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Foreign Investment and the Dollar

The decline of the dollar since the mid-1980s has been accompanied by a dramatic increase in foreign direct investment (FDI) in the United States. While foreigners still own a relatively small share of the U.S. capital stock—under 15 percent—the rate at which they are acquiring U.S. productive assets has increased threefold since the dollar's peak in 1984.

In **Exchange Rates and Foreign Direct Investment: An Imperfect Capital Markets Approach** (*NBER Working Paper No. 2914*), **Kenneth Froot** and **Jeremy Stein** explain why a weak domestic currency increases foreigners' ability to buy certain domestic assets: when it is difficult for the capital market to monitor the progress of investments, internal funds are cheaper than funds obtained from external sources. By redistributing wealth toward foreigners, a currency depreciation increases their capacity to finance internally, thereby allowing them to bid more aggressively for assets. Froot and Stein claim that dollar depreciation will stimulate foreign purchases of "informationally intensive" assets, such as real estate and controlling shares of plants and companies. By contrast, the foreign demand for assets that pose no monitoring problems—such as publicly traded stocks and bonds—should be insensitive to the value of the dollar.

Froot and Stein examine both quarterly and annual data on foreign capital inflows into the United States between 1973 and 1988. They find that foreign *direct* investment increases by about $5 billion for each 10 percent fall in the value of the dollar. This relationship between the exchange rate and FDI exists in a wide variety of industries, although it is particularly strong in manufacturing.

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Froot and Stein also note that over half of FDI goes into mergers and acquisitions of existing companies. The effect of the exchange rate is strongly significant on this form of capital inflows. Also, as the theory predicts, the exchange rate has no effect on foreign portfolio investments in stocks and bonds, they find.

ML

Managerial Objectives Drive Acquisitions

While takeovers may bring large increases in share prices to stockholders of acquired companies, stockholders of the typical acquiring company lose money, according to a new NBER study by **Randall Mørck, Andrei Shleifer,** and **Robert Vishny.** They find that buying rapidly growing companies is generally a mistake, that diversifying into unrelated industries is costly, and that managers with below-average performance tend to make acquisitions that reap below-average returns.

In **Do Managerial Objectives Drive Bad Acquisitions?** (*NBER Working Paper No. 3000*), Mørck, Shleifer, and Vishny examine the change in stock prices of 327 firms that bought other firms worth at least 5 percent of the acquirer's value between 1975 and 1987. They measure the return to the acquisition as the change in the acquirer's stock price as a percentage of the purchase price of the target. Only 42 percent of acquirers had their stock price rise as a result of the merger. The average return was -0.65 percent, they find.

Mørck, Shleifer, and Vishny report that buying rapidly growing firms depresses the stock price of the acquiring firm. They estimate that the return to buying a firm whose sales doubled during the previous five years is worth about 11 percentage points less to the acquirer than buying a firm with no sales growth.

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The authors also find that the stock market was neutral or slightly favorable toward diversification in the 1970s but penalized it in the 1980s. During the 1970s, the stock prices of acquirers of firms in unrelated industries rose slightly, but in the 1980s these prices fell. In the 1980s, buying firms in related industries has become far more attractive than buying unrelated firms, perhaps because of the decline in antitrust enforcement by the federal government.

Finally, managers whose performance is below average for their industry tend to make bad acquisitions. Mørck, Shleifer, and Vishny measure firm performance in two ways: as the growth in equity value or the growth in profits over the previous three years, relative to the average for the firm's industry. They estimate that the difference between above-average managers and below-average managers in the return to an acquisition is about seven percentage points. This finding suggests that managers who are good at running their companies are also good at choosing acquisitions.

Puzzling Differences in Black/White Wealth

The average young white family has more than five times the assets of the average young black family, according to NBER Research Associates **Francine Blau** and **John Graham.** The average wealth of white households headed by someone aged 24 to 34 was $23,700 in 1976–8, while the comparable black household had less than $4200 in assets. Blau and Graham define wealth as the sum of net financial and business assets and equity in cars and homes.

In **Black/White Differences in Wealth and Asset Composition** (*NBER Working Paper No. 2898*), the authors report that the average income of white households in their sample was about $16,000, while the average for blacks was around $10,000. However, differences in all forms of wealth were much larger. On average, whites had over $11,000 in equity in their homes, but blacks had less than $3000. Whites had equity in automobiles of about $2400, but blacks had only $1100. The net assets in other real estate, businesses, and farms for whites were around $7000, versus $438 for blacks. And the financial assets in bank accounts, stocks, and bonds of the average white household totaled almost $3000, while blacks reported only $71 in such assets after subtracting the value of personal loans.

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Blau and Graham note that wealth will be higher in families with higher incomes, headed by married

couples, and living outside central cities where homeownership is less common. For all of these reasons, whites are likely to have more wealth than blacks. For instance, white households headed by a married couple had $27,000 in wealth while those headed by a single person had only $12,800. Among blacks, households with married heads had $6200 in wealth while those with unmarried heads had $1700. However, taking into account racial differences in income explains as little as one-fourth of the black/white wealth gap. Blau and Graham suggest that young whites have wealthier parents than young blacks with the same current incomes, and may receive larger inheritances and gifts from them. Discrimination against blacks in housing and credit markets also may have inhibited their accumulation of wealth in homes or businesses.

Blau and Graham use data from the 1976 and 1978 National Longitudinal Surveys. The mean age of the family heads in their study is 30.

Lower Federal Taxes May Raise State Interest Costs

The sweeping reductions in marginal tax rates in the Tax Reform Act of 1986 reduced the demand for tax-exempt interest income among high-bracket individual investors. NBER Research Associate **James Poterba** finds that, as a result, borrowing costs for states and local governments increased substantially.

In **Tax Reform and the Market for Tax-Exempt Debt** (*NBER Working Paper No. 2900*), Poterba uses historical data on bond yields to calculate the "implied marginal tax rate" in the municipal bond market. This is the tax rate of an investor who would receive the same aftertax return by holding nontaxable prime-grade municipal bonds or high-grade taxable debt. When municipal yields are far below comparable taxable yields, the implied tax rate is high. When investors' marginal tax rates fall, or when such reductions are expected to occur sometime in the future, they will pay less for tax-exempt obligations. Therefore, the interest rates on these bonds will rise, and the implied tax rate will decline.

Poterba investigates whether the implied tax rate depends on both current and expected future tax policy by examining how the taxable/tax-exempt yield differential responds to major tax policy announcements. In June 1980, for example, when candidate Ronald Reagan announced his plans for across-the-board marginal tax rate reductions, the implied marginal tax rate in the municipal debt market fell by almost four percentage points.

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The municipal market also reacted to important events in the legislative history of the 1986 Tax Reform Act. In December 1985, when the House of Representatives passed a preliminary version of the Tax Reform Act, the implied tax rate fell by nearly four percentage points. When the Senate considered including municipal bond interest in the minimum tax base, in March 1986, the implied tax rate fell by nearly ten percentage points. These results, along with comparable evidence from other tax reform discussions during the last two decades, suggest that the municipal market is very sensitive to changes in expected *future* tax rates.

The average implied tax rate on long-term municipal bonds was 15.5 percent in 1988, far less than the 30.3 percent average during the second half of the 1970s. At prevailing taxable interest rates of approximately 10 percent, this shrinking differential implies that the last decade has witnessed a 150-basis-point increase in the borrowing cost for states and localities. Poterba concludes that "the tax reforms of 1981 and 1986, by compressing the distribution of marginal tax rates and lowering the top marginal rates, have [reduced] . . . the subsidy that states and localities receive relative to taxable borrowers."

DRH

No Long-Term Memory in U.S. Business Cycles

Is the record-setting expansion of the 1980s likely to continue for an extended time, or is the United States overdue for a recession? According to a new

study for the NBER by **Joseph Haubrich** and **Andrew Lo,** a contraction is likely to follow the current lengthy expansion, but it will be brief. They find that the economy moves rapidly toward its average level of moderate growth. Therefore, prolonged expansions and contractions are the exception, not the rule.

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In **The Sources and Nature of Long-Term Memory in the Business Cycle** (*NBER Working Paper No. 2951*), Haubrich and Lo search for long-term recurring patterns in the American economy, often called "long-term memory" or "long-range dependence." Long-term memory implies that the economy will recover slowly from recessions, taking decades, not years. Bad periods, like the 1930s, will see weak booms but long and deep recessions. Prosperous times, like the 1980s, will involve long expansions, only occasionally marred by mild recessions. Haubrich and Lo find little evidence for such long-term patterns in real quarterly GNP data since World War II, and in real annual GNP data since the Civil War. For example, they observe that the recessions of the 1980s were short but severe, which is inconsistent with long-term memory.

Many economists consider long-term memory to be a natural outcome of the growth and decline of major industries. For example, when an important industry—such as steel—enters a long decline, it weakens the entire economy, even in otherwise good years. Conversely, when a growing "recession-proof" industry—such as computers—dominates, it takes the edge off otherwise serious contractions. However, Haubrich and Lo find that such industrial gains are neither strong enough nor long enough to create long-term memory in the entire economy. Perhaps that is because, as one industry grows, another declines, offsetting the other's effects on the economy and thus preventing shocks from having a permanent impact on overall output.

How much longer can we expect the current expansion to last? No one can predict future strikes, deficits, and inflation perfectly. On average, though, in a five-year period, the unemployment rate moves more than 95 percent of the way back to its long-run average, according to Haubrich and Lo. This implies that today's economy will have little impact on unemployment. In contrast, if the economy exhibited long-range dependence, then the unemployment rate would move only half as much over the same five-year period, and changes in today's economy would have a substantial impact on the economy of the 1990s.

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