

Stock Market Efficiency and Economic Efficiency: Is There a Connection?

JAMES DOW, GARY GORTON

First published: 18 April 2012

<https://doi.org/10.1111/j.1540-6261.1997.tb02726.x>

Citations: 443

ABSTRACT

In a capitalist economy, prices serve to equilibrate supply and demand for goods and services, continually changing to reallocate resources to their most efficient uses. However, secondary stock market prices, often viewed as the most “informationally efficient” prices in the economy, have no direct role in the allocation of equity capital since managers have discretion in determining the level of investment. What is the link between stock price informational efficiency and economic efficiency? We present a model of the stock market in which: (i) managers have discretion in making investments and must be given the right incentives; and (ii) stock market traders may have important information that managers do not have about the value of prospective investment opportunities. In equilibrium, information in stock prices will guide investment decisions because managers will be compensated based on informative stock prices in the future. The stock market indirectly guides investment by transferring two kinds of information: information about investment opportunities and information about managers' past decisions. However, because this role is only indirect, the link between price efficiency and economic efficiency is tenuous. We show that stock price efficiency is not sufficient for economic efficiency by showing that the model may have another equilibrium in which prices are strong-form efficient, but investment decisions are suboptimal. We also suggest that stock market efficiency is not necessary for investment efficiency by considering a banking system that can serve as an alternative institution for the efficient allocation of investment resources.

REFERENCES

Allen, Franklin, 1993, Stock markets and resource allocation, in Mayer Colin and Vives Xavier, Eds.: *Capital Markets and Financial Intermediation* (Cambridge University Press).

[Google Scholar](#)

Arrow, Kenneth J., 1953, Le role des valeurs boursieres pour la repartition la meilleure des risques, (CNRS, Paris) *English translation in Review of Economic Studies* (1964) 31, 91–96.

[Web of Science®](#) | [Google Scholar](#)

Barro, Robert J., 1990, The stock market and investment, *Review of Financial Studies* 3, 115–131.

[Web of Science®](#) | [Google Scholar](#)

Bosworth, Barry, 1975, The stock market and the economy, *Brookings Papers on Economic Activity* 2, 257-300.

[Google Scholar](#)

Boyd, John, and Edward Prescott, 1986, Financial intermediary-coalitions, *Journal of Economic Theory* 38, 211-232.

[Web of Science®](#) | [Google Scholar](#)

Bresnahan, Timothy, Paul Milgrom, and Jonathan Paul, 1992, The real output of the stock exchange, in Griliches Zvi, Ed.: *Output Measurement in the Service Sectors* (University of Chicago Press).

[Web of Science®](#) | [Google Scholar](#)

Chandler, Alfred D., 1977, *The Visible Hand: The Managerial Revolution in American Business* (Harvard University Press, Cambridge).

[Google Scholar](#)

Diamond, Douglas, 1984, Financial intermediation and delegated monitoring, *Review of Economic Studies* 51, 393-414.

[Web of Science®](#) | [Google Scholar](#)

Diamond, Douglas, and Robert E. Verrecchia, 1981, Information aggregation in a noisy rational expectations economy, *Journal of Financial Economics* 9, 221-235.

[PubMed](#) | [Web of Science®](#) | [Google Scholar](#)

Diamond, Peter, 1967, The role of a stock market in a general equilibrium model with technological uncertainty, *American Economic Review* 57, 759-773.

[Web of Science®](#) | [Google Scholar](#)

Dow, James, and Gary Gorton, 1996, Stock market efficiency and economic efficiency: Is there a connection?, Working paper, The Wharton School, University of Pennsylvania.

[Google Scholar](#)

Dow, James, and Gary Gorton, 1995, Profitable informed trading in a simple general equilibrium model of asset pricing, *Journal of Economic Theory* 67, 327-369.

[Web of Science®](#) | [Google Scholar](#)

Dow, James, and Gary Gorton, 1994a, Arbitrage chains, *Journal of Finance* **49**, 819–849.

[Web of Science®](#) | [Google Scholar](#)

Dow, James, and Gary Gorton, 1994b, Noise trade, delegated portfolio management, and economic welfare, *Journal of Political Economy*, forthcoming.

[Google Scholar](#)

Dow, James, and Rohit Rahi, 1996, Informed trading, investment, and welfare, Working paper, European University Institute.

[Google Scholar](#)

Fama, Eugene F., 1976, *Foundations of Finance* (Basic Books, New York).

[Google Scholar](#)

Fama, Eugene F., and Merton H. Miller, 1972, *The Theory of Finance* (Dryden Press, Hinsdale).

[Web of Science®](#) | [Google Scholar](#)

Fischer, Stanley, and Robert C. Merton, 1984, Macroeconomics and finance: The role of the stock market, *Carnegie-Rochester Conference Series on Public Policy* **21**, 57–108.

[Google Scholar](#)

Fishman, Michael, and Kathleen Hagerty, 1992, Insider trading and the efficiency of stock prices, *Rand Journal* **23**, 106–122.

[Web of Science®](#) | [Google Scholar](#)

Glosten, Lawrence, and Paul Milgrom, 1985, Bid, ask, and transaction prices in a specialist market with heterogeneously informed traders, *Journal of Financial Economics* **14**, 71–100.

[Web of Science®](#) | [Google Scholar](#)

Gorton, Gary, and Frank Schmid, 1996, Universal banking and the performance of German firms, NBER Working paper 5453.

[Google Scholar](#)

Grant, Simon, Stephen King, and Ben Polak, 1996, Informational externalities, share-price based incentives, and managerial behavior, *Journal of Economic Surveys* **10**, 1–21.

[Web of Science®](#) | [Google Scholar](#)

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

[Web of Science®](#) | [Google Scholar](#)

Hayek, Friedrich A., 1945, The use of knowledge in society, *American Economic Review* **35**.

[Web of Science®](#) | [Google Scholar](#)

Hellwig, Martin F., 1980, On the aggregation of information in competitive markets, *Journal of Economic Theory* **22**, 477–498.

[Web of Science®](#) | [Google Scholar](#)

Henrotte, Philippe, 1992, Market behavior with endogenous production and asymmetric information, Stanford University, Working paper.

[Google Scholar](#)

Hirshleifer, J., 1972, The private and social value of information and the reward to inventive activity, *American Economic Review* **61**, 561–574.

[Web of Science®](#) | [Google Scholar](#)

Holmstrom, Bengt, and Jean Tirole, 1993, Market liquidity and performance monitoring, *Journal of Political Economy* **101**, 678–709.

[Web of Science®](#) | [Google Scholar](#)

Kihlstrom, Richard, and Steven Matthews, 1990, Managerial incentives in an entrepreneurial stock-market model, *Journal of Financial Intermediation* **1**, 57–79.

[Google Scholar](#)

Korajczyk, Robert A., Deborah J. Lucas, and Robert L. McDonald, 1990, Understanding stock price behavior around the time of equity issues, in R. Glenn Hubbard, Ed.: *Asymmetric Information, Corporate Finance and Investment* (NBER and University of Chicago Press).

[Google Scholar](#)

Kyle, Albert S., 1985, Continuous auctions and insider trading, *Econometrica* **53**, 1315–1335.

[Web of Science®](#) | [Google Scholar](#)

Leland, Hayne, 1992, Insider trading: Should it be prohibited?, *Journal of Political Economy* **100**, 859–887.

[Web of Science®](#) | [Google Scholar](#)

Leland, Hayne, 1978, Information, managerial choice and stockholder unanimity, *Review of Economic Studies* 45, 527-534.

[Web of Science®](#) | [Google Scholar](#)

Leland, Hayne, and David Pyle, 1977, Informational asymmetries, financial structure, and financial intermediation, *Journal of Finance* 32, 371-387.

[Web of Science®](#) | [Google Scholar](#)

Lucas, Deborah J., and Robert L. McDonald, 1990, Equity issues and stock price dynamics, *Journal of Finance* 45, 1019-1043.

[Web of Science®](#) | [Google Scholar](#)

Paul, Jonathan, 1992, On the efficiency of stock-based compensation, *Review of Financial Studies* 5, 471-502.

[Web of Science®](#) | [Google Scholar](#)

Roberts, Harry V., 1967, Statistical versus clinical prediction of the stock market, Working paper, University of Chicago.

[Google Scholar](#)

Tobin, James, 1969, A general equilibrium approach to monetary theory, *Journal of Money, Credit, and Banking* 1, 15-29.

[Google Scholar](#)

Welch, Ivo, 1994, The cross-sectional determinants of corporate capital expenditures: A multinational comparison, Working paper, UCLA.

[Google Scholar](#)

Citing Literature



Download PDF

[Privacy Policy](#)

[Terms of Use](#)

[About Cookies](#)

[Manage Cookies](#)

[Accessibility](#)

[Wiley Research DE&I Statement and Publishing Policies](#)

[Developing World Access](#)

HELP & SUPPORT

[Contact Us](#)

[Training and Support](#)

[DMCA & Reporting Piracy](#)

OPPORTUNITIES

[Subscription Agents](#)

[Advertisers & Corporate Partners](#)

CONNECT WITH WILEY

[The Wiley Network](#)

[Wiley Press Room](#)

Copyright © 1999-2024 John Wiley & Sons, Inc or related companies. All rights reserved, including rights for text and data mining and training of artificial intelligence technologies or similar technologies.

WILEY