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Investment and Financing Constraints: Evidence from the Funding of Corporate Pension Plans

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ABSTRACT

I exploit sharply nonlinear funding rules for defined benefit pension plans in order to identify the dependence of corporate investment on internal financial resources in a large sample. Capital expenditures decline with mandatory contributions to DB pension plans, even when controlling for correlations between the pension funding status itself and the firm's unobserved investment opportunities. The effect is particularly evident among firms that face financing constraints based on observable variables such as credit ratings. Investment also displays strong negative correlations with the part of mandatory contributions resulting solely from unexpected asset market movements.

REFERENCES

Almeida, Heitor, Murillo Campello, and Michael S. Weisbach, 2004, The cash flow sensitivity of cash, *Journal of Finance* **59**, 1777–1804.

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Angrist, Joshua D., and Victor Lavy, 1999, Using Maimonides' Rule to estimate the effect of class size on student achievement, *Quarterly Journal of Economics* **114**, 533–575.

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Baker, Malcolm, Jeremy C. Stein, and Jeffrey Wurgler, 2003, When does the market matter? Stock prices and the investment of equity-dependent firms, *Quarterly Journal of Economics* **118**, 909–968.

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Bergstresser, Daniel, Mihir A. Desai, and Joshua Rauh, 2006, Earnings manipulation, pension assumptions, and managerial investment decisions, Quarterly Journal of Economics, forthcoming.

Google Scholar

Blanchard, Olivier J., Florencio Lopez-de-Silanes, and Andrei Shleifer, 1994, What do firms do with cash windfalls? *Journal of Financial Economics* **36**, 337–360.

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Bodie, Zvi, 1990, The ABO, the PBO, and pension investment policy, *Financial Analysts Journal* **46**, 27–34.

Google Scholar

Cleary, Sean, 1999, The relationship between firm investment and financial status, *Journal of Finance* **54**, 673–692.

Web of Science® | Google Scholar

Clifton, Gregory, Steven Oman, Michael Mulvaney, and Tassos Philippakos, 2003, *Analytical Observations Related to U.S. Pension Obligations* (Moody's Investors Service).

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Fama, Eugene F., and Kenneth R. French, 1997, Industry costs of equity, *Journal of Financial Economics* **43**, 153–193.

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Fama, Eugene F., and James D. MacBeth, 1973, Risk, return and equilibrium: Empirical tests, *Journal of Political Economy* **81**, 607–636.

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Fazzari, Steven M., Glenn R. Hubbard, and Bruce C. Petersen, 1988, Financing constraints and corporate investment, *Brookings Papers on Economic Activity* **1**, 141–195.

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Fazzari, Steven M., Glenn R. Hubbard, and Bruce C. Petersen, 2000, Investment-cash flow sensitivities are useful: A comment on Kaplan-Zingales, *Quarterly Journal of Economics* **115**, 695–705.

Google Scholar

Froot, Kenneth A., David S. Scharfstein, and Jeremy C. Stein, 1993, Risk management: Coordinating corporate investment and financing policies, *Journal of Finance* **48**, 1629–1658.

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Gertner, Robert, Eric Powers, and David Scharfstein, 2002, Learning about internal capital markets from corporate spin-offs, *Journal of Finance* **57**, 2479–2506.

Web of Science® | Google Scholar

Gomes, Joao F., 2001, Financing investment, *American Economic Review* **91**, 1263–1285.

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Gross, David B., 1995, The investment and financing decisions of liquidity constrained firms, Unpublished Ph.D. dissertation, Massachusetts Institute of Technology.

Google Scholar

Grossman, Sanford J., and Oliver D. Hart, 1982, Corporate financial structure and managerial incentives, in John J. McCall, ed.: *The Economics of Information and Uncertainty* (University of Chicago Press, Chicago).

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Härdle, Wolfgang, 1990, *Applied Nonparametric Regression* (Cambridge University Press, Cambridge, United Kingdom).

Google Scholar

Hart, Oliver, and John Moore, 1995, An analysis of the role of hard claims in constraining management, *American Economic Review*, 567–585.

Google Scholar

Hawkins, David F., 2001, *Retiree Benefits*, Harvard Business School Case 9-197-021.

Google Scholar

Hayashi, Fumio, 1982, Tobin's marginal q and average q: A neoclassical interpretation, *Econometrica* **50**, 213–224.

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Ibbotson Associates, 2003, *Stocks, Bonds, Bills, and Inflation 2003 Yearbook: Market Results for 1926–2002* (Ibbotson Associates, Chicago).

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Kaplan, Steven N., and Luigi Zingales, 1997, Do investment-cash flow sensitivities provide useful measures of financing constraints? *Quarterly Journal of Economics* **112**, 169–215.

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Kaplan, Steven N., and Luigi Zingales, 2000, Investment-cash flow sensitivities are not valid measures of financing constraints, *Quarterly Journal of Economics* **115**, 707–712.

Web of Science® | Google Scholar

Lamont, Owen, 1997, Cash flow and investment: Evidence from internal capital markets, *Journal of Finance* **52**, 83–109.

Web of Science® | Google Scholar

Lamont, Owen, Christopher Polk, and Jesús Saá-Requejo, 2001, Financial constraints and stock returns, *Review of Financial Studies* **14**, 529–554.

Web of Science® | Google Scholar

Langbein, John H., and Bruce A. Wolk, 2000, *Pension and Employee Benefit Law*, 3rd ed. (Foundation Press, New York).

Google Scholar

Modigliani, Franco, and Merton H. Miller, 1958, The cost of capital, corporation finance, and the theory of investment, *American Economic Review* **48**, 261–297.

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Moyen, Nathalie, 2004, Investment-cash flow sensitivities: Constrained versus unconstrained firms, *Journal of Finance* **59**, 2061–2092.

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Myers, Stewart C., and Nicholas S. Majluf, 1984, Corporate financing and investment decisions when firms have information that investors do not have, Journal of Financial Economics **13**, 187–221.

Google Scholar

Pension Benefit Guaranty Corporation, 2003, Cash contribution projections for JCWAA, corporate bond, corporate bond for 3 years, and corporate bond with no DRC for 3 years, Tables prepared for Congressional testimony.

Google Scholar

Perfect, Steven B., and Kenneth W. Wiles, 1994, Alternative constructions of Tobin's q: An empirical comparison, *Journal of Empirical Finance* **1**, 313–341.

Google Scholar

Petersen, Mitchell, 1992, Pension reversions and worker-stockholder wealth transfers, *Journal of Finance* **107**, 1033–1056.

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Poterba, James M., 1988, Comment: Financing constraints and corporate investment, *Brookings Papers on Economic Activity* **1**, 200–206.

Google Scholar

Silverman, B. W., 1986, *Density Estimation for Statistics and Data Analysis* (Chapman & Hall, London).

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Stulz, Rene, 1990, Managerial discretion and optimal financing policies, *Journal of Financial Economics* **26**, 3–27.

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Wooldridge, 2002, *Econometric Analysis of Cross Section and Panel Data* (MIT Press, Cambridge).

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Zion, David, and Bill Carcache, 2002, *The Magic of Pension Accounting* (Credit Suisse First Boston).

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