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The Tax Treatment of Married Couples

When Congress passed the major tax law of 1981, one of its goals was to reduce the so-called "marriage penalty"—the extra tax paid by some couples who were legally married and filed a joint tax return, as opposed to living together without being married and filing separate returns. In *Working Paper No. 872,* **The Tax Treatment of Married Couples and the 1981 Tax Law,** NBER Research Associate **Daniel Feenberg** concludes that Congress did succeed in cutting this "virtue tax," as it has also been called. The "secondary earner's deduction," permitting a couple filing a joint return to exempt 10 percent of the secondary worker's earnings (but not more than $3000) from taxation, will trim the marriage penalty when it takes full effect in 1983. However, that success in reducing the penalty is nearly overshadowed by increases in the tax benefits enjoyed by other couples who file a joint return. Many couples who suffered a tax penalty when they married will now reap a tax bonus. The net result for married couples, says Feenberg, is a slight increase in the average deviation from neutrality in the tax system.

Under the tax law in effect prior to the 1981 changes, the paper shows, the departure from tax neutrality was quite substantial. The average amount of "marriage penalty" paid by the 18.7 million couples whose tax liability would have been lower if they were allowed to file as single individuals was $481 in 1979, notes Feenberg. However, another 20.3 million couples enjoyed gains of $713 on average from joint filing. Only 6 percent of couples neither lost nor gained from their joint tax returns. (Feenberg's study is based on data obtained from the March 1980 Current Population Survey of the Bureau of the Census.)

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Feenberg points out, though, that it is impossible for any tax system simultaneously to achieve several goals that many would consider desirable, such as marriage neutrality, horizontal equity (that is, equal

taxes on equal incomes), and progressivity (the well-to-do pay a larger proportion of their incomes in taxes than do those with lower incomes). The secondary earner's deduction (SED), for instance, will tend to reduce the progressivity of the federal income tax system.

By 1983, the general income tax cut will amount to 19 percent. But "bracket creep"—the tendency for inflation to result in wage boosts that shove taxpayers into higher tax brackets—will offset this cut to some degree. Taking these various changes into account, Feenberg looks at the marriage penalty in 1983 first as if the SED were not in place, and then as if it were in effect. Without it, a "nontrivial" 11 percent of 1983 households would pay a marriage penalty of 2 percent or more of family income. With the enacted law, only 2 percent of such couples are so "abused" financially.

Without the SED, the federal government's revenue losses from the "marriage bonus" would be slightly reduced in 1983, from $14.5 billion to $13 billion (in 1979 purchasing power dollars). The gross "marriage penalty," however, would increase slightly, from $9 to $9.3 billion. So, overall, there would be a $1.2 billion reduction in deviation from marriage neutrality in the tax system. With the SED, the marriage penalty is reduced by $2 billion while the marriage bonus grows by $1.7 billion. The net improvement in deviation from neutrality of $0.3 billion is thus small relative to the 1983 law's general reduction in progressivity.

One side benefit from this new deduction for secondary earners is a slight increase in the labor supplied by married women. Under the old tax system, secondary earners (mostly women) were taxed on their incomes at the highest tax level applicable to their partners' earnings. This discouraged many women from making that extra effort to work outside their homes. Feenberg calculates the lower tax rate on the earnings of these mostly women workers will result in their putting in an additional 15 hours of work per year. The incentive is strongest for those couples with joint incomes in the $30,000 to $50,000 range.

From the government's standpoint, this extra work and income offsets to a degree the revenue losses incorporated in the SED as a result of the tax cut. Washington will reap some extra taxes on that extra income. The revenue losses will thus be reduced by about one-third to an average $72 per joint return (compared to total average federal income taxes of $4602), Feenberg finds.

Another provision of the 1981 tax law expanded the child care credit to 20 percent of the first $2400 in child or dependent care expenses for each of the taxpayer's first two dependents. The credit is increased by 1 percent for each $2000 that the taxpayer's income falls short of $30,000, with a maximum credit of 30 percent of expenses. This provision, according to the author's calculations, does give the average recipient of the credit an extra $28 in tax reductions. However, for moderate-income families, the credit is so structured that it tends to discourage secondary earners from working, since the more they earn, the higher tax they pay. Feenberg reckons that this disincentive is fairly small, though—about four hours a year per recipient. DF

Stockholder Tax Rates and Firm Attributes

Results of a recent study by NBER Research Associate **Alan J. Auerbach** provide fresh support for the hypothesis that companies with different dividend policies attract separate "clienteles" of investors that vary according to the investors' tax brackets. **Stockholder Tax Rates and Firm Attributes,** *NBER Working Paper No. 817,* also strongly suggests that such tax-based clienteles are determined almost entirely by a stock's yield, and not by other characteristics such as risk.

The tax-based clientele hypothesis was first put forth in 1961 by Franco Modigliani and Merton Miller. It holds that investors in high tax brackets should prefer comparatively low-yield stocks since proportionately more of the total returns on those stocks comes in the form of capital gains, which are taxed at lower rates than dividend income. A large number of studies of the dividend-clientele phenomenon have been performed since then. Although the results have been mixed, the weight of the evidence appears to support the presence of some clientele effect.

The question of whether investors really do sort themselves out according to tax brackets is important because it affects the ways companies should behave in order to maximize the interests of their particular shareholder audiences. However, it is also important to know whether wealthy investors own low-yield stocks for some other reason. Some economists have theorized, for example, that wealthy investors may simply have a greater tolerance for the higher risk than usually is associated with low-yield stocks.

In his study, Auerbach first develops a model showing that high-bracket investors should prefer low-yield stocks, all other things being equal. However, his model also shows that they should prefer low-risk stocks, not high-risk ones. That is because a high-bracket investor can hold proportionately more of his total portfolio in equities without increasing

his total risk if he owns low-risk stocks. Such a strategy enables him to reduce taxes—by avoiding higher-taxed interest income—without increasing his overall risk. High-bracket investors should prefer low-risk stocks regardless of whether they are more or less risk averse than low-bracket investors. Risk aversion should affect the share of total assets invested in stocks, but not the composition of the stock portfolio.

Auerbach tests for the presence of a clientele effect, and its causes, by focusing on the performance of stocks on the "ex-dividend" day—the first day that a new owner of a stock is not entitled to a previously declared dividend. In the absence of taxes, transaction costs, and uncertainty, a stock should drop by exactly the amount of the dividend on the ex-dividend day. If all investors faced a single tax rate, the stock would drop by the aftertax value of the dividend. But with progressive taxes, the size of the decline may be determined by some weighted average of the tax rates paid by the company's shareholders. If so, the presence of a clientele effect will show up in the varying performances of stocks on their ex-dividend days.

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Instead of focusing on yield, as other researchers have done, Auerbach uses the ex-dividend-day performances to calculate implicit tax rates—and, hence, clienteles—for 436 companies over the fifteen years from 1963 through 1977. He then performs a number of statistical tests to determine which company characteristics accounted for the differences in implicit tax rates.

In one set of tests, Auerbach finds that the only characteristics that were significant were yield and risk. As his theory predicts, the tax rate rises as both yield and leverage decrease. That is, high-bracket investors tend to own low-yield, low-risk stocks.

Auerbach also shows that the implicit tax rates for individual companies remained fairly steady from one five-year period to the next, which suggests that companies attract clienteles on the basis of long-run payout policies rather than short-run variations in yield.

When Auerbach refines his model still further, risk disappears completely as a factor in determining clienteles. He thus concludes that there is a significant clientele difference among companies, and that yield is the most important determining variable. If risk is also important, it is less obvious, perhaps because present measures of risk may be too imprecise to capture its effect. AE

Determinants of Real Exchange Rates

Since 1973, exchange rates internationally have been quite volatile—even moreso than relative prices. Accepted theories of exchange-rate movements, in which changes in (relative) money stocks cause changes in (relative) national price levels and exchange rates in a one-to-one relationship, needed to be modified to allow for changes in the equilibrium real exchange rate. Monetary disturbances do not change the equilibrium real exchange rate, but real disturbances to the current account do. In addition, under the assumption of rational expectations, economists theorize that it is news, or innovations about changes in money, relative prices, or the current account that cause exchange rates to move.

In *Working Paper No. 801,* **Macroeconomic Determinants of Real Exchange Rates,** NBER Research Associate **William H. Branson** tests this new view of exchange-rate movements against quarterly data since 1973 for the United States, United Kingdom, Germany, and Japan. His analysis includes money, relative prices, and the current account balance, with or without rational expectations. Branson concludes that the new view is consistent with the data: "Real exchange rates adjust to real disturbances to the current account, and innovations in the current account seem to signal the need for adjustment."

Branson first considers the relationship between relative price levels and (nominal) exchange rates, once believed to be perfectly correlated. He finds that in the United States, United Kingdom, and Germany "there is not a one-to-one correspondence between price and exchange rate fluctuations." For Japan, in contrast to the other three countries, "the . . . behavior of the exchange rate is consistent with that of relative prices and the current account, but . . . does not follow the random walk pattern of money."

Next Branson considers the relationship between changes in the (nominal) exchange rate and in the money stock. He finds a positive correlation between the two for the United Kingdom and Germany, almost no correlation for Japan, and a negative relationship for the United States. A positive correlation is consistent with what Branson refers to as "leaning-against-the-wind" policy behavior, that is, a slowing of money growth when the currency depreciates, or vice versa. He explains further that "A U.K. policy of moving the minimum lending rates to defend the currency would also be consistent with the positive U.K.-M1 correlation. . . . When sterling depreciates,

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After comparing the causes of exchange-rate movements among the four countries, Branson notes that the United States is quite different from the others in that its monetary policy is formulated with domestic targets in mind; money is exogenous with respect to the exchange rate. The crux of this difference is that U.S. monetary policy drives exchange rates, while in the other countries monetary policy reacts to exchange rates.

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