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Taxation of Structures

Many economists have long believed that our tax system favors investment in equipment and in owner-occupied housing. At the same time, investors seem eager to participate in "tax shelter" investments, which typically are structures. Now, a study by NBER reports that rental structures indeed receive larger tax advantages than other forms of capital do.

In **Notes on the Tax Treatment of Structures** (*NBER Working Paper No. 1896*), **Roger Gordon, James Hines,** and **Lawrence Summers** note that most earlier studies failed to take two factors into account: that it is easier to finance some kinds of structures than other types of investments with debt; and that these structures may be depreciated more than once (churned) for tax purposes. Since the tax system treats debt and capital gains more favorably than it treats equity and ordinary income, and because churning allows investors to sell assets to buyers who receive new depreciation allowances on them, rental structures are taxed more lightly than equipment and owner-occupied housing are.

Gordon, Hines, and Summers find churning of structures to be a common practice. They observe that without churning, investors would minimize their taxes by opting for accelerated rather than straight-line depreciation. However, investors who plan to sell their property face different incentives. When investors who have taken accelerated depreciation sell their assets, the value of depreciation allowances claimed in the past is taxed as ordinary income. If these investors had used straight-line depreciation instead, then the difference between the sale price of the asset and its depreciated value (that is, the value of the property for tax purposes) would be treated as a capital gain. Because capital gains are taxed more lightly than ordinary income is, using straight-line depreciation results in lower taxes than using accelerated depreciation on assets that are churned. In 1982, over 60 percent of real property investment by partnerships was depreciated straight-line, as was 33 percent of real property investment by corporations. This suggests that most of these investors intended to churn their properties, and is consistent with the authors' finding that partnerships benefit from churning more than corporations do.

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Gordon, Hines, and Summers also report that housing represented just over half of the investment in structures in 1985. Of that investment, 55 percent was owner-occupied and 45 percent was rental housing. Investment in office buildings and other commercial structures, the categories of nonresidential assets that are most easily churned and financed with

debt, each accounted for about 8 percent of total investment in structures. Structures for mining (including gas and oil wells) and public utilities were 12 and 9 percent of the total, respectively. By comparison, industrial buildings were only 4 percent of the total investment in structures in 1985. Between 1980 and 1985, real investment in commercial structures rose by more than 50 percent, while investment in industrial structures declined in real terms.

Do Small Businesses Create More Jobs?

A number of studies have reported that small businesses are responsible for most of the job creation in the United States over the last decade. But NBER Faculty Research Fellow **Jonathan Leonard** has taken a new look at the numbers and finds that the evidence for that conclusion is mixed.

In **On the Size Distribution of Employment and Establishments** (*NBER Working Paper No. 1951*), Leonard first analyzes data from the Census Bureau's *County Business Patterns.* He finds that in 1974, businesses with fewer than 100 workers employed 53 percent of all workers. By 1980, their share of total employment had grown only slightly, to 54 percent. According to the Census data, small establishments accounted for 64 percent of the net increase in jobs over that period. So, small businesses were responsible for a somewhat larger share of new jobs than their share of total employment.

However, Leonard cautions, it would be a mistake to infer from this that the jobs created by small establishments are stable ones, or that small firms have an advantage over large ones. Leonard reports that total employment in a sample of 68,690 establishments increased by about 5 percent between 1974 and 1980. However, firms that grew accounted for an 18 percent increase in the work force, while firms that shrank accounted for a 13 percent decline in total employment. Thus, these gross flows, or fluctuations in employment, are much larger than the net employment growth usually observed and reported.

This variation in the size of establishments over time also lends itself to the belief that small workplaces are the fountainheads of growth. If they survive, small establishments do tend to grow and indeed account for a disproportionate share of new jobs. In the large sample, establishments with fewer than 250 employees in 1974 accounted for 31 percent of all employment in that year but 34 percent in 1980. But this is only half of the story.

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Focusing instead on establishments with fewer than 250 employees in 1980, Leonard finds that they accounted for 29 percent of all 1980 employment, down from 32 percent in 1974. In other words, establishments that are now small tend to have shrunk, and they account for a disproportionate share of all job loss. These patterns are two sides of the same coin: Establishments fluctuate in size a great deal over time as they experience temporary shocks. That is, an establishment that is small today likely has had bad news recently but will probably rebound soon. Similarly, large establishments are more likely to have recently enjoyed good news, but they will probably move toward the average level of employment as time passes.

Finally, Leonard tries to isolate a number of factors, including industry, region, and corporate structure, to determine how they affect job creation. He finds on net that single establishments, rather than parts of multibusiness companies, demonstrated more employment growth from 1974–80. Also, firms that employed mostly nonclerical white collar workers (for example, certain high tech firms) had significantly higher rates of job growth than other types of firms. The most consistent growth in jobs took place in mining, chemicals, machinery, instruments, and services. Furthermore, growth rates were higher in the West and lower in the mid-Atlantic and East-North Central regions.

How Good Are Estimates of GNP?

One of the indicators most closely watched by economic forecasters is the quarterly preliminary estimate of GNP (Gross National Product). The Bureau of Economic Analysis (BEA), a branch of the

U.S. Department of Commerce, issues the first estimates of GNP 15 days before the end of the quarter and releases three revised estimates at 30-day intervals thereafter. Just how reliable are these important numbers?

According to NBER's **N. Gregory Mankiw** and **Matthew Shapiro,** there are large errors in the preliminary GNP data. Nonetheless, the BEA's statistical procedures, and the preliminary GNP estimates, appear to be efficient given the available information.

In **News or Noise? An Analysis of GNP Revisions** (*NBER Working Paper No. 1939*), Mankiw and Shapiro analyze GNP data covering the period from the fourth quarter of 1975 to the fourth quarter of 1982. They first find that errors in preliminary data are large. For example, if the preliminary estimate of quarterly GNP predicts no change, there is only an 80 percent chance that the final estimate of quarterly growth (annual rate) will be in the range of −2.8 percent to +2.8 percent.

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Mankiw and Shapiro then ask whether the errors in the data are caused by "news" or "noise." If preliminary announcements differ from the final announcement because of measurement error, there is noise in the preliminary estimates. In such cases, the preliminary announcement should vary more from quarter to quarter than do the final announcements. By contrast, the "news" view holds that the preliminary figures are efficient forecasts of the final figures. According to this view, the final figures should vary more from quarter to quarter than do the preliminary figures, since the final figures contain more information (news). Mankiw and Shapiro find that the final announcements are more variable than the preliminary announcements for both real and nominal GNP. This finding, and similar evidence they derive using more sophisticated statistical techniques, supports the news view of preliminary announcements.

Mankiw and Shapiro's findings for preliminary GNP data contrast with their earlier findings for preliminary data on the money stock. The money stock data, provided by the Federal Reserve Board, appear to conform to the noise view of preliminary announcements. Mankiw and Shapiro conclude that these two data series may differ because the BEA exercises greater discretion in estimating GNP.

Coordinating Monetary and Fiscal Policy

Suppose that the Fed and the White House agreed on the relative importance of the short-term goals of reducing inflation and lowering unemployment, but that they disagreed on the best combination of monetary and fiscal policies to achieve these goals. Should they compromise their views and try to coordinate their actions in order to reach their shared goals?

Not necessarily, says NBER Research Associate **Jeffrey Frankel** in **The Sources of Disagreement among International Macro Models and Implications for Policy Coordination** (*NBER Working Paper No. 1925*). In many cases, such a compromise might actually result in worse policies than if each authority had charted an independent course. In fact, if both policymakers miscalculate the effects of their policies, then cooperation between them could lead to higher inflation and unemployment than would have occurred if they had refused to compromise.

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Of course, economic forecasters are often wrong about the future, and monetary and fiscal policies are sometimes based on mistaken predictions. Frankel tries to measure the effect of these mistakes on the potential contribution of improved coordination. He analyzes what would happen if the Fed (monetary authorities) believed that one model accurately reflected the behavior of the economy, the fiscal authorities believed in another model, and both authorities adopted policies designed to minimize inflation and unemployment. Using 11 different models developed by private forecasting firms and government agencies, Frankel simulates what would occur with and without coordination between the monetary and fiscal authorities. He finds that when one authority believes in the model that accurately reflects the effects of monetary and fiscal policies on the econo-

my, then coordination is definitely better than no coordination. However, when neither authority believes in the "true" model, approximately half of the time, coordination results in worse inflation and unemployment than independently set policies would.

Therefore, Frankel concludes that uncertainty and disagreement about the effects of monetary and fiscal policies may be more serious obstacles to successful policy coordination than the absence of cooperative institutions and political will.

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