

NBER *Reporter*

NATIONAL BUREAU OF ECONOMIC RESEARCH

WINTER 1994/5

In This Issue

Program Report:	
Corporate Finance	1
Research Summaries:	
The Political Economy of Workers' Compensation in the Early Twentieth Century	5
Health Insurance and Individual Labor Market Decisions	8
Executive Compensation	11
NBER Profiles	14
Conferences	17
Bureau News	33
Bureau Books	47
Current Working Papers	48

Program Report

Corporate Finance

Robert W. Vishny

The NBER's Program in Corporate Finance was established in fall 1991, and grew out of the earlier financial markets and monetary economics program. Traditionally, corporate finance is defined as "the study of the investment, financing, and dividend decisions of firms." To that traditional list of topics, I would add "most financial or contractual issues relating to the firm, including internal organization, ownership structure, and corporate governance." Corporate finance is institutionally oriented, with research often driven by issues of current importance. Most of the NBER's research on corporate finance consists of empirical studies on firm-level data motivated by relevant, applied theory.

Recent work by NBER economists has centered on a variety of topics. Since the program is barely three years old, the origins of much of this research predate its formal start. This is especially true of the extensive research on corporate restructuring, but it is also true of some of the research on bankruptcy and financial distress, and the research on banks and the role of credit. One new area beginning to attract attention is the cross-country comparison of corporate governance and financing practices.

Corporate Restructuring

NBER researchers began to study corporate restructuring in earnest in the late 1980s in the midst of a huge wave of mergers, acquisitions, and leveraged management buyouts. The total value of U.S. assets changing hands in the 1980s was approximately \$1.3 trillion, with 143 of the 1980 *Fortune* 500 becoming acquired by 1989. This wave of activity sparked much public controversy. At issue were: the large number of hostile takeovers; the perception that employees and communities were being hurt; the heavy use of debt in many transactions and the fear that basic R and D was being sacrificed; and the large profits made by corporate raiders and corporate managements.

NBER researchers have conducted extensive studies on the causes and consequences of these mergers and acquisitions. One important question

NBER Reporter

NATIONAL BUREAU OF ECONOMIC RESEARCH

The National Bureau of Economic Research is a private, nonprofit research organization founded in 1920 and devoted to objective quantitative analysis of the American economy. Its officers and board of directors are:

President and Chief Executive Officer—*Martin Feldstein*
Executive Director—*Geoffrey Carliner*
Director of Finance and Administration—*Sam Parker*

BOARD OF DIRECTORS

Chairman—*Paul W. McCracken*
Vice Chairman—*John H. Biggs*
Treasurer—*Gerald A. Polansky*

DIRECTORS AT LARGE

Peter Aldrich	George C. Eads	Robert T. Parry
Elizabeth E. Bailey	Martin Feldstein	Peter G. Peterson
John Herron Biggs	George Hatsopoulos	Richard N. Rosett
Andrew Brimmer	Karen N. Horn	Bert Seidman
Carl F. Christ	Lawrence R. Klein	Kathleen P. Utgoff
Don R. Conlan	Leo Melamed	Donald S. Wasserman
Kathleen B. Cooper	Merton H. Miller	Marina v. N. Whitman
Jean A. Crockett	Michael H. Moskow	John O. Wilson

DIRECTORS BY UNIVERSITY APPOINTMENT

Jagdish W. Bhagwati, <i>Columbia</i>	James L. Pierce, <i>California, Berkeley</i>
William C. Brainard, <i>Yale</i>	Andrew Postlewaite, <i>Pennsylvania</i>
Glen G. Cain, <i>Wisconsin</i>	Nathan Rosenberg, <i>Stanford</i>
Franklin Fisher, <i>MIT</i>	Harold T. Shapiro, <i>Princeton</i>
Saul H. Hymans, <i>Michigan</i>	Craig Swan, <i>Minnesota</i>
Marjorie B. McElroy, <i>Duke</i>	Michael Yoshino, <i>Harvard</i>
Joel Mokyr, <i>Northwestern</i>	Arnold Zellner, <i>Chicago</i>

DIRECTORS BY APPOINTMENT OF OTHER ORGANIZATIONS

Marcel Boyer, *Canadian Economics Association*
Mark Drabenstott, *American Agricultural Economics Association*
Richard A. Easterlin, *Economic History Association*
Gail Fosler, *The Conference Board*
A. Ronald Gallant, *American Statistical Association*
Robert S. Hamada, *American Finance Association*
Charles Lave, *American Economic Association*
Rudolph A. Oswald, *American Federation of Labor and Congress of Industrial Organizations*
Gerald A. Polansky, *American Institute of Certified Public Accountants*
James F. Smith, *National Association of Business Economists*
Josh S. Weston, *Committee for Economic Development*

Contributions to the National Bureau are tax deductible. Inquiries concerning contributions may be addressed to Martin Feldstein, President, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138-5398.

The *Reporter* is issued for informational purposes and has not been reviewed by the Board of Directors of the NBER. It is not copyrighted and can be freely reproduced with appropriate attribution of source. Please provide the NBER's Public Information Department with copies of anything reproduced.

Preparation of the *NBER Reporter* is under the supervision of Donna Zerwitz.

Requests for subscriptions, changes of address, and cancellations should be sent to *Reporter*, National Bureau of Economic Research, Inc., 1050 Massachusetts Avenue, Cambridge, MA 02138-5398. Please include the current mailing label.

addressed is: Has all of this restructuring activity made the U.S. economy any more efficient or competitive? While the evidence is far from definitive, the studies suggest that there is cause for optimism. Steven N. Kaplan finds strong evidence of improvements in operating profit in a sample of 1980s leveraged buy-outs.¹ Various NBER researchers have documented the role of the 1980s bustup takeovers in moving firms away from the ill-fated diversification of the 1960s toward greater specialization.² Arguably, this favorable reconfiguration of the economy has been made possible by the more lenient antitrust policy followed in the United States since 1982.

Before jumping to the conclusion that the average merger entails huge synergies, however, it is important to note that many acquisitions appear to be motivated by the welfare of bidding management, rather than by the desire to increase shareholder wealth. Randall Mørck, Andrei Shleifer, and I show that over 50 percent of acquisitions in the 1980s were greeted by a negative reaction from bidding shareholders.³ Kaplan and Jeremy C. Stein provide evidence that the second generation management buyouts of the late 1980s were encouraged by generous deals for bidding management, overpriced junk bonds, and fee structures that encouraged investment bankers to suggest questionable deals.⁴

NBER studies also have found that the negative social impact of takeovers may be exaggerated. Frank R. Lichtenberg and Donald Siegel, and Sanjai Bhagat, Shleifer, and I find that the employment effects of hostile takeovers are not very large and are disproportionately felt by highly compensated white collar employees.⁵ Joshua

Rosett finds little evidence that union wage cuts are a major source of gains in hostile takeovers.⁶ Finally, Bronwyn H. Hall finds that the effect of takeovers on R and D expenditures is limited because the most R and D-intensive firms do not typically enter into highly leveraged transactions.⁷

Banks and the Role of Credit

One open question in monetary economics concerns the channel for the transmission of monetary policy. In particular, the link between monetary tightening and the contraction of credit made available by banks has not been firmly established empirically using microdata. NBER researchers Anil K. Kashyap and Stein, in an interesting series of papers, have brought us closer to understanding these issues.⁸ Kashyap, Stein, and David W. Wilcox show that monetary tightening appears to be correlated with a shift toward the use of commercial paper and a decline in the use of bank financing. But, as Charles C. Calomiris, Charles P. Himmelberg, and Paul Wachtel argue, the large, well-capitalized firms who issue commercial paper appear to be less affected by a tightening of bank credit.⁹ If mostly smaller firms are being cut off from bank credit when the monetary authority tightens, how does increased issuance of commercial paper by large firms end up substituting for bank credit? Calomiris, Himmelberg, and Wachtel suggest that the intermediation works as follows: During tight money periods, banks cut loans to small and medium-size firms. Large firms make up for this by extending more trade credit to smaller firms and finance this through increased issuance of commercial paper. While there is more empirical work to be done here, the prospects for better understanding the role of banks and

credit in a monetary contraction are exciting.

NBER researchers also have been documenting the special role of banks in providing credit. Using Japanese data, Takeo Hoshi, Kashyap, and David S. Scharfstein show that the sensitivity of investment to cash flow is much greater for firms without a bank relationship than for those with one.¹⁰ Using data from the National Survey of Small Business Finance, Mitchell A. Petersen and Raghuram G. Rajan have been studying the importance of banking relationships, and how the quality of those relationships depends on the concentration of lending institutions.¹¹ Interestingly, they find that typically more credit is available in highly concentrated credit markets. They attribute this to the fact that high concentration increases the likelihood that the borrower and lender will be dealing with each other for a long time, which gives the lender a greater incentive to invest in the relationship.

Bankruptcy and Financial Distress

With the rise in leveraged buyouts and the use of junk bonds in the mid- to late-1980s, the collapse of Drexel Burnham Lambert, and the recession of the early 1990s, bankruptcy and financial distress became a more focal issue in corporate finance research. Paul Asquith, David Mullins, Jr., and Eric Wolff have conducted the most careful study to date on the long-run default experience of junk bonds.¹² They find a significantly higher default rate than previous researchers after taking into account unfavorable exchanges offered to junk bondholders. Asquith, Robert Gertner, and Scharfstein study a large sample of junk bond issuers to explore the determinants of a successful debt restructuring after default.¹³ Among other things, their study suggests that bank fi-

nancing decreases the likelihood of an out-of-court settlement. Philippe Aghion, Oliver Hart, and John Moore have compared the efficiency properties of various bankruptcy procedures including the current Chapter 11 procedure.¹⁴ Their main insight is the construction of alternative bankruptcy procedures that separate the decision about how the post-bankruptcy assets will be deployed from how the proceeds from the assets will be divided among the various claimants.

International Comparisons of Corporate Financing and Governance Practices

A relatively new research area in corporate finance is the cross-country comparison of different financial and governance systems. This area originally was motivated by the apparent differences between U.S., U.K., Japanese, and German financial systems. Japanese and German corporate finance is dominated by banks, whereas the United States and the United Kingdom have much bigger bond markets. German banks typically also own equity in the firms they lend to, while this is prohibited in the United States. These differences are alleged to be important for corporate governance, with the bank-dominated systems purportedly providing superior oversight of management. Also, the close bank relationships are hypothesized to result in fewer credit constraints and a greater ability to take on leverage. NBER researchers are just starting to make progress on some of these questions.

Hoshi, Kashyap, and Scharfstein have studied the banks versus bond market trade-off in Japan.¹⁵ They find that Japanese corporate finance is moving toward the U.S. model. Rajan and Luigi Zingales

undertake an ambitious study of leverage across countries.¹⁶ They find that the claim of greater leverage in bank-dominated countries is exaggerated. Differences in leverage between countries are not that large, although there are important differences in the average maturity of debt. Finally, they find that equity issuances by mature firms are much more common abroad than they are in the United States. Jun-Koo Kang and René M. Stulz study the market's reaction to security issues by Japanese firms.¹⁷ Their evidence suggests that the negative reaction to equity issues by mature firms is much less pronounced in Japan than in the United States. Kaplan, in a series of papers, contrasts corporate governance in the United States with that in Japan and Germany.¹⁸ He finds that the probability of top management turnover in Japan is similar to that in the United States, and shows a similar sensitivity to poor performance. One apparent difference between the countries is that top management turnover in Japan is associated more strongly with negative earnings and less strongly with poor stock returns than in the United States. This is consistent with the relative importance of debt-related discipline, which is triggered when operating earnings fall below required interest payments. Corporate governance in Germany does not appear to be too different from corporate governance in the United States. For example, Kaplan does not find that the sensitivity of executive turnover to performance in Germany is affected significantly by the degree of bank ownership of equity.

¹⁶S. N. Kaplan, "The Effects of Management Buyouts on Operating Performance and Value," *Journal of Financial*

Economics 24, 2 (October 1989), pp. 217-254.

²S. Bhagat, A. Shleifer, and R. W. Vishny, "Hostile Takeovers in the 1980s: The Return to Corporate Specialization," *Brookings Papers on Economic Activity: Microeconomics* (1990); S. N. Kaplan and M. S. Weisbach, "The Success of Acquisitions: Evidence from Divestitures," *NBER Reprint No. 1742*, August 1992, and *Journal of Finance* (March 1992).

³R. Mørck, A. Shleifer, and R. W. Vishny, "Do Managerial Objectives Drive Bad Acquisitions?" *NBER Working Paper No. 3000*, June 1989, and *Journal of Finance* (March 1990).

⁴S. N. Kaplan and J. C. Stein, "The Evolution of Buyout Pricing and Financial Structure," *NBER Reprint No. 1835*, December 1993, and *Quarterly Journal of Economics* (May 1993).

⁵F. R. Lichtenberg and D. Siegel, "The Effect of Takeovers on the Employment and Wages of Central Office and Other Personnel," *NBER Reprint No. 1539*, March 1991, and *Journal of Law and Economics* (October 1990); S. Bhagat, A. Shleifer, and R. W. Vishny, "Hostile Takeovers in the 1980s: The Return to Corporate Specialization," *Brookings Papers on Economic Activity: Microeconomics* (1990).

⁶J. Rosett, "Do Union Wealth Concessions Explain Takeover Premiums? The Evidence on Contract Wages," *NBER Working Paper No. 3187*, November 1989.

⁷B. H. Hall, "The Impact of Corporate Restructuring on Industrial Research and Development," *Brookings Papers on Economic Activity: Microeconomics* (1990).

⁸A. K. Kashyap, J. C. Stein, and D. W. Wilcox, "Monetary Policy and Credit Conditions: Evidence from the Composition of External Finance," *NBER Working Paper No. 4015*, March 1992, and *American Economic Review* (March 1993); J. C. Stein and A. K. Kashyap, "The Impact of Monetary Policy on Bank Balance Sheets," *NBER Working Paper No. 4821*, August 1994.

⁹C. W. Calomiris, C. P. Himmelberg, and P. Wachtel, "Commercial Paper, Corporate Finance, and the Business Cycle: A Microeconomic Perspective," *NBER Working Paper No. 4848*, September 1994.

¹⁰T. Hoshi, A. K. Kashyap and D. S.

Scharfstein, "The Role of Banks in Reducing the Costs of Financial Distress in Japan," *NBER Working Paper No. 3435*, September 1990, and *Journal of Financial Economics* (September 1990).

¹¹M. A. Petersen and R. G. Rajan, "The Effect of Credit Market Competition on Lending Relationships," *NBER Working Paper No. 4921*, November 1994, and *Quarterly Journal of Economics*, forthcoming.

¹²P. Asquith, D. Mullins, and E. Wolff, "Original Issue High Yield Bonds: Aging Analyses of Defaults, Exchanges, and Calls," *Journal of Finance* (September 1989).

¹³P. Asquith, R. Gertner, and D. S. Scharfstein, "Anatomy of Financial Distress: An Examination of Junk Bond Issuers," *NBER Working Paper No. 3942*, December 1991, and *Quarterly Journal of Economics* (August 1994).

¹⁴P. Aghion, O. Hart, and J. Moore, "Economics of Bankruptcy Reform," *NBER Working Paper No. 4097*, June 1992, and *Journal of Law, Economics and Organization* 8 (1992), pp. 523-546.

¹⁵T. Hoshi, A. K. Kashyap, and D. S. Scharfstein, "The Choice Between Public and Private Debt: An Analysis of Post-Deregulation Corporate Financing in Japan," *NBER Working Paper No. 4421*, August 1993.

¹⁶R. G. Rajan and L. Zingales, "What Do We Know About Capital Structure? Some Evidence from International Data," *NBER Working Paper No. 4875*, October 1994.

¹⁷J.-K. Kang and R. M. Stulz, "How Different Is Japanese Corporate Finance? An Investigation of the Information Content of New Security Issues," *NBER Working Paper No. 4908*, October 1994.

¹⁸S. N. Kaplan, "Top Executive Rewards and Firm Performance: A Comparison of Japan and the United States," *NBER Reprint No. 1900*, August 1994, and *Journal of Political Economy* (June 1994); S. N. Kaplan and B. A. Minton, "'Outside Intervention' in Japanese Companies: Its Determinants and Implications for Managers," *NBER Working Paper No. 4276*, February 1993; S. N. Kaplan, "Top Executives, Turnover, and Firm Performance in Germany," *NBER Working Paper No. 4416*, August 1993.