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Housing Tenure, Taxes, and Uncertainty

The federal income tax system may not influence the decision to own one's home as much as had been thought, according to *NBER Working Paper No. 1168* by **Harvey S. Rosen, Kenneth T. Rosen, and Douglas Holtz-Eakin**. In **Housing Tenure, Uncertainty, and Taxation**, the authors note that most past work on tenure choice—that is, the choice between owning or renting a home—assumed that households were certain of the “user cost” of housing when they made their decision. The user cost integrates various components of the total cost of housing: interest rates, property and income taxes, maintenance, depreciation, expected capital gains, and so on. Since the ex post user cost measure has varied over time, it is fairly unlikely that households would have characterized themselves as certain of it when they made their housing decisions.

In this paper, Rosen, Rosen, and Holtz-Eakin construct and estimate a model of tenure choice that allows for uncertainty in user costs. Their model uses annual U.S. data for 1956–79. They also perform a number of simulations to estimate the effect of changes in tax policy on home ownership when costs are uncertain.

For example, what if the deduction of mortgage interest and property taxes from the federal income tax were disallowed? The proportion of home ownership would fall, but by only 0.4 of a percentage point, they find. On the other hand, if capital gains on housing were taxed at ordinary capital gains rates, the proportion of owner-occupiers would rise by an estimated 1.05 percentage points. If both of these changes in the income tax were enacted, the propor-

tion of owner-occupiers would still rise, but by only 0.6 of a percentage point.

These somewhat surprising simulation results can be explained by the fact that “Proposals to modify the tax treatment of housing affect both the expected price differential between renting and owning and the difference in the forecast error variances [variability in predicting costs, or uncertainty].” For example, taxing capital gains increases the expected cost of owning a house but at the same time reduces the variability. The two effects work in opposite directions, so the net impact can go either way.

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In fact, in the late 1970s, the ex post costs of homeowning fell greatly relative to renting, but the aggregate proportion of homeowners changed relatively little. The authors believe that “. . . this was largely due to the erratic nature of housing costs which made ownership commitments unattractive.”

The authors conclude that price uncertainty had a “statistically significant effect and quantitatively large impact on the percentage of owner-occupiers.” This suggests that “previous work which ignored uncertainty may have overstated tax effects on tenure choice.”

Optimal Stock Trading with Personal Taxes

A new analysis by NBER Faculty Research Fellow **George M. Constantinides** leads to the startling conclusion that some investors can profit by selling stocks in which they have long-term gains and, in effect, voluntarily paying capital gains taxes. Conventional wisdom has long held that a principal advantage of capital gains laws is the ability to do just the opposite—to defer the payment of taxes indefinitely by holding on to securities with unrealized gains.

Investors who cannot draw the distinction between short-term and long-term status of capital gains and losses, and who expect the \$3000 deduction limit on capital losses from ordinary income to be nonbinding in the future, can profit by realizing their capital losses and deferring their capital gains. The tax rate on long-term capital gains is 40 percent of the rate on short-term losses.

Those investors who can draw the distinction between the short-term and the long-term status have a second timing option—to realize long-term gains and repurchase either similar stock or the same stock 31 days later in order to reestablish the short-term status and realize future losses at the advantageous short-term rate. In **Optimal Stock Trading with Personal Taxes: Implications for Prices and the Abnormal January Returns**, *NBER Working Paper No. 1176*, Constantinides demonstrates theoretically and by post-sample simulation that the second timing option is very valuable.

The theory states that the second timing option is valuable on high-variance stocks even with 4 percent "round-trip" transactions costs. The option is also valuable on medium-variance stocks if transactions costs are low. Moreover, a decrease in the interest rate increases the value of this option.

Constantinides goes on to simulate the returns of an investor in the 50 percent tax bracket by following several trading strategies. He uses the actual performances of 1147 stocks on the New York and American Stock Exchanges from December 1962 through December 1977. He assumes that the current one-year holding period for long-term capital gains applies. He also assumes that the investor cashes out at the end of the period by selling the stocks and paying any capital gains taxes or capturing the tax benefits of capital losses. The benchmark is to simply buy stock and hold it until the end of the period.

The first strategy is to realize short-term losses at the beginning of each December on the day before they become long term and then repurchase the stock, but not to realize any gains. This strategy outperforms buy-and-hold for all categories of stocks,

in the absence of transactions costs, but the improvement is greatest for high-variance ones. The second strategy is the same as the first, except that gains are realized long term the following day. The performance of this strategy is spectacular for both high- and medium-variance stocks, even after deducting round-trip trading costs equal to 4 percent of a stock's value. With high-variance stocks the investor ends up with 72 percent more money on average than he has after 15 years of simply holding the stocks. The median improvement is 52 percent.

In one sense, however, the second policy overestimates the benefits of tax trading. It assumes that the investor owns just one stock and takes long-term gains in some years and short-term losses in others. If the investor applies the policy to a portfolio of stocks, in most years he will have short-term losses on some and long-term gains on others. In that case, he loses at least some of the benefit of the lower tax rate on long-term gains. Under the law, long-term gains are offset dollar for dollar by any short-term losses. The third strategy takes this problem into account.

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Under the third trading strategy, the investor realizes losses every December but realizes gains every second year. Constantinides overcompensates for the offset provision by allowing the investor to draw the distinction between short-term and long-term losses only in the years that no gains are realized. In the years that gains are realized, all losses are treated as long term. Even so, the average improvement in the investor's wealth position is 36 percent with high-variance stocks, and the policy proves advantageous for most medium-variance stocks.

Constantinides also explores the possibility that tax trading may explain two anomalies in stock performance that have been documented in recent years. One is the abnormally high returns that stocks of small companies have provided over the last half century. The other is the January seasonality in stock returns. Stocks, especially the ones that performed badly in the last year and the small company stocks, tend to perform unusually well in early January. Constantinides concludes that tax strategies cannot explain the abnormally high returns of small firms but could produce seasonality in the trading pattern at year-end. The trading seasonality would lead to similar seasonality in stock prices only if investors were irrational.

The Economy of Israel

Despite proceeding at a rate in excess of 100 percent, inflation in Israel is not the dominant issue. "It is talked about, but there is no groundswell of public insistence that the rate be reduced," notes NBER Research Associate **Stanley Fischer**. In *NBER Working Paper No. 1190, The Economy of Israel* (dated August 1983, before this fall's Israeli economic crisis), he explains that the indexation of pensions, long-term savings, and wages enables consumers to largely keep up with inflation, covering "most of the difficulties that would face an unsophisticated economic agent living in an economy with a high and variable rate of inflation."

Israeli policymakers frequently assert that unemployment would be needed to disinflate successfully, and this cannot be justified in Israel. Writes Fischer: "The 1965-67 recession during which unemployment reached double digits and there was a net emigration has burned as deep a concern about unemployment in the memory of policymakers and the public as the Great Depression did in the United States."

Inflation did accelerate. From 1953 to 1973, the average inflation rate (consumer price index) was 7.1 percent; from 1973 to 1979 the inflation rate averaged more than 40 percent; and in the last three years the annual inflation rate has been in the triple-digit range—more than 100 percent.

At the same time, growth slowed. From 1953 to 1973 real gross domestic product in Israel grew at an annual rate of nearly 10 percent; over the next nine years the growth rate was only 3 percent.

Some have asserted that the low growth of the 1970s in Israel is the result of the high and variable inflation, which draws resources into such nonproductive activities as banking, and which distorts the price mechanism. Fischer points out that the productivity slowdown is a worldwide phenomenon that has taken place in low-inflation as well as high-inflation countries. So he does not find a convincing demonstration that inflation is responsible for low growth.

The government has experimented with the alternative of trying to reduce the inflation rate by keeping the price of commodities or the exchange rate stable. A stable exchange rate tends to keep the price of imports about the same. But, writes Fischer, such policies have not worked. "Fixing of the exchange rate for a period during which domestic inflation is continuing only ensures that a big correction has to take place later. Similarly, the attempt to use subsidies

to stabilize some nominal prices leads to large increases in the budget deficit, and eventually to the lifting of the subsidies and more inflationary pressure."

To help finance such deficits, the government has been creating new money, rather than borrowing all of the necessary money from the public or from abroad. It signs checks or lets the money printing presses run longer in order to pay its bills. This creates seignorage revenue for the government, that is, the difference between the small cost of turning out the checks or cash not covered by regular government revenue or borrowing, and their purchasing power. This seignorage currently amounts to about 2 percent of gross national product (GNP), the total output of goods and services in the nation. The creation of too much money also produces higher inflation, which, to the extent that the public is not protected by the indexation of taxes, amounts to an undisclosed rise in the tax level. However, Fischer points out, until recently the Israeli government also granted nonindexed credit subsidies to the private sector; as inflation rose, the degree of subsidy increased because the borrower would repay in inflated, less valuable shekels.

Rather than inflation, the balance of payments has been the major preoccupation of Israeli policymakers for the past three decades, Fischer asserts. The foreign deficit has been in the range of 20 percent of GNP for most of the period, with a sharp increase taking place following the Yom Kippur War and the associated oil shock.

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This deficit, Fischer notes, is considered undesirable for two reasons. First, it is partly covered by foreign borrowing and the accumulation of foreign debt places an undue burden on future generations that, presumably, would have to repay it. Second, "the need to rely on external financing, some of it in the form of grants, makes for excessive vulnerability to outside pressure, economic and political."

The gross debt amounted to \$25.2 billion in 1982. The net debt was \$13.7 billion, or 62.9 percent of GNP and 140.7 percent of exports. With a real interest rate of 5 percent, the annual interest cost of the debt would be above 3 percent of GNP. "This," states Fischer, "would be a manageable amount in steady state. But the ratio of the net foreign debt to GNP is growing because of the size of current account deficits financed through borrowing. By the end of 1982

net debt service amounted to nearly 25 percent of exports and more than 10 percent of GNP." Part of the international payments deficit arises from defense imports, particularly in the mid-1970s.

Fischer points out that foreign pressures resulting from the payments deficit and size of the foreign debt have been brought to bear in the past, although the abrupt cutoff of aid that has been the primary fear of policymakers has not happened. "If it were to happen, the access of the Israeli government and private sector to international capital markets would be curtailed; there would be a major disruption to the economy and a reduction in the standard of living."

The government has several times undertaken major restrictive policies to reduce the balance of payments deficit, either through restrictive fiscal and monetary policies, or through devaluation of the currency. In 1982-83, the government has sought to stabilize the inflation rate through appreciation of the currency. This has sharply increased the payments deficit to more than \$4 billion per year and increased the prospects for a "rising and ultimately unsustainable foreign external debt burden," states Fischer. Writing this summer he argued, correctly as it subsequently turned out: "For this reason the current policy will be reversed." DF

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