a time. Yet it is necessary to get at least the direction right in every

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50 International Monetary Fund, IMF Outlook, Oct. 1993, pp. 93-95.
area, particularly in the intricately intertwined issues of money and taxes. Without a workable tax system, it becomes quite difficult to finance government budget deficits in a noninflationary way. And without stable money, it becomes difficult, if not impossible, to avoid large budget deficits.

It is not widely appreciated that monetary reform is usually essential to fiscal success. Runaway inflation invariably erodes real tax collections and inflates the government's interest expense. One of the most startling lessons of economic miracles—from Germany in 1924 to Mexico in 1993—is that budget deficits often cease to be a problem after monetary reform brings inflation and interest rates down.

Estonia, with its 26 percent flat tax and gold-backed currency overseen by a currency board, seems to be well aware of these two key components of economic success—trustworthy money and a tax system that encourages people to increase their incomes by increasing their output. In the long run, growth of real tax receipts depends on growth of the economy. Trying to tax an ever increasing share of a stagnant or contracting economy always fails.32

Whenever combined marginal income, payroll, and sales-tax rates have been reduced to internationally competitive levels, this has resulted in (1) a substantially increased net capital inflow and therefore a stronger currency and lower interest rates; (2) a reduced brain drain and increased personal investment in education; and (3) reduced tax evasion, more rapid economic growth, and therefore increased real tax collections from all sources.

The most successful "economic miracles" of the century shunned wage and price controls, guaranteed to convert the currency to a more credible currency or commodity, and reduced marginal tax rates and tariffs. A similar set of policies could help those countries now struggling to make the transition from planned to market economies. And Washington would do well to focus its efforts on encouraging those countries to institute such policies.

32 Two useful sources on tax policy are Amaresh Bachi and Nicholas Stern, Tax Policy in Developing Countries (New York: Oxford University Press, 1993); and Javad Khalilzadeh-Shirzai and Anwar Shah, Tax Policy in Developing Countries.