

The **NBER** Digest

NATIONAL BUREAU OF ECONOMIC RESEARCH

www.nber.org

March 1998

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In the Long Term, the U.S. Still Faces Deficits

The Clinton Administration has recently proposed a balanced budget for fiscal year 1999, the first such budget in decades. This follows an impressive downward trend in recent years: the \$22.6 billion deficit in fiscal year 1997, which ended September 30, was indeed a welcome and hard-won change from the huge deficits which peaked at \$290 billion in 1992. But when Baby Boomers begin to retire around 2010 and draw trillions of dollars in Social Security and Medicare benefits, federal accounts could spin out of control and drag the economy down.

Huge deficits pose at least two major threats. Rising government debts lead to rising interest payments, which feed higher debts. Further, the more the government borrows from capital markets to cover its spending, the less money remains for private investment. Paychecks and corporate earnings will grow more slowly, which in turn will slow the growth in government revenues needed to keep deficits in check.

NBER Research Associate **Alan Auerbach** says "The long-run prob-

lem is still extremely severe and much larger than most people realize." In **Quantifying the Current U.S. Fiscal Imbalance** (NBER Working Paper No. 6119) Auerbach analyzes long-term projections from the Congressional Budget Office (CBO), which show Medicare and Medicaid spending will rise from 4 percent of gross domestic product (GDP) today

"Medicare and Medicaid spending will rise from 4 percent of gross domestic product (GDP) today to 12 percent by 2070."

to 12 percent by 2070—admittedly a long way off, but within the lifetime of many of today's children. Add in Social Security spending growth and the government's "primary deficit" (which excludes interest expenses) could rise to more than 7 percent of GDP by then. Government borrowing at that level would sink private investment and quite possibly undercut international confidence in the dollar.

To achieve long-term fiscal balance, even with a balanced budget in the year 2002, Auerbach calculates that the federal government would

have to engineer a combination of permanent spending cuts and tax increases equal to 3.6 percent of GDP—starting today. That means aiming not just for a balanced budget, but for an additional surplus on the order of \$300 billion annually. Running surpluses for the next decade or two would pare the national debt, making the subsequent rise in

deficits more manageable during the peak years of the retirement of Baby Boomers. Recent CBO projections of a small surplus by 2002 put only a small dent in this total. But these projections assume no recession between now and 2002; one modest downturn could sap revenues and send deficits rising again.

Despite recent focus on saving the Social Security system, Auerbach calculates that most of the problem lies elsewhere: eliminating the current imbalance, as measured by the Social Security Trustees, would reduce the imbalance only by one-fourth—

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to 2.7 percent of GDP. The remainder is attributable to rising government health care expenditures. Indeed, this remaining gap would be even higher were it not for a projected continuation of the sharp decline (as a share of GDP) in all other government spending. While

modest policies, such as reducing cost-of-living adjustments for retirees and increasing the normal retirement age, would help deal with the Social Security imbalance, Auerbach suggests that it will be much more difficult to address the overall fiscal problem without very large changes

in the Medicare and Medicaid systems. Given the magnitude of changes involved even if this problem is addressed immediately, a policy of dealing with it "only when it arises"—that is, when Baby Boomers begin to retire—may leave future policy-makers with a very daunting task.

Zero Inflation Would Reduce Tax Distortions

In the popular press, the glowing reviews of America's so-called "Goldilocks" economy—not too hot, not too cold—focus on what is often viewed as a battle won: the conquering of inflation. In **Capital Income Taxes and the Benefits of Price Stability** (NBER Working Paper No. 6200), NBER President **Martin Feldstein** argues that, given the way inflation interacts with American tax law, even the current relatively low inflation rate does significant damage to the economy. And he asserts that the gains from

value of those annual gains would be equal to 30 to 40 percent of current GDP.

Feldstein notes that taxes reduce the return to saving more at modest inflation rates than they would with pure stability because the tax is levied on nominal interest rates and nominal capital gains. Taxes also distort the uses of saving, causing more investment in housing and less in productivity-increasing plant and equipment.

Feldstein suggests that the benefits of inflation reduction could "in principle also be achieved by eliminating all capital income taxes or by

from now, the present value gain from price stability until then would probably exceed the cost of inflation reduction."

Feldstein's argument that zero inflation is a worthy economic goal for the United States appears to be true for Germany as well, another country where inflation would not, at first glance, seem to be much of an issue. In **Price Stability vs. Low Inflation in Germany: An Analysis of Costs and Benefits** (NBER Working Paper No. 6170), **Karl-Heinz Tödter** and **Gerhard Ziebarth** conclude that their analysis "has confirmed for Germany what Feldstein discovered for the United States: inflation is anything but an attractive option."

"The interaction of even moderate rates of inflation with the existing system of taxation (in Germany) results in a significant loss of welfare," the authors conclude. Changing from an equilibrium "true" inflation rate of 2 percent to a rate of zero would bring permanent welfare gains, they find, equivalent to 1.4 percent of GDP per year.

The authors acknowledge that their argument is charged with political implications, given the fact that deflationary policies could be an irritant, in the short-term, to Germany's current unemployment problems, and to the economic difficulties in the formerly communist east.

—Matthew Davis

"Price stability would produce permanent annual dividends equal to about 1 percent of GDP."

bringing inflation closer to zero or "price stability" would easily offset the pain of getting there.

In his analysis of the U.S. economy, Feldstein cites evidence that reducing inflation from 2 percent to zero would inflict a "one-time" loss (because of a temporarily higher level of unemployment) equal to about 6 percent of GDP. But the resulting price stability would produce permanent annual dividends equal to about 1 percent of GDP, he argues. And, unlike the "one-time" loss, those annual dividends would continue forever. Furthermore, Feldstein calculates that the present

indexing capital income taxes so that taxes are based only on real income and real expenses." But he notes that "technical and administrative difficulties" make it unlikely such changes will ever be adopted, and that "no industrial country has fully (or even substantially) indexed its taxation of investment income." "Moreover, the annual gains from shifting to price stability that are identified in this paper exceed the costs of transition within a very few years," Feldstein adds. "Even if one could be sure that the tax-inflation distortions would be eliminated by changes in the tax system ten years

Environmental Regulation Affects Technology Choice

Do environmental regulations affect corporate investment? In a paper recently published by the NBER, **Wayne Gray** and **Ronald Shadbegian** take a close look at the paper industry and find that both the choice of technology used in production and the level of investment are influenced by environmental regulation.

As they began their research on **Environmental Regulation, Investment Timing, and Technology Change** (NBER Working Paper No. 6036), Gray and Shadbegian visited 10 paper mills in the Northeast and talked to both plant managers and environmental directors. They also interviewed corporate executives and government regulators. "Our visits gave us a much greater appreciation of the differences across plants, especially in their production technology, and the importance of institutional aspects of regulation leading to differences across states in regulatory stringency," they say. These interviews greatly informed the direction of their research. Their visits and discussions provided the

basis for statistical analyses, using investment data from the Census Bureau's Longitudinal Research Database and the Lockwood Directory, an industry publication.

The authors confirm that environmental regulations do matter. Plants in states with more stringent environmental rules are less likely to use the "dirtier" production technologies. For example, plants using mechanical pulping tend to generate more air

reflecting the high cost of shutting down a plant for renovations. Also, it appears that plants with steep bills for pollution abatement have less money available for other investments. The results indicate nearly complete crowding out: a plant spending \$1 million more on pollution abatement investment spends about \$1 million less on productive investments, averaged over the time period studied.

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pollution, and this technology is less common in states with stricter air quality regulations. By the same token, sulfite pulping, which is associated with more water pollution, is less likely in states with tougher water pollution rules.

State regulatory strictness doesn't significantly influence total investment spending. However, the timing of investment is affected, as plants bunch together pollution abatement and productive investment, probably

The authors began their paper asking, "How much can economists learn from [directly observing] the 'real world'? Can plant visits and conversations with people in the industry suggest hypotheses to test, or modeling strategies? Is empirical research helped (or hindered) by understanding institutional details?" In light of their study, the answer is clearly yes—economists learn a lot from engaging the real world.

—Chris Farrell

The Benefits of Privatization: Evidence From Mexico

Why do some countries cling to state-owned industries, despite compelling evidence that privatization works? The answer often lies in political leaders' fears that the higher profitability of private companies comes at the expense of the rest of society, especially during the difficult transition period.

In **The Benefits of Privatization: Evidence From Mexico** (NBER Working Paper No. 6215), **Rafael La Porta** and **Florencio Lopez-de-Silanes** investigate whether compa-

nies become more profitable following privatization, whether privatization leads to significant social losses, and if so by which channels. They conclude that the positive changes in performance of privatized firms are the result of significant restructuring efforts and not of exploitation of market power, or of massive layoffs and lower wages. In other words, firms undergo a harsh restructuring process following privatization and do not simply markup prices and lower wages, as many economists predicted. Deregulation, particularly the removal of price/quantity con-

trols and trade barriers, is associated with faster convergence to industry benchmarks. The authors suggest that the additional revenues the government receives as a result of the privatization auctions, and the increased tax revenues, are probably enough to offset the cost to society of job losses.

Mexico provides the stage for one of the most massive privatization programs in the world. Using data from all 218 nonfinancial privatizations which occurred in Mexico from 1983 to 1991, La Porta and Lopez-de-Silanes document the effects of pri-

vatization in seven general areas: profitability, operating efficiency, employment and wages, capital investment, taxes, output, and prices. By including both privately held and public companies, spanning a wide variety of sectors, and using detailed wage data and product-level quantities and prices, they can test competing theories on the effects of privatization.

The authors show that newly privatized firms come up to industry performance standards in the first few years. For example, the companies averaged a 24 percent gain in their operating-income-to-sales ratios, which is one of the four measures of profitability the authors use, each of which were positive. Large increases in operating efficiency accompanied the gains in profitability. As an example, the average cost-per-unit plummeted 21.5 per-

cent, while the average sales-per-employee nearly doubled.

As one would expect, newly privatized firms cut employment, with the rolls of white and blue collar workers nearly halved. These numbers may actually underestimate the effects of privatization, since in the years preceding privatization most companies already had trimmed payrolls to prepare for divestiture. These findings suggest that transfers from workers to shareholders play a role in the success of privatization. However, productivity gains resulted in large increases in real wages in the post-privatization period: real wages increased 114 percent.

La Porta and Lopez-de-Silanes also show that privatized firms increased sales 54.3 percent, despite workforce reductions and only modest increases in capital. Surprisingly, prices rose only 2.9 percent relative to the

Producer Price Index.

The authors find that monopoly power does not play an important role in increased profitability. Nor do firms in the noncompetitive sector increase prices in real terms any more than those in the competitive sector. In fact, in virtually every observed category, firms in competitive and non-competitive sectors acted similarly.

Finally, the authors decompose the reported increases in profitability. Approximately 10 percent of that gain was attributable to higher prices and 33 percent to worker layoffs, while productivity gains accounted for the remaining 57 percent. Some of the social effects of higher prices and layoffs were offset by corporate taxes, which absorbed slightly more than half of the gains in operating income.

—Les Picker

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