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Contracts, Credibility, and Disinflation

In October 1979, the Federal Reserve System announced a new monetary policy designed to reduce the inflation rate, then running at 12 percent for the previous 12 months. But it took two recessions to get inflation, as measured by the consumer price index, down to 2.9 percent for the 12 months prior to October 1983. There was no cheap way out of inflation for the United States, concludes NBER Research Associate **Stanley Fischer** after looking at the period of disinflation since 1979. "The cure for inflation during this period used the old-time medicine of recession," he notes in *Working Paper No. 1339, Contracts, Credibility, and Disinflation*.

Just prior to this period, recalls Fischer, there was a wide range of opinion as to what economic suffering would be needed to reduce the inflation rate. Economist Arthur Okun (chairman of the Council of Economic Advisers under President Johnson; Okun died in 1980) concluded in 1978 that "the cost of a 1 point reduction in the basic inflation rate is 10 percent of a year's GNP, with a range of 6 percent to 18 percent." That does not mean that the nation's output of goods and services (GNP) would plunge 10 percent in a year. Rather, over a few years or so, the equivalent of 10 percent of GNP would be lost just to get the rate of inflation down 1 percent. At the other extreme, NBER Research Associate Thomas J. Sargent argued that a resolute and credible monetary policy could reduce inflation virtually without cost. He suggested, with careful hedging, that "under the proper hypothetical conditions, a government could eliminate inflation very rapidly and with virtually no 'Phillips curve' costs in terms of foregone real output

or increased unemployment." The Phillips curve thesis maintains that there is a trade-off between inflation and unemployment—increase the number of jobless and inflation will fall, or, vice-versa, an increase in inflation will usually accompany a drop in unemployment.

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Fischer, looking at the evidence of the 1979-83 period, concludes that the loss of GNP to get a 1 percent drop in the deflator (the broadest measure of inflation) was around 5 or 6 percent—or at the very bottom of the range suggested by Okun. Assuming the "natural rate of unemployment" (that is, a rate not so low as to stir up inflation) is about 6.5 percent, the cumulative loss of GNP over this period from 1980 to 1985 would be some 23.6 percent of output. That "sacrifice ratio" is somewhat less costly than in past battles with inflation, Fischer states. This calculation, however, assumes that the deflator rate will be about 5 percent in 1985, compared to 10 percent at its earlier peak. If inflation is actually run-

ning at about 6 percent next year and thus the improvement is only 4 percent, the sacrifice ratio would be 6 to 7.5 percent of GNP per 1 percent gain on inflation. Or, if inflation next year is down 6 percent from its peak, then the sacrifice ratio would be 4 or 5 percent of GNP. All these estimates are somewhat below the median sacrifice ratio suggested by Okun.

Another paper by economist James Tobin in 1980 suggested that unemployment would hit 10 percent and the inflation rate 2.5 percent in 1987. Inflation, notes Fischer, almost reached that low last year, in less than half the time predicted by Tobin. However, Tobin did note that inflation might well come down more rapidly than he predicted if actual and prospective bankruptcies led to more rapid changes in wage and price patterns than had been experienced in the post-World War II period. Fischer points out that labor was forced to make wage and other concessions in the recent recession years when their firms or industries ran into hard times or were threatened with bankruptcy or closing.

In the paper, Fischer argues that costless immediate disinflation is not possible in an economy with long-term labor contracts that protect past wage gains and call for future benefit increases. There is also the problem of the public not believing government officials when they proclaim they will carry out an anti-inflationary policy. If the public expects continued inflation, the theory goes, businessmen will continue to raise prices and labor will seek wage hikes as in the past. If they did believe, management and labor would act accordingly and maintain steadier prices and would bargain for smaller benefit increases. Fischer constructs a model to calculate how much of continued inflation was the result of the fact that the public did not believe in the Fed's proclaimed anti-inflationary policy and how much was caused by the long-term labor contracts. He calculates that about half of the stickiness of inflation is caused by the long-term labor contracts; the other half by the lack of credibility of government officials. The public is slow to change its inflation expectations. But even if the public believed a government anti-inflationary policy, a reduction in inflation would still be costly because of the need to change labor contracts over some years.

Fischer notes that, including professional associations, or white collar unions, about 28 percent of the labor force is unionized. More significantly, he writes, about 50 percent of the labor force works in establishments in which some workers belong to unions. Presumably the wages received by the unionized workers in such establishments influence the wages of the remaining workers. Also, large non-unionized firms try to keep unions out by providing wage and benefit packages that on balance match those obtained by unionized workers. So, Fischer reckons that more than 50 percent of the labor force is closely affected by the terms of union contracts.

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Regulation and Productivity

Productivity growth in the United States has slowed from about 3 percent annually between 1950 and 1973 to less than 1 percent annually from 1973-80. This slowdown has meant smaller increases in real wages for workers and may also have contributed to higher inflation and unemployment. In *NBER Working Paper No. 1405*, **Wayne B. Gray** finds that more than one-third of the productivity slowdown in manufacturing industries was the result of increases in government regulations on health, safety, and the environment.

In **The Impact of OSHA and EPA Regulations on Productivity**, Gray estimates that these regulations reduced productivity growth in the manufacturing sector by 0.57 percent annually and lowered manufacturing output in 1978 by \$13 billion. However, Gray's study suggests that much of the impact may have been a one-time cost to industry of adjusting to the new regulations. Thus, the long-run impact of regulation on the rate of productivity growth may be smaller than Gray's estimate for 1978.

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To calculate the costs of regulation, Gray uses data for 450 manufacturing industries from 1958 to 1980. He finds that industries that spent the most to comply with the government regulations introduced after 1970 suffered the largest declines in productivity growth between 1958-69 and 1973-78.

Gray also attempts to measure some of the benefits of OSHA inspections. OSHA concentrates on industries with high injury rates and significant health hazards. Although OSHA and EPA regulations may have some benefits, Gray finds that OSHA's program of safety inspections did not significantly reduce injury rates.

Debt, Deficits, and Exchange Rates

Oil prices, high interest rates, and the worldwide recession are often cited as the primary causes of debt problems in Latin America. In contrast, a recent analysis by NBER Research Associate **Rudiger Dornbusch** indicates that overvalued exchange rates and large government budget deficits were responsible for excessive foreign borrowing by Latin American countries. External disturbances made the underlying problems in those countries more apparent and more unsustainable.

In **External Debt, Budget Deficits, and Disequilibrium Exchange Rates**, (*NBER Working Paper No. 1336*), Dornbusch shows that Argentina, Brazil, and Chile each went heavily into debt for different reasons, and each used its foreign borrowings in different ways. Argentina used foreign loans to finance a massive outflow of private capital. Brazil borrowed abroad to pay for increased government deficits, which were used to shelter the Brazilian economy from oil and interest rate shocks. Chile used its foreign borrowings to pay for huge imports of consumer and producer durables.

In the late 1970s, Argentina attempted to reduce inflation by allowing its exchange rate to appreciate (in real terms). As its currency became increasingly overvalued, it became increasingly clear that a devaluation was inevitable.

To escape the effects of the anticipated devaluation, and the political instability that Argentina faced during this period, many Argentines purchased U.S. currency, bank deposits, securities, and real estate. This was possible because, unlike Chile and Brazil, Argentina had very loose controls on outflows of private capital. As a result, increases in Argentina's public foreign debt—almost \$27 billion between 1978 and 1982—were more than offset by increases in privately held foreign assets. It remains to be seen whether a significant portion of these assets will be repatriated if Argentina's economy and political situation become more stable. Experience suggests not.

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Chile also tried to use an overvalued exchange rate to reduce inflation. In 1979, the peso was fixed

at 39 to the dollar, in spite of much higher rates of inflation in Chile than in the United States. As a result, the peso became increasingly overvalued. Unlike Argentina, Chile controlled capital outflows but had loose restrictions on imports. Therefore, the overvaluation led to an import boom but not to an increase in privately held foreign assets. Between 1978 and 1981, imports, especially of consumer durables such as cars, more than doubled. There was also a big increase in imports of producer durables. As the peso's value rose relative to the dollar, a devaluation became more and more likely, and imports rose even faster. Finally, in 1982, the peso was devalued and the import boom came to an end with Chile on the edge of a debt crisis.

Brazil's foreign debt skyrocketed when the government attempted to insulate the Brazilian economy from higher oil prices and world interest rates. As oil prices and interest rates rose, the government increasingly subsidized oil consumers and borrowers, its deficit grew, and borrowing from abroad increased. Thus, the oil shock was the source of the sharp rise in Brazil's foreign debt, but only because the Brazilian government chose to use higher deficits and more borrowing rather than to make timely and necessary adjustments to higher oil prices. However, unlike either Argentina or Chile, Brazil had strict controls on both capital outflows and on imports. As a result, there was neither capital flight as in Argentina nor an import boom as in Chile.

The Social Security Student Benefit Program and Family Decisions

When Congress voted in 1981 to terminate the Social Security program that provided financial help to full-time college students who were the unmarried children of deceased, disabled, or retired workers, it was mainly concerned about costs. The debate almost totally ignored the possible effects of the program on the decision to attend college, the quality of the education received, the amount that families contribute to the students' education, or students' employment. But, according to NBER Research Associate **Ronald G. Ehrenberg** and **Rebecca A. Luzadis** writing in *Working Paper No. 1357*, **The Social Security Student Benefit Program and Family Decisions**, eliminating Social Security student benefits probably had little effect on students' education costs, or on the choice of a public over private school, and led to only a small increase in student employment.

At its peak in 1981, the program cost \$197 million. It provided benefits averaging about \$3000 per year to more than half a million students. Indeed, about 20 percent of all federal outlays on student assistance for higher education were channeled through this program.

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Critics argued that the program was no longer required because of the growth of “needs-based” financial aid programs administered by the U.S. Department of Education. They pointed out that because the Social Security program was not based on need, it provided money for the well-to-do as well as the poor. They noted that payments were not limited to college costs nor contingent on satisfactory academic progress. Finally, some charged that the growth of the program had contributed to the financial problems of the Social Security trust fund. Congress thus

terminated the program for students entering college on or after May 1, 1982.

Ehrenberg and Luzadis use data from a 1973 survey of student beneficiaries to try to determine how the program influenced them and their families. They find that the benefits did not influence students’ decisions on whether to attend public or private colleges. Of those attending public institutions, the Social Security payments did not affect the *net* cost of education. Nor, surprisingly, did the benefits appear to influence the amount of money contributed by parents to the costs of education. Receipt of benefits was also unrelated to the number of hours put in by students in paid jobs.

Of those attending private institutions, the program appears to have had more of an effect (although quite small in dollars). The benefits did permit parents to send their children to higher-cost private colleges and universities than they otherwise could have. As a result, loss of benefits meant that both net expenditures on education and parents’ contribution to college costs increased. Moreover, students who received benefits did not spend so much time at paid work during the school year or the summer as they would have in the absence of the program.

Ehrenberg and Luzadis conclude: “. . . given the growth of needs-based financial aids programs, the evidence presented here at least provisionally supports the view that the decision to eliminate the program made sense.”

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