



S&L Borrowing Raised Interest Rates

In the 1980s, real inflation-adjusted interest rates were unusually high. Although the average real interest rate on short-term Treasury bills averaged over 0.1 percent from 1926–81, it was 4.7 percent from 1981–90. Now, a new NBER study concludes that some part of the unusually high real yields on Treasury bills in the 1980s may be directly connected with the decade-long crisis in the savings and loan (S&L) industry and the federal government's handling of that crisis.

In Real Interest Rates and the Savings and Loan Crisis: The Moral Hazard Premium (NBER Working Paper No. 3754), John Shoven, Scott Smart, and Joel Waldfogel suggest that lax government regulation combined with federal deposit insurance induced many S&Ls (also known as "thrift institutions" or "thrifts") to finance very risky investments by issuing ever-larger volumes of certificates of deposits (CDs). They write, "Owners and managers of troubled thrifts, responding to the incentives provided by underpriced deposit insurance, offered higher and higher rates in an attempt to attract new funds. Depositors, anticipating that the government would protect their investments, actively sought out higher yields in local and national markets. . . . The rates offered by Treasury securities rose to compete with these quasi-risk-free substitutes sold by S&Ls."

The authors note that CDs and Treasury bills are close substitutes. Both have similar maturities, are offered in denominations of \$10,000 and up, and are guaranteed by the U.S. government. Since CDs competed directly with Treasury bills, the federal government was forced to pay more to borrow from the public as interest rates paid on CDs rose.

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Shoven, Smart, and Waldfogel estimate the extra interest cost to the federal government under a range of plausible assumptions. If as much as one-fifth of the increase in real interest rates that occurred in the 1980s can be attributed to their explanation, then the present value of the extra cost could be as much as \$146 billion. This was in addition to the amount spent to bail out insolvent thrifts and pay off depositors in bankrupt institutions.

Japanese Foreign Direct Investment

By early 1989, Japan had replaced the United Kingdom as the largest foreign investor in U.S. real estate. The rate at which Japanese investors had begun to acquire such well-known properties as Rockefeller Center rose rapidly. However, foreign investors in total own only 1 percent of U.S. real estate, according to a recent NBER study by **Kenneth Froot.**

In Japanese Foreign Direct Investment (NBER Working Paper No. 3737), Froot notes that the growth and composition of Japanese foreign direct investment (FDI) in the United States has been similar to the worldwide pattern. Between 1985 and 1988, Japanese FDI annual inflows to the United States had quadrupled, to almost \$22 billion. Despite this rapid growth, Japanese holdings are still relatively small: Japanese FDI comprises only about one-fifth of the total stock of all FDI in the United States, accounting for about 1 percent of U.S. production of goods and services.

In terms of new FDI purchases, Japanese FDI shifted away from mining, agriculture, forestry, and fisheries in developing countries toward investments in financial services and real estate in developed countries. Japanese FDI also shifted geographically toward North America: new investments in North America accounted for about 25 percent of Japanese outflows from 1951–75, but rose to about 50 percent in 1988. Europe's share of Japanese FDI rose from 12 to 20 percent over this same period, while the developing countries' share fell from over 60 percent to under 30 percent.

The pattern of Japanese investment also shifted within developing countries. For example, most Japanese FDI in Asia used to go into oil and mining in Indonesia. More recently, though, investments in real estate and insurance in Hong Kong, and in manufacturing of chemicals, electrical machinery, and transportation equipment in Thailand, have grown rapidly.

In the United States, Japanese investments used to be concentrated in wholesaling, where they facilitated Japanese exporting. During the 1980s, though, Japanese firms began to invest in U.S. manufacturing, in part because U.S. trade barriers, actual or anticipated, discouraged them from selling Japanese products made in their factories at home.

In recent years, Japanese FDI in the United States also shifted from new facilities to mergers and acquisitions, such as Sony's purchase of Columbia Pictures. Between 1979 and 1986, 23 percent of Japanese FDI went into mergers and acquisitions and 48 percent into new facilities. In 1987, however, 31 percent of Japanese FDI went into mergers and acquisitions, and only 25 percent for new facilities. For all other countries combined, over 50 percent of FDI

went to mergers and acquisitions and 30 percent to new facilities.

Froot confirms that the sharp increase in Japanese and worldwide flows of FDI has not been matched by similar increases of FDI into Japan. For instance, the share of foreign-owned firms represented in total U.S. sales grew from 5 percent to 10 percent between 1977 and 1986. In Japan, though, the corresponding share fell from only 2 percent to a mere 1 percent during this period. This decline occurred in spite of an easing of official restrictions on FDI in Japan.

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Also, Japanese affiliates abroad are far more likely to use home country suppliers than other foreign affiliates, and are more likely to have a Japanese chief executive. Japanese manufacturing firms in the United States import three times as much per worker as other foreign affiliates in the United States. And, while 20 percent of U.S. firms in Japan were headed by Americans, 85 percent of Japanese firms in the United States were headed by Japanese.

Froot concludes that some of these differences may be explained by the relatively recent influx of Japanese FDI compared to FDI from other countries. Nonetheless, these differences and the size of Japanese FDI have sparked considerable controversy in several receiving countries.

Lunap-Suma Payments Lower Wages in the 1980s

In the latter half of the 1980s, union wages rose about 1.5 percentage points less per year than would have been expected, given the level of inflation and the unemployment rate. Some of that wage moderation can be explained by the rapid expansion of alternative compensation schemes, according to a recent NBER study.

In Lump-Sums, Profit Sharing, and Labor Costs in the Union Sector (NBER Working Paper No. 3630), Linda Bell and David Neumark note that much of the moderation in union wages in the 1980s occurred in conjunction with union settlements that entailed nominal wage givebacks or reduced wage growth. Still, in 1986 and 1987, more than half of all union workers were covered by contracts including lump-

sum payments (a one-time cash payment in lieu of an increase in the base wage). These plans seem to be fully entrenched in labor settlements, according to 1990 figures.

Bell and Neumark estimate that a 10 percentage point increase in the share of workers covered by lump-sum contracts reduces national annual wage growth by 0.3 or 0.4 percentage points. Since the share of workers covered by lump-sum contracts rose from about 10 percent in the late 1970s and early 1980s to about 60 percent in 1984–8, lump-sum deals reduced wage inflation by about 1.5 percentage points from what it would have been otherwise.

Profit-sharing plans were far less prevalent than lump-sum plans, and they tapered off sharply in the latter part of the 1980s. In general, profit sharing has been more widespread in manufacturing than in nonmanufacturing industries. Bell and Neumark suggest that workers and managers may view profit-sharing schemes skeptically in the adversarial environment of collective bargaining. Thus, profit sharing is not likely to exist without a strong union that can monitor reporting of profits.

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Bell and Neumark estimate that a 10 percentage point increase in the share of workers covered by profit-sharing plans also leads to a 0.3 percentage point reduction in wage inflation. However, since relatively few union workers were covered by profit sharing in the 1980s, its impact on overall wage inflation was much smaller than that of lump-sum payments.

Using data for 304 individual firms, Bell and Neumark confirm that the existence of a lump-sum or profit-sharing plan coincides with lower growth in labor costs. However, the trend toward these alternative forms of compensation occurs when there is a general pattern of wage concessions in labor settlements and overall lower wage growth.

Still, Bell and Neumark observe that in years when firms had profit-sharing provisions, wages grew more moderately than in other years. Similarly, in profit-sharing years, employment growth was larger relative to other years or other firms.

At the firm level, profit-sharing plans appear to be linked causally to wage moderation. However, because profit sharing is not widespread in the union sector, it can offer only a partial explanation of the aggregate moderation in union wage inflation.

Bell and Neumark use data from 5443 contracts negotiated in 1241 private industrial firms between 1975 and May 1988, excluding construction. DRF

Pension Plan Investments

Most large firms manage their own pension plan investments. While federal laws have tightened the requirements for funding and vesting pension plans, the only requirement regarding the assets is that they be invested "prudently." As holders of annuities issued by First Executive Corporation have discovered, this criterion is both subjective and difficult to apply.

NBER researcher **Leslie Papke** finds that most large pension plans invest less in equities and more in fixed-income securities than experts in pension fund management recommend. The traditional view calls for a 40 percent bond/60 percent equity mix.

In **The Asset Allocation of Private Pension Plans** (NBER Working Paper No. 3745), Papke shows that the average single-employer defined-benefit plan has 50 percent of its holdings in fixed-income assets, 20 percent in equities, and 20 percent in pooled funds. Pooled funds are the combined contributions of many plans that are managed by one or more banks. The largest pension plans rely less on pooled funds and directly invest more in fixed-income securities. On average, they have a 60 percent fixed, 30 percent equity, and 2 percent pooled fund mix.

Only about 20 percent of single-employer definedbenefit plans hold more than 60 percent in equity. Less than 10 percent of these plans hold more than 60 percent in long-term fixed-income securities.

Papke finds that the average defined-contribution pension plan invests about 10 percent more in equities than the average defined-benefit plan does: 41 percent in fixed-income assets, 30 percent in equity, and 20 percent in pooled funds. For larger plans, the mix is 49 percent fixed, 38 percent equity, and 2 percent pooled.

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Multiemployer defined-benefit plans (typically unionized plans) invest less in equities: 63 percent in fixed-income securities, 19 percent in equities, and 8 percent in pooled funds. Multiemployer defined-contribution plans hold a 73 percent fixed, 5 percent equity, and 8 percent pooled fund mix.

Papke reports pension plan investment shares from a sample of IRS Form 5500 returns, weighted to represent the population of plans with more than 100 participants.

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This volume is part of a larger NBER study aimed at increasing our understanding of the conditions under which financial markets are vulnerable to disruption, and the economic consequences that might

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Martin Feldstein is president and CEO of the NBER and the George F. Baker Professor of Economics at Harvard University.

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