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There Is Still a Marriage Tax

The changes in the personal income tax embodied in the Omnibus Budget Reconciliation Act of 1993 did not eliminate the marriage tax: spouses with roughly equal incomes still tend to pay a marriage tax, while spouses with unequal incomes tend to receive a marriage subsidy. A new NBER study by **Daniel Feenberg** and **Harvey Rosen** predicts that in 1994, 52 percent of American couples will pay a marriage tax averaging about \$1244, while 38 percent will receive a subsidy averaging about \$1399. But these averages mask considerable dispersion, they write. "Under the new law, the marriage tax for certain low-income families can exceed \$3000 annually; for certain very high-income families, it can exceed \$10,000 annually."

In **Recent Developments in the Marriage Tax** (*NBER Working Paper No. 4705*), Feenberg and Rosen estimate that the average marriage tax for the population as a whole is \$124; under the old law, in contrast, there was an average subsidy to the population of \$143. The most striking difference between the old and new laws applies to the high-income group: because of the 10 percent surcharge on taxable income above

\$250,000, the average marriage tax for this group is \$7451.

Feenberg and Rosen observe in general that, except at the high end of the income distribution, most childless couples face little change in the marriage tax. For many low-income couples with children, the marriage tax is higher under the new law, though.

The tax law also provides a substantial "dowry" for an individual with no income who marries someone with income: marriage is subsidized as long as the spouses' incomes are sufficiently far apart. Conversely, the tax law penalizes marriage for couples whose incomes are relatively close.

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These results are based on a sample of actual U.S. tax returns. Estimates are generated by the NBER's Tax Simulation Model.

Macroeconomic Stability Is Good for Economic Growth

It is often said that good macroeconomic performance is necessary if not sufficient for economic growth. This view is reflected in the emphasis that most economists put on macroeconomic stabilization in the formerly socialist economies, and in their policy advice to countries suffering from high inflation.

In **The Role of Macroeconomic Factors in Growth** (*NBER Working Paper No. 4565*), NBER Research Associate **Stanley Fischer** uses three basic indicators of macroeconomic policy—the inflation rate, the budget deficit, and the premium in the black market for foreign exchange—to explain how macroeconomic factors affect growth. Based on data for a sample of up to 94 countries between 1962 and 1988, Fischer finds that inflation, budget deficits, and the black market premium all are strongly *negatively* associated with growth.

The inflation rate serves as an indicator of monetary (and also fiscal) policy, as well as a measure of the general competence of the government in controlling the economy. Inflation could be good for growth if it encouraged a portfolio shift away from money toward real capital. But there are far more reasons to expect inflation to be bad for growth: high inflation raises the effective tax rate on capital; it diverts resources away from the management of production and toward the management of portfolios; and high inflation is typically uncertain inflation, which impedes the efficient operation of the price system.

Fischer's calculations imply that an increase in the inflation rate of 100 percentage points (for example, from 5 to 105 percent per annum) is accompanied by a 3.9 percent per annum decline in the growth rate. In other words, a country that has an inflation rate 100 percentage points higher than another will have growth reduced by nearly 4 percent per year. Other things equal, Fischer concludes, high inflation is very bad for growth.

The budget deficit, too, serves as an overall indicator of the competence of the government. In addition, budget deficits crowd out domestic saving and reduce investment. An increase in the budget surplus of 1 percent of GNP, on the

other hand, is associated with an increase in growth of 0.2 percent per year, Fischer finds.

The black market premium, or the gap between the official exchange rate and the market rate, is an indicator of the extent to which the foreign exchange market is distorted. A larger black market premium is likely to be associated with lower growth.

Fischer traces the impact of the policy variables on economic growth to their effects on capital accumulation and productivity growth. Inflation has powerful negative effects on capital accumulation, and a smaller but significant negative impact on productivity growth. A country with an inflation rate 100 percentage points higher than another, for example, will have productivity growth that is 1.8 percent per annum lower: the impact of inflation on productivity growth thus accounts for just under half of its effect on growth. Budget surpluses, in contrast, are not related significantly to capital accumulation.

Neither the inflation rate nor the budget deficit is a genuinely external measure of policy, though. A supply shock that reduces growth also tends to raise inflation, and the budget deficit tends to be higher when growth is slow than when it is rapid. To hold constant one source of external shocks, Fischer includes the terms of trade in his calculations. His results confirm that adverse changes in the terms of trade are associated negatively with growth. In addition, the basic results are unchanged when the sample is broken in 1973, the year when supply shocks first became globally important. This means that the negative association between inflation and growth held both in the period up to 1973 when demand shocks predominated, and in the subsequent period when supply shocks were more prominent.

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Extending the basic results, Fischer shows that the effects of inflation on growth are nonlinear. That is, a 1 percentage point increase in inflation is associated with a larger decline in growth at low than at high inflation rates. He also shows that the results hold when other variables, such as the initial stage of development of the country, and education, are included.

Finally, Fischer examines all episodes in which inflation exceeded 50 percent per annum, and all cases in which the budget deficit exceeded 10 percent of GNP. There are some years of high growth among the countries experiencing high inflation, but either average growth rates during the periods of high inflation were low, or the period of high inflation was followed by a serious growth collapse. Thus, there is no ambiguity that countries with high inflation are in trouble or heading for it. Most countries that had high deficits suffered from low growth, but there are a few cases in which countries managed to sustain budget deficits of more than 10 percent of GNP and still grew at reasonable rates. The bottom line of the paper is: macroeconomic stability is good for your economic health.

Overseas Investment Does Not Reduce Domestic Employment

American corporations that invest in production outside the United States often are criticized by politicians, labor unions, and the media for "exporting jobs." In the past, these complaints have given rise to restrictive legislation, and they were among the major reasons for recent opposition to the North American Free Trade Agreement.

An NBER study by **Robert Lipsey** refutes that type of thinking, showing that direct investment is often defensive, undertaken to retain and stabilize multinationals' shares of the world market under adverse conditions in the home country. Further, many studies of U.S. and foreign multinationals have concluded that they have little effect on home country exports. U.S. multinationals with higher shares of production overseas tend to have higher employment in the United States relative to domestic production.

In **Outward Direct Investment and the U.S. Economy** (NBER Working Paper No. 4691), Lipsey notes that direct investment has been the characteristic form of U.S. foreign investment as far back as data exist, and that the United States was the dominant source of the world's direct investment for a long period. America provided well over half of world direct investment in the 1960s, and was still providing over 40 percent in

the 1970s. While U.S. outward direct investment declined to 20 percent of the world's total in the late 1980s, it had recovered to about 25 percent by 1992. The United States has regained its role as the largest supplier of direct investment capital to other countries.

Overseas production has helped American multinationals to retain their world market share, even though the overall U.S. share of world export markets has declined, and despite such short-term changes as exchange rate fluctuations. The total U.S. share in world export markets for manufactured goods had declined from 17 percent in 1966 to about 12 percent today: a 30 percent drop. But Lipsey shows that U.S. multinationals, exporting both from the United States and from their overseas production sites, held onto their market shares more successfully than the country as a whole, experiencing a decline of less than 9 percent over the same period.

The idea that outward investment "exports jobs" is based mainly on the theory that it replaces home-country exports with overseas production. Lipsey reviews a long line of studies that have attempted to find evidence of such a relationship, and concludes that production outside the United States by U.S.-based firms has little effect on exports from the United States. To the extent that there is an effect, it is more likely to be positive than negative.

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Within multinational firms, Lipsey finds, the higher the share of overseas operations in the total production of the firm, the higher the ratio of home employment to home production will be. One possible explanation for this is that a larger share of foreign production requires a larger number of headquarters employees, such as R and D staff and supervisory personnel.

Instead of a vehicle for exporting jobs, Lipsey concludes, outward direct investment is a method by which U.S. firms raise their shares in foreign markets and defend those shares against foreign rivals. The investing firms exploit their company assets, including proprietary technologies, patents, or skills in advertising or marketing, and the opportunity to produce abroad in

turn raises the return on these assets and encourages firms to invest in them. RN

Why Do German Firms Have Apprenticeship Programs?

In Germany, about two-thirds of the work force has completed an apprenticeship of two to three-and-a-half years. The ability of the German system to provide training to the noncollege-bound has attracted the attention of U.S. policymakers, but little is known about the incentives undergirding the apprenticeship system.

We do know that German firms face considerable costs in providing this training, even though apprentices earn low wages. In 1980, the net cost of training an apprentice was roughly \$6000 per year (1990 dollars) in the craft sector and \$9400 per year in the industrial sector. Although these costs may be overstated for smaller craft firms, it is estimated that the larger industrial firms spend roughly \$18,800 to train an apprentice over two years. Still, roughly 70 percent of graduating apprentices leave their training enterprise within five years.

In **Financing Apprenticeship Training: Evidence from Germany** (*NBER Working Paper No. 4557*), **Dietmar Harhoff** and NBER Faculty Research Fellow **Thomas Kane** evaluate three characteristics of the German labor market that could lead firms to accept part of the cost of general training, even in the face of worker turnover. First, through their presence on works councils, unions may enable firms to finance training by restricting worker mobility, and preventing competing firms from poaching workers trained elsewhere. This is probably not the case, though, because turnover rates have remained quite high since World War II. In fact, even among large industrial firms, which have the highest training costs, 50 percent of graduating apprentices leave.

Further, although this is not necessarily evidence of poaching, workers leaving their training firms seem to earn more than those who remain with the firm that trained them. Workers leaving within the first year have current earnings roughly 9 percent higher than those who remained with the training firm, the authors find.

Second, because of rigid wage structures (which essentially impose minimum wages by sector and job category) and high firing costs, firms may value information about workers' productivity highly. Apprenticeships could allow firms to identify the most productive workers before being subject to the more stringent restrictions of German labor laws. However, the authors report that, beginning in 1986, firms were allowed to hire workers on contingent contracts for up to 18 months before being subject to the strict rules on worker dismissals. Therefore, one foundation of the apprenticeship training programs may have been weakened: after 1986, there may be less expensive ways to collect information about workers than by training them as apprentices.

Third, if enough workers find the cost of mobility to be high, and thus stay in their jobs for quite a while, then firms that are isolated from others in their industry might be willing to invest in training. In a sense, the workers who remain with the training firm pay for the training of the apprentices who leave. This is potentially an important explanation for the German experience, given that 80 percent of German respondents report that they have never moved to take another job.

Unfortunately, none of these conditions exist in the United States. First, unions could not be counted on to restrict poaching by competing U.S. firms. Second, wages are more flexible, and firing costs are low. Finally, mobility costs are probably lower in the United States. Although the current policy discussion often has proceeded as if it were simply a lack of imagination or foresight that has limited training efforts in the United States, the cause may be rooted more deeply in our labor market institutions.

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Finally, it is noteworthy that German apprentices seem to fare roughly the same as U.S. high school graduates with no college: they earn no more relative to unskilled workers, and no less

relative to college graduates. Further, despite greater job turnover in the United States, the relationship between age and earnings among German apprentices is quite similar to that of U.S. high school graduates. This is puzzling, given the much discussed differences in training between Germany and the United States.

Given the lower costs of changing jobs and the greater variability of wages for different jobs and different locations in the United States, there simply may be a higher return to job search in the United States than in Germany. In both countries, workers who want to earn more probably choose between taking in-house training and searching for a different job; and firms that want more productive workers probably choose between giving in-house training and searching for a different employee.

German Public Policies Affect Income and Housing of the Aged

Among the seven large OECD countries (Canada, France, Germany, Italy, Japan, the United States, and the United Kingdom), the aging of the population is least marked in the United Kingdom and the United States, but particularly pronounced in Germany. By 2030, more than 25 percent of the German population will be elderly. Further, the proportion of German households headed by individuals aged 60 and above is projected to increase from 21 percent in 1980 to 37 percent in 2030.

Also, by 2030, Germany will have twice as many people aged 85 and older as it does now. Already, the German dependency ratio (that is, the ratio of people who do not work and receive government aid to those who work and pay taxes) is as high as it will be in the United States in 2015. So, comparing how the German and U.S. economies provide for their elderly can be useful for policymakers in both countries.

In **Aging in Germany and the United States: International Comparisons** (NBER Working Paper No. 4530), NBER Research Associate **Axel Börsch-Supan** contrasts the two countries' pension systems, savings behavior, and housing practices, focusing on their effects

on the elderly. He finds that the incentives set by the various policies are reflected strikingly in the actual behavior of the elderly. He points out, for example, that both Germany and the United States have "pay-as-you-go public pension systems," with broad coverage: about 95 percent of all U.S. workers are insured by Social Security, and in Germany, only the self-employed (8.9 percent of the 1988 labor force) and very low-income workers (5.6 percent of the 1988 labor force) are not covered.

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Private pensions, in contrast, contribute income to a larger share of the U.S. elderly than to the German elderly. Further, German public pensions have higher replacement rates (that is, replace more of preretirement income) than U.S. pensions. German social security income is about 33 percent higher than U.S. Social Security income, resulting in an average net replacement ratio of more than 70 percent in Germany.

The German system also favors retirement at or *before* age 65, and heavily penalizes work during early retirement (between ages 60 and 65). This is not the case for the United States.

Overall, according to Börsch-Supan, the difference in the two pension systems suggests that retirement choices are likely to be more uniform in Germany, and to vary more by individual and firm in the United States. Moreover, because retirement income is higher in Germany and the system is less than actuarially fair for late retirees, "we should observe a lower supply of labor in old age in Germany as compared to the United States." Indeed, U.S. labor force participation among those aged 65 and above has fallen from about 27 percent in 1965 to about 10 percent in 1985. But in West Germany, labor force participation for that group fell from 24 percent to just over 5 percent during the same period, and is the lowest in the seven major OECD countries.

Personal savings rates—that is, disposable income minus consumption and excluding social security contributions—have always been higher in Germany than in the United States, Börsch-Supan explains. But that is especially true in re-

cent years: personal savings are about 15 percent for Germany versus 5 percent for the United States in 1990. Because the tax treatment of savings is more favorable in Germany, German savings are higher despite the fact that "two of the main economic rationales for saving—assuring a comfortable retirement income and precaution against high health expenses—are less important in Germany than they are in the United States (because the safety net is tighter in Germany)," he writes.

In the United States, Börsch-Supan continues, most housing subsidies are directed toward homeownership. In Germany, subsidies favor rental housing. For middle-class households and a typical-priced home in 1985, ownership subsidies were two-and-a-half to three times higher in the United States than in Germany. In contrast, in Germany most older people were eligible for rental assistance, covering about 23 percent of rents in 1985.

Thus, elderly Germans are more likely to live in rental housing, while elderly Americans are more likely to stay in their own homes. Less than 50 percent of German elderly, versus 70 percent of U.S. elderly, own a home.

Further, in part because of strong tenant pro-

tection regulations in Germany, the elderly there are less mobile than American elderly. Relatedly, there is little reduction of dwelling size among German homeowners as they age. Actually, moving to a smaller dwelling is discouraged in both countries: in the United States, because of the tax deductions for homeownership and fewer attractive rentals; in Germany, because of "tenure discounts" for renters who stay in a dwelling for a long time.

Finally, compulsory health insurance in Germany covers long-term hospital care, but not (much) in-home care. In sum, "health care coverage, public subsidies which reduce rental housing costs for the elderly, and the generally tighter social safety net for the elderly in West Germany represent economic disincentives for family support and shared living arrangements as compared to the United States," Börsch-Supan finds. As a matter of fact, the most significant difference in elderly housing arrangements in the two countries is that there is more shared living in the United States. Almost one-third of the very old live with adult children or others in the United States, versus one-fifth in Germany. However, the percentage of the elderly living alone is about the same in both countries.

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