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'Til Debt Do Us Part

In the 1980s, the international economy has been burdened by the overhang of Third World debt—hundreds of billions of what started out as petrodollars and are now mainly charges to the loan loss reserves of commercial banks. There are obvious parallels with the 1930s, when the onset of the Great Depression put two-thirds of the foreign securities held by American investors into default. Although he cautions against too literal an interpretation of this parallel, NBER Research Associate **Barry Eichengreen** sees some lessons to be derived from that earlier history.

In **'Til Debt Do Us Part: The U.S. Capital Market and Foreign Lending, 1920-1955** (*NBER Working Paper No. 2394*), Eichengreen shows that the widespread defaults of the 1930s caused private lenders to stop lending not only to those countries that defaulted but also to the high-risk countries. Eichengreen also concludes that "when disruptions to trade and a debt overhang interrupt the flow of lending, outside intervention by government or international institutions may serve to restart it." This happened both in the decade that followed World War I, when the Dawes Loan sidestepped the problem of transfer of reparations, and again in the decade following World War II when the Marshall Plan stimulated the recovery of international trade and investment. Evidence from both of these cases clearly implies that capital markets do not repair themselves quickly.

Eichengreen's analysis of the international capital markets over the full 50-year debt cycle between the 1930s and the 1980s indicates that loan pricing practices did not take into account adequately the readily available macroeconomic information. Moreover, while the borrower's reputation counted for something, investors consistently underestimated the risk of default, particularly for those bonds most at risk. During the 1920s, for instance, such risky countries as Bulgaria and Poland paid interest rates on their loans that were only two or three percentge points above the interest rates on loans to Switzerland, Canada, and Sweden.

Eichengreen also finds litle evidence of a "default penalty," in terms of inferior access to international capital, for the individual countries that did not pay their debts. The consequences of the defaults in the 1930s were general rather than specific. Private portfolio investment in the decade following World War II was a small fraction of such investment in the decade following World War I. What little portfolio investment there was went primarily to large countries and to countries with high ratios of imports to GNP. From 1946–55, countries that paid the debts they had incurred in the 1920s were treated little better than countries that had defaulted.

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The overwhelming majority of international lending during the decade after World War II took the form of government loans, mainly from the United States. The Marshall Plan, rather than private banks and investors, started capital flowing and helped to put the international trading and financial system back on its feet. When private lending started up again, it took the form of direct investment. LB

Taxes and Corporate Finance

Because corporations can deduct interest payments on debt, but not dividend payments, from their income tax liabilities, they may be more likely to issue debt than equity when their marginal income tax rate rises. The availability of other deductions from corporate taxable income (so-called "tax shields") should make firms more likely to prefer equity. In a study of 1418 securities registrations between 1977 and 1984, NBER Research Associate **Jeffrey MacKie-Mason** confirms that the higher a firm's income tax shields are, the less likely it is to issue debt, because the tax shields reduce the value to the firm of the deductibility of interest payments on bonds.

In **Do Taxes Affect Corporate Financing Decisions?** (*NBER Working Paper No. 2632*), MacKie-Mason focuses on the firm's next (or marginal) financing decision, rather than on its overall ratio of debt-to-assets. Studying the debt-to-asset ratio alone, MacKie-Mason contends, presents two problems. First, the firm's decision on its capital structure is made concurrently with other financial decisions; examining the debt structure in isolation without considering other operating and investment factors, such as the firm's growth rate, sheds little light on the question of whether it will choose to issue debt or equity the next time it needs financing. Second, changes in capital structure are relatively infrequent, so the firm's ratio of debt-to-assets on any given day may not indicate the long-term desired ratio.

MacKie-Mason shows that the effect of tax shields on the choice of debt and equity depends on the financial health of the firm. In financially sound firms, the presence of tax shields, such as tax loss carryforwards and investment tax credits that shelter corporate income, increases the likelihood that a firm will choose to issue equity rather than debt. In financially weak firms, the availability of investment tax credits is associated with a lower likelihood of issuing debt, since the firm is relatively unlikely to be able to use the interest deductions.

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More generally, firms in weak financial condition, measured by such indicators as a low or declining sales-to-asset ratio or a large variance in annual earnings, are also likely to opt for equity financing: if a firm's managers believe that bankruptcy or a zero-tax status is likely, then they will avoid incurring a greater debt burden and interest expense when they seek new financing. A firm that has had a significant increase in its debt-to-asset ratio is also likely to prefer adding equity rather than debt. For financially sound firms, investment tax credits are associated with a higher probability of debt issue, perhaps because the tax credits indicate recent purchases of tangible, easily resold capital goods that serve as security for bondholders.

When MacKie-Mason specifically studies 16 industrial sectors, he finds that only the telephone and petroleum refining industries were significantly more likely than the average industry to issue debt than equity.

Many previous studies have found litle or conflicting evidence of tax effects on corporate financing decisions; MacKie-Mason finds clear and consistent effects. He concludes that the effect of taxes on the corporate financing decision is greatest for firms approaching a state of financial distress, indicated either by large tax loss carryforwards or by high tax shields at a time when the predictors of bankruptcy are also high. ML

Deterrence, Work, and Crime

Increasing spending on police departments decreases both the incidence and the seriousness of criminal activities, according to NBER Research Associate **Anne Witte, Helen Tauchen,** and **Harriet Griesinger.** They find that young males (age 18–26) living in Philadelphia during the 1970s were significantly less likely to be involved in crime when the police department had more funds. It is important, the authors observe, that the police budget increase both in real terms (that is, more than inflation) and relative to the amount of serious crime (such as robbery or murder) in the city.

In **Deterrence, Work, and Crime: Revisiting the Issues with Birth Cohort Data** (*NBER Working Paper No. 2508*), Witte, Tauchen, and Griesinger also report that criminal activity decreases with age, time spent at work or in school, and higher IQs. However, receipt of a high school diploma has no significant effect on the probability of committing crime. At the same time, those youths who attend parochial high schools appear less likely to commit crimes than those who attend public high schools. This leads the authors to speculate that both work and parochial schools give youths information about opportunities

and shape their preferences so that they are less likely to commit crimes.

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Not surprisingly, this study also finds that boys who had more police "contacts" as juveniles, whose first arrest was for a serious crime against persons, and who were gang members as juveniles had higher crime rates as young adults. On the other hand, the arrest rates of boys whose parents were born in the United States are not different from the rates for boys whose parents were foreign-born.

Witte, Tauchen, and Griesinger study the criminal behavior of a random sample of males born in 1945 and residing in Philadelphia between their 10th and 18th birthdays. They combine individual information from school records, draft registration, police and FBI records (beginning in 1964, when the youths turned 18 and became adults), and a survey conducted in 1970 with information on Philadelphia neighborhoods and police budgets. DRH

Monetary Policy and Performance in the United States, Japan, and Europe

Two oil shocks in the 1970s and widely fluctuating exchange rates during the 1980s posed difficult challenges for central banks in the major industrial countries. An NBER study by **Stanley Fischer** (*NBER Working Paper No. 2475*) evaluates the success of monetary policies in the United States, Japan, Germany, and the United Kingdom from 1973–86 in addressing such challenges.

Fischer's main conclusion is that tight monetary policy and a determination by the central bank to suppress inflation must be combined with wage flexibility to avoid a recession while keeping inflation in check. Because the Federal Reserve System and the Bank of England lacked credibility, reducing inflation after the second oil shock required deep recessions in the United States and the United Kingdom in 1980–2. That is, because firms and workers in the United States and the United Kingdom were not convinced that their central banks would take serious steps to bring down inflation, they continued to raise their prices and wages until interest rates and unemployment soared.

On the other hand, the Bundesbank's reputation as an inflation fighter was clear. Nonetheless, Germany also fell into a recession during 1980–2 as the monetary authorities pushed down the inflation rate by reducing the growth of the money supply. The Bundesbank's credibility for exercising tight control of monetary policy did not help Germany avoid a downturn.

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Only Japan avoided a recession after the second oil shock, while experiencing inflation rates of about the same level as Germany's. Fischer attributes this successful response in part to a tightening of monetary policy. Also essential, however, was the behavior of Japanese wage earners. Faced with a real loss of GNP because of the increase in oil prices, Japanese workers accepted lower nominal wage increases and lower real wages. As a result, the slower growth in Japan's money supply led to lower inflation without a recession. In contrast, when wage inflation rose in Germany in 1981, the Bundesbank's tighter monetary policy led to a recession.

Fischer also concludes that allowing the money supply to grow at a fixed rate can cause unnecessary movements in output and unemployment. The relationship between the money supply and nominal GNP, known as the velocity of money, was very unstable in all four countries during various periods after the first oil shock. Failing to adjust to money growth targets for these shifts in velocity could lead to larger economic fluctuations.

(This study is also forthcoming in the Bank of Japan's *Monetary and Economic Studies*.)

Why Go to Law School?

During the 1986–7 academic year, the average tuition at private American law schools (not including the cost of books, room, or board) was almost $8300, up from $3800 in 1979–80. But average starting salaries for lawyers in eight large cities also were

up, to $36,900 in 1987 from $20,900 in 1980. Although tuition rose faster than starting salaries did during this period, NBER Research Associate **Ronald Ehrenberg** calculates that attending law school is still a worthwhile investment.

In **An Economic Analysis of the Market for Law School Students** (*NBER Working Paper No. 2602*), Ehrenberg compares starting salaries for lawyers with starting salaries in alternative occupations that lawyers might have chosen. He reports that new MBAs with nontechnical undergraduate degrees earned $31,500 in 1987. Starting salaries for college graduates who majored in economics averaged $23,600, and for college graduates with humanities degrees averaged $20,300. Considering the number of years a typical individual works, attending law school remains a good investment despite increasing costs, Ehrenberg concludes.

Ehrenberg also examines the factors that affect the starting salaries of law school graduates. He finds that students who had higher LSAT scores received higher starting salaries. Students from higher-ranked law schools also earned higher starting salaries, as did graduates of private rather than public law schools. On the other hand, Ehrenberg finds that "the race and gender composition of a school's student body was unrelated to its graduates' starting salaries."

The differentials in starting salaries shrink somewhat when Ehrenberg controls for the percentage of graduates placed in public sector, public interest, or public service positions—where salaries are lower than in the private sector. The average starting salary for 1986 law school graduates was about $36,000 for those entering private practice, $29,000 for academics, and $27,000 for government lawyers. Jobs in the public sector are more likely to be filled by graduates of public than private law schools and by graduates of lower-ranked law schools. Between 1974 and 1986, though, the proportion of graduates entering private practice rose from 52 percent to 62 percent, while the share of graduates entering other areas of the profession dropped from 36 percent to 31 percent.

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Highly rated law schools have higher tuition than the other schools, and the total costs of private law schools are anywhere from 30 percent to 75 percent higher than the costs of public law schools. Ehrenberg finds, however, that the economic returns to attending highly rated private law schools far outweigh their additional costs. Not surprisingly, the number of applicants per space and the fraction of accepted applicants who attend these schools are high. He notes, too, that law schools that raise their tuition above their competitors' levels will have fewer accepted applicants who enroll, and as a result may find that the average quality of their students declines.

Ehrenberg also reports that lawyers' salaries increase quickly with experience. For instance, average starting salaries in a set of New York law firms in 1982 were $25,000, but four years later lawyers still with these firms averaged $50,000. Similarly, in Washington in 1982, the average starting lawyer in a set of firms earned $25,500, but by 1986 these lawyers averaged $48,000.

Ehrenberg's empirical analyses use data from a wide variety of sources, including: annual salary surveys conducted by the National Association for Law Placement; *Student Lawyer*; *Barron's Guide to Law Schools*; and the College Placement Council.

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