



American Finance Association

External Financing and Liquidity: Discussion

Author(s): Andrew H. Chen

Source: *The Journal of Finance*, Vol. 39, No. 3, Papers and Proceedings, Forty-Second Annual Meeting, American Finance Association, San Francisco, CA, December 28-30, 1983 (Jul., 1984), pp. 908-910

Published by: Blackwell Publishing for the American Finance Association

Stable URL: <http://www.jstor.org/stable/2327955>

Accessed: 27/11/2009 07:47

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=black>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Blackwell Publishing and American Finance Association are collaborating with JSTOR to digitize, preserve and extend access to *The Journal of Finance*.

<http://www.jstor.org>

3. Paul Asquith and David Mullins, Jr. "The Impact of Initiating Dividend Payments on Shareholders' Wealth." *Journal of Business*. 56 (January 1983), 77-96.
4. ———. "Equity Issues and Stock Price Dilution." Working paper: Harvard Business School, 1983b.
5. Sudipto Bhattacharya and Jay R. Ritter. "Innovation and Communication: Signalling with Partial Disclosure." *The Review of Economic Studies*. 50 (April 1983), 331-346.
6. James Brickley. "Shareholder Wealth, Information Signaling and the Specially Designated Dividend—An Empirical Study." *Journal of Financial Economics*. 12 (August 1983), 187-209.
7. Robert W. Clower. "A Reconsideration of the Microfoundations of Monetary Theory." *Western Economic Journal*. 6 (December 1967), 1-8.
8. Larry Y. Dann. "Common Stock Repurchases: An Analysis of Returns to Bondholders and Stockholders." *Journal of Financial Economics*. 9 (June 1981), 113-138.
9. Larry Y. Dann and Wayne H. Mikkelson. "Debt Issuance and Capital Structure Change: Impact on Shareholder's Wealth." *Journal of Financial Economics*. To appear, 1984.
10. Eugene Fama. "The Empirical Relationship between the Dividend and Investment Decisions of Firms." *American Economic Review*. 64 (June 1974), 304-318.
11. G. Handjinicolaou and A. Kalay. "Wealth Redistributions or Changes in Firm Value: An Analysis of Returns to the Bondholders and to the Stockholders Around Dividend Announcements." *Journal of Financial Economics*. To appear, 1984.
12. Marie-Claire Huart. *Analyse De L'Efficiency Du Marche Boursier Americain Au Travers Des Augmentations De Capital Par Emission D'Actions*. Institut d'Administration et de Gestion, Universite Catholique de Louvain: Belgium, 1980.
13. Allan Kleidon. "Stock Prices as Rational Forecasters of Future Cash Flows." Working paper: University of Chicago, 1982.
14. Ronald W. Masulis. "Stock Repurchase by Tender Offer: An Analysis of the Causes of Common Stock Price Changes." *Journal of Finance*. 35 (May 1980), 305-319.
15. Merton H. Miller and Franco Modigliani. "Dividend Policy, Growth and the Valuation of Shares." *Journal of Business*. 34 (October 1961), 411-433.
16. Merton H. Miller and Kevin Rock. "Dividend Policy under Asymmetric Information." Working paper: University of Chicago, 1982.
17. Merton H. Miller and Myron Scholes. "Dividends and Taxes: Some Empirical Evidence." *Journal of Political Economy*. 90 (December 1982), 1118-1141.
18. Stewart D. Myers and Nicholas J. Majluf. "Stock Issues and Investment Policy When Firms Have Information Investors Do Not Have." Working paper #1258-81: Massachusetts Institute of Technology, 1981.
19. Jack Shohet and Richard Rikert, eds. *Accounting Trends and Techniques*. New York: American Institute of CPAs, Inc., 1982.
20. Theo Vermaelen. "Common Stock Repurchases and Market Signalling: An Empirical Study." *Journal of Financial Economics*. 9 (June 1981), 113-138.
21. Ross Watts. "The Information Content of Dividends." *Journal of Business*. 46 (April 1973), 191-211.

DISCUSSION

ANDREW H. CHEN*: Abundant empirical evidence has shown a negative relation between a firm's external financing and its market value, though there does not appear to be a single, widely accepted explanation for this observation. Professor Huberman's paper represents an important addition to the existing theories that attempt to explain the empirical observation that external financing activities of firms are usually accompanied by a decrease in their equity values. The financial

* Southern Methodist University.

theories that have been advanced in the literature include the theory of signalling with differential information, the theory of differential taxes, and the theory of agency. Professor Huberman has introduced another theory, namely, the theory of liquidity, which is consistent with the observed phenomenon of a negative relation between a firm's external financing and equity value. Huberman's liquidity theory is similar to the Keynesian money demand for speculative purposes. In a world with liquidity costs and uncertainty, firms have reasons to hold money or liquid assets for the purpose of not losing the opportunities to invest in profitable projects.

A firm's liquidity need is met by maintaining an adequate level of money or liquid assets. According to Huberman's theory, the firm's earnings from the existing projects and the funds raised externally from capital markets are the main sources of maintaining its desirable level of liquidity. If there is a short-fall in the firm's earnings (current or future), the firm will be forced to rely on a more costly source of maintaining its level of liquidity, namely, external financing. Consequently, any external financing is viewed as a sign of poor current or future earnings which will have a negative effect on the firm's value. Thus, the liquidity theory is consistent with the empirical observation that the stock prices of a firm are negatively correlated with its external financing activities.

In order to illustrate his theory of liquidity, Huberman has applied a simple stochastic dynamic programming model to analyze the optimal decisions of allocating resources between investments in the liquid assets and in the risky projects. The tradeoff between the benefits and the costs of liquid assets is the key determinant of the optimal investment decision. It should be pointed out that Huberman's model is very similar to the stochastic cash management models in the literature. The formulation of the model and the analysis of its properties are lucidly presented in Sections II and III in the paper. The results of the model and the policy implications are generally consistent with economic intuition. Among several results of the model, I have found the one that identifies the four regions of investment/financing policies of a firm described in Figure 1 in the paper to be of most importance. I believe that linking this result with theories of the industrial life cycle would provide new insights capable of predicting the differential levels of liquid assets held by different firms in the different industries.

Although Huberman has recognized that a firm's investment opportunities are usually uncertain in the real world, he has chosen to assume that they are certain in his model. This assumption, in my judgment, has eliminated some of the most complicated and interesting aspects of the liquidity management problems faced by financial managers. Under a more realistic assumption that both the earnings from risky projects and the investment opportunities are uncertain, then the interplays of these two stochastic variables will result in a larger variety of investment/financial policies. For instance, in the more realistic model, an external financing activity of a firm could very well be the result of a firm's having more favorable investment opportunities and higher level of liquidity need in a changing environment, and would not necessarily be a sign of a short-fall in its current or future earnings from risky projects. A simple theory which

could be consistent with the observed phenomenon may not tell the whole story.

The remainder of my comments will deal with pointing out some specific directions for extension of the current model to make the liquidity theory more complete.

(1) The risk-neutrality assumption in the current model appears to be too strong. In a world with uncertainty, even the returns on liquid assets are uncertain. Therefore, the liquid assets provide not only the liquidity-service, but also a portfolio diversification service. Adding only the assumption of risk-aversion, the portfolio diversification service of the liquid assets can be incorporated into a model analyzing a firm's optimal decision on holding liquid assets. Chen, Jen and Zions [2] have studied the joint portfolio and liquidity service of assets.

(2) The current model has assumed that firms issue risk-free debt. In view of the risky projects undertaken by the firms, I believe that an assumption of issuing risky debt by the firms is more appropriate. Furthermore, I believe that incorporating risky debt into the model of liquidity management is a natural way to combine the theories of agency, signalling and liquidity and will provide a more complete and unified theory necessary to explain the observed phenomenon mentioned above.

(3) The current model has not explicitly incorporated the adjustment costs for portfolio rebalancing. As Chen, Jen and Zions [1] have shown, ignoring the adjustment costs in the portfolio rebalancing would lead to non-optimal portfolio decisions. Explicitly incorporating the adjustment costs into the current model might change the regions of investment/financing policies described in the paper.

(4) The current paper represents a microeconomic decision analysis which ignores the presence of other decision-making units and the capital market. Extending the model to a market equilibrium along the lines of Chen, Kim and Kon [3] should provide interesting additional new insights in firms' demand for liquidity and the possible effects of their external financing activities.

In sum, Professor Huberman's paper has made an important contribution which should stimulate additional work in the area of investment/financing decisions of firms.

REFERENCES

1. Andrew H. Chen, Frank C. Jen, and Stanley Zions, "The Optimal Portfolio Revision Policy," *Journal of Business*, (January 1971), 51-61.
2. Andrew H. Chen, Frank C. Jen and Stanley Zions, "The Joint Determination of Portfolio and Transaction Demands for Money," *Journal of Finance*, (March 1974), 175-186.
3. Andrew H. Chen, E. Han Kim and Stanley J. Kon, "Cash Demand, Liquidation Costs and Capital Market Equilibrium Under Uncertainty," *Journal of Financial Economics*, (September 1975), 293-308.
4. Gur Huberman, "External Financing and Liquidity," *Journal of Finance*, (May 1984).