

### Effects of the Deductibility of State and Local Taxes

The Reagan administration and the Senate continue to discuss the merits of eliminating federal tax deductibility for some, or all, state and local personal taxes. The administration's view is based on Treasury predictions that total elimination of deductibility would increase federal revenues by \$40 billion by fiscal 1990, thereby financing 55 percent of planned reductions in personal tax rates. But a new study for NBER by Research Associate **Martin Feldstein** and **Gilbert Metcalf** calculates that federal revenues would not increase by nearly that amount, and might even fall, if deductibility were eliminated.

In The Effect of Federal Tax Deductibility on State and Local Taxes and Spending (NBER Working Paper No. 1791), Feldstein and Metcalf explain that deductibility now affects the way state and local governments finance their spending. That is, in states with higher proportions of itemizers, deductibility lowers the cost of using certain taxes—income, sales, and property—relative to other taxes. Those states and localities therefore rely more heavily on personal taxes than on business taxes and other revenue sources.

If deductibility were eliminated, state and local governments would likely switch to collecting more revenue from corporations and less from individuals. But if businesses must pay higher taxes and fees to state and local governments, then their net income will drop and federal corporate income tax receipts will decline. Also, reduced net corporate income means lower dividends and reductions in other personal capital income. This will mean a reduction in personal tax payments as well. The com-

bined lower receipts from corporate and personal federal taxes would offset some, or all, of the increased revenue from eliminating the deduction. In fact, if the state and local shift from personal taxes to taxes and fees paid by business is large enough, then the Treasury could actually *lose* revenue by eliminating deductibility.

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Feldstein and Metcalf also conclude that deductibility is more cost-effective than direct grants for raising the general level of state and local government spending. They estimate that for every dollar of net federal cost, deductibility increases state and local spending by more than three dollars. Federal block grants, at best, would boost state and local spending by only one dollar per net federal dollar. Even federal matching grants, which raise spending by more than the one dollar net federal cost, are far less cost-effective than deductibility, the authors find.

Feldstein and Metcalf conclude that "...it would be wrong to assume that eliminating federal deductibility would substantially increase federal revenue or that substituting block grants for deductibility would permit the current level of state-local spending to be maintained at lower cost to the federal government."

#### The Cost of Union Work Rules in Construction

Construction industry executives maintain that make-work rules and other restrictive practices of organized labor decrease efficiency and raise costs substantially. In **Union Work Rules and Efficiency in the Building Trades** (*NBER Working Paper No. 1733*), NBER Research Economist **Steven Allen** indeed finds that in a typical office building subcontract, union restrictions increase the number of workers by 3.2 percent and increase labor costs by 5 percent. Since labor costs typically represent 40 percent of total construction costs, the effect of union work rules is to increase the total cost of construction by 2 percent.

Allen comments: "Although their magnitude is by no means trivial, [these numbers] create an impression quite different from that produced by journalistic horror stories or studies by 'experts' in the business community." In effect, Allen's results show that the building trade unions are willing to give up 5 percent of their wages in return for a 3 percent increase in staffing.

Allen finds that union work rules mainly restrict the allocation of different types of labor. This is consistent with the results of recent interviews with employers, who cited the exclusive jurisdiction system as the "greatest current handicap faced by union contractors." Contractors believe that they could significantly reduce man-hour requirements if they could assign workers to tasks outside their craft's jurisdiction and make greater use of semiskilled and unskilled labor.

On the other hand, Allen's results show that union work rules generally have little effect on the use of capital or materials. Union contractors are just as likely to use prefabricated components as are non-union contractors—despite union work rules. Even in the case of sheet metal work, where union contracts most strictly limit the use of prefabricated components, there is little difference between union and nonunion projects. For example, about half of the union contractors in one sample used prefabricated air ducts and air conditioning equipment. Union contractors were also more likely that nonunion contractors to use prefabricated underfloor ducts. Indeed, union contractors were more likely to use the prefabricated component for 8 out of 15 materials.

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In office building construction, Allen finds, union contractors are sufficiently more productive than

open shop contractors that they can compete effectively with them, despite the tendency of work restrictions to drag down productivity and of higher wages to boost costs. "Superior training and reduced hiring costs seem to override the effects of work rules and wages," he concludes.

One reason that the impact of union work rules seems to be relatively modest, Allen finds, is that most union contracts are not riddled with provisions that seriously interfere with the allocation of labor or materials. Another reason is that "many rules look more restrictive on paper than they are in practice because either they do not generally impose binding constraints or they are not followed."

Allen's data come from the Bureau of Labor Statistics. He uses one survey of hospitals and nursing homes completed in 1976, 36 of which were built by union labor and 8 by nonunion labor. He also analyzes data on 83 commercial office structures built in 1974 and 68 elementary and secondary schools built in 1972.

## The Cost of Capital in Japan and the United States

Do Japanese corporations outperform their American competitors because capital is cheaper in Japan than in the United States? In a recent study for NBER, Albert Ando and Research Associate Alan Auerbach indeed find that the cost of capital, according to one measure, is somewhat lower in Japan than in the United States. According to another measure, however, the cost in Japan is dramatically higher than in the United States.

In The Corporate Cost of Capital in Japan and the United States: A Comparison (NBER Working Paper No. 1762), Ando and Auerbach study the earnings of a sample of 21 Japanese and 19 American corporations between 1966 and 1981. They use corporate earnings and rates of return as a proxy for the cost of capital because the firm's long-run cost of capital is determined by the price of its stock, which in turn is determined by earnings.

After adjusting depreciation and inventories to account for inflation, they find that the median after-tax rate of return on capital among the Japanese firms was 7.5 percent. For the American firms, the median return was 9.4 percent.

They also find that taxes, especially on debt, do not explain the lower cost of capital in Japan. In their sample of large corporations, Japanese firms were taxed more heavily than American firms. Specifically, taxes took more than half of the pretax returns of 16 out of the 21 Japanese firms; only 10 out of 19 American firms were taxed that heavily. Furthermore, Ando and Auerbach estimate that the tax deductibility of interest payments changed the cost of capital by 1.2 percentage points at most for the median Japanese firm and by only 0.7 percentage points for the median American firm.

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Finally, Ando and Auerbach calculate an alternative measure of the total return to capital in each country, including capital gains in excess of retained earnings as well as earnings adjusted for inflation. They find that the total return on capital was substantially higher for the Japanese firms than for the American firms. The authors caution that not all of the difference in the returns to capital represents a difference in the cost of capital. Nonetheless, they conclude that the cost of capital in Japan is, at most, slightly lower than in the United States and in fact may be considerably higher.

### **Exchange Rates and Prices**

The rise in the U.S. dollar relative to other currencies in the early 1980s reduced relative production costs abroad, bringing import prices down in the United States. In a new study for NBER, Research Associate **Rudiger Dornbusch** asks whether import prices fell as much as the value of foreign currencies, or whether importers instead raised their profit margins on sales to the United States.

In Exchange Rates and Prices (NBER Working Paper No. 1769), Dornbusch finds that prices of imported metals and agricultural products fell by an even larger proportion than the dollar's rise. However, prices of imported manufactured goods did not drop as much as the value of foreign currencies did.

As the dollar appreciated between 1980 and early 1985, Dornbusch reports, labor costs in the United

States rose by 44 percent relative to our major trading partners. If the cost savings overseas had been passed fully to American consumers, then import prices relative to domestic prices might have fallen by a similar percentage. Instead, Dornbusch finds that for every percentage point increase in the real value of the dollar, the price of metals fell 1.4 percent and the price of agricultural products fell 1.2 percent. However, the prices of a wide range of imported manufactured goods fell by less than one percentage point.

According to Dornbusch, this difference between the price responses for the various types of products reflects differences in the structure of their markets. Metals, and agricultural products, are homogeneous goods, or perfect substitutes. Prices for each type of good must be equal in markets around the world and must immediately reflect changes in exchange rates.

"In the early 1980s...prices of imported manufactured goods did not drop as much as the value of foreign currencies did."

Manufactured goods, on the other hand, are not perfect substitutes for one another. For example, one type of car is not exactly like another. Moreover, the manufacturer may be able to set different prices for these products in its home market and in foreign markets. Therefore, the prices of imported manufactured goods need not completely reflect changes in exchange rates.

One implication of these findings is that the recent decline in the dollar's value may not yet be fully translated into a rise in the prices of manufactured imports. If Dornbusch's analysis is correct, then U.S. consumers may look forward to increasingly higher prices on Japanese autos, Swiss watches, and other manufactured goods. However, the rise in the prices of imported goods will be proportionately smaller than the decline in the value of the dollar.

# Productivity and Pollution Regulations

Productivity growth in many countries slowed at about the same time that governments began requiring industry to invest in pollution control equipment. However, a recent study by NBER researchers Catherine Morrison and Klaus Conrad finds that only

a small part of the slowdown in productivity growth in the manufacturing sectors of Canada, Germany, and the United States over the last decade was the result of diverting savings to such investments. In fact, government requirements to install cleaner equipment may have raised productivity in some years by forcing firms to invest in newer and more efficient equipment.

"Pollution regulations...had only a negligible effect on the international competitiveness of the [United States, Canada, and Germany]."

Between 1960 and 1967, measured productivity in U.S. manufacturing grew by 2.9 percent annually. However, between 1967 and 1973 annual productivity growth declined slightly, to 2.7 percent, and fell

further to 1.6 percent between 1973 and 1980. In The Impact of Pollution Abatement Investment on Productivity Change: An Empirical Comparison of the United States, Germany, and Canada (NBER Working Paper No. 1763). Morrison and Conrad report that only 0.2 percentage points of this 1.3 percent decline can be attributed to increased spending on pollution control equipment.

Morrison and Conrad's findings for Germany and Canada are similar. In Germany, manufacturing productivity grew at an annual rate of 2.6 percent between 1972 and 1981. Spending on pollution control equipment depressed this growth by 0.1 percentage points. In Canada, annual productivity growth in manufacturing fell from 1.8 percent during 1967–72 to 0.9 percent during 1972–80. However, only 0.5 percentage points of that decline can be attributed to spending on pollution control equipment.

Finally, Morrison and Conrad observe that pollution regulations have probably had only a negligible effect on the international competitiveness of the three countries, since the effects of these regulations on productivity have been so small and similar.

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