

THE ECONOMIC SIGNIFICANCE OF EQUITY CAPITAL:
LESSONS FROM VENTURE CAPITAL INVESTING
(1991)

By 1991, the date of this talk, I had established a close and enormously rewarding intellectual relationship with Hyman Minsky, a post-Keynesian economist marginalized by the discipline until the Global Financial Crisis demonstrated the relevance of his work (as discussed at length in chapter 8 of my book). The talk challenged the orthodox theory of corporate finance as formulated by Merton Miller and Franco Modigliani, which asserts that the value of the enterprise is independent of the composition of the right hand side of the balance sheet, the relative quantities of debt and equity. It emphasized how critical is the assumption of liquidity in securities markets and how economically damaging is its endogenous disappearance under stress, a lesson learned at systemic scale in 2008.

I was motivated to address this subject by the rich irony of last year's Nobel Prize in Economics. The end of the LBO era was crowned by the recognition of work which purported to demonstrate that the value of an enterprise is independent of the volume of its debt. In response, this paper is an attempt to inform the post-Keynesian critique of Miller-Modigliani ("M-M") with the experience of one whose profession it is to invest equity capital in imperfect markets under conditions of uncertainty. That is to say, I and my firm act as proprietary venture investors, prepared to forego liquidity in return for inside information and to accept strategic responsibility for the performance of the enterprises in which we invest.

As preparation for addressing M-M (1), I have drawn on Douglas Vickers' discussion of the nature and role of "money capital" in the real world--beyond the General Equilibrium domain where the issues of finance are, alternatively, oxymoronic or redundant. As a practitioner, I can testify that Vickers' examination of the "full marginal cost of relaxing the money capital availability constraint" integrates the analysis of operating and financial issues under realistic conditions.(2) Vickers and like-minded analysts such as Marris(3), Herendeen(4) and Chamberlain(5) have succeeded, I judge, in establishing the economic role of equity capital in an uncertain world.

My purpose here is to challenge M-M's equation of the prices of securities as established in the financial markets with the value of their issuers. I will focus on three areas in which the story that M-M tells simply fails to correspond with reality: the presumption of liquidity in security markets, the boundary constraint represented by bankruptcy, and the functioning of the take-over market.

The Presumption of Market Liquidity Even Vickers seems to presume a degree of liquidity in securities markets that recent experience suggests may not exist when it is needed.(6) Of course, the most dramatic Life Experiment to date has been the Crash of October 1987. More subtly, the post-Drexel breakdown in the junk bond market provided a demonstration of how radically discontinuous can be the value of an enterprise, on the one hand, and the value of its securities, on the other. The liquidation of the market maker engendered a massive and indiscriminate decline in the market prices of those securities with which it was identified. And this decline was entirely independent of the current or prospective operating performance of the enterprises that were Drexel's former clients.

Now, at a fundamental level in our monetary economy, access to effective liquidity has been the rarely analyzed quid pro quo that compensates equity owners for their loss of managerial control. At the level of the individual issuer of securities, a decline in effective liquidity in the market for its securities is likely to be reflected in increased concern with issues of "corporate governance" on the part of its security holders. At the level of the market, a decline in effective liquidity should reveal itself in increased volatility.

More generally, the capital markets have been transformed since MM was written by three forces that feed on each other. First, the institutionalization of the savings flow since World War II has enormously concentrated market decision-making. Second, the spread of indexation --by which investment managers commit to being long-term holders of the component stocks -- represents as much recognition of an institutional fact as it does adherence to a problematic conclusion of analysis. Major money managers have limited ability to avoid owning major stocks. Incidentally, the gain in what I would call "tactical" efficiency in the trading of the component stocks goes hand in hand with the loss of "strategic" efficiency in the valuation of the host of smaller stocks outside the index. Finally, the computerization of the marketplace and the creation of derivative and synthetic securities have radically shortened the time constants that allow decisions based on dynamically derived data to interact without generating chaotic feedback and discontinuities in the pricing of assets.(7) Computerization of the "casino" has added a new, systemic element to the randomness explicit in Keynes' characterization. No wonder that the managers of inefficiently large pools of capital should respond to performance anxiety in a contingent world by indexing for safety.

The manifest imperfections observable in the capital markets create management problems not only for investors. They establish the basis for a fundamental asymmetry between the "cost" --as adjusted for relative risk of access--of internally generated capital and externally generated capital. Simply put, internal cash flow (buffered, as Fazzari and Petersen show, by stocks of working capital⁽⁸⁾) is what a firm can rely on to build a business through historical time. External equity capital is a sort of windfall to be amassed whenever the market valuation of the firm's worth allows prudent managers to "buy cash" from investors at prices above the historic median of market multiples.

The Realities of Bankruptcy

Analysts of optimal finance in the theory of the firm generally tip their hats to bankruptcy as a boundary condition at the limit of their concerns.⁽⁹⁾ In fact, our monetary economy has entered a period in which the transformation of debt into equity is its participants' predominant financial concern. One might add that anytime anyone offers buyers the prospect of 10% real rates of return on securities, the securities issued are, at bottom, not debt of any adjectival character --they are equity. Nonetheless, the "junk" issued during the 1980's in such quantities was legally debt. And the processes, more or less legally defined, by which reality asserts itself in the portfolios of security holders and on the balance sheets of issuers have themselves become essential objects of analysis.

One prime consequence of taking bankruptcy seriously is this: new equity committed to restructuring an insolvent enterprise dare not accept the market's discounted value of the outstanding debt without the formal assent of the debt holders -- which, in turn, may not be available by a voluntary exchange this side of bankruptcy. For it is the face value of the debt that represents the senior claims on available assets and cash flow --not what the market says the debt is worth as traded securities. Thus, the "enterprise value" of a firm and the market value of its securities may only be equated by direct negotiation or in court. The actual experience of bankruptcy presents an obvious demonstration of the independent economic existence of the enterprise from the securities that M-M equates with it.

The Dynamics of the Take-Over Market

Chamberlain is representative of post-Keynesian analysts in accepting in principle one neoclassical assertion of the theoretical second best:

If the market for corporate control functioned perfectly, a management concerned with its security would follow policies that maximized the wealth of its stockholders⁽¹⁰⁾

In fact, the take-over market of the 1980's represents a superb example of how the aggressive pursuit of clearly visible and rational self-interest by the players produced an incoherent and literally self-liquidating game. Academic rationalizations such as that of Michael Jensen⁽¹¹⁾ -- as distinct from reportorial muck-raking⁽¹²⁾ -- of the LBO-funded take-over boom of the 1980's have almost willfully missed the underlying dynamic that drove the activity: fees. Fees for the initiators, fees for the lenders, fees for the advisers -- fees whose absolute size might appear modest relative to the absolute value of the deal itself but which loomed large in the cash flow of the firms and the individuals rewarded.

Most significantly the payment of fees to the equity investors themselves, often in an amount that approached or even exceeded the dollars they committed as cash to the deal, decoupled the attractiveness of the deal from the investment merits of the enterprise whose operating and financial future had been "put into play." In turn, the "value" placed on the enterprise by the price paid for its securities became a function of the fee-driven volume of cash raised from bank lenders and junk bond buyers. While the LBO boom lasted, the market price of a firm's equity was subject to radical revision by the rationalizations required to justify the winning bid in a competitive auction. Neither had any necessary, fundamental relationship to the value of the enterprise issuing the securities that were traded in the market and purchased in the deal.

The "Price" of Equity Capital

Vickers nicely skewers the point at which M-M converges with the Capital Asset Pricing Model. Invocation of the full set of General Equilibrium assumptions is required in order to identify the cost of equity capital with the "beta" of the enterprise's common stock, let alone ultimately with the "virtual betas" of the "virtual projects" that exhaustively comprise the enterprise: "the logic of this line of argument is that in the last analysis no reason exists for the existence of firms at all."⁽¹³⁾ Contrariwise, in the real world the cost of equity capital as the "market price of risk" is not an observable. In fact, I can testify that the process of defining what degree of financial leverage is appropriate to what degree of operating leverage in the specific competitive and technologically evolving environment of a particular issuer of securities --this is a matter of several months' work for experienced professionals given the full cooperation and assistance of operating managers. The market, by contrast, necessarily values securities -- not the underlying businesses.

Keynes memorably captured the task facing the "long-term investor":

...Investment based on genuine long-term expectation is so difficult today as to be scarcely practicable. He who attempts it must surely lead much more laborious days and run greater risks than he who tries to guess better than the crowd how the crowd will behave; and, given equal intelligence, he may make more disastrous mistakes....It needs more intelligence to defeat the forces of time and our ignorance of the future than to beat the gun.... Furthermore, an investor who proposes to ignore near-term market

fluctuations needs greater resources for safety and must not operate on so large a scale, if at all, with borrowed money -- a further reason for the higher return from the pastime to a given stock of intelligence and resources.(14)

There was an episode in the history of Wall Street when "fundamental" investment research from merchant purveyors offered the long-term institutional investor assistance in his onerous task. But fundamental research was an aberration, since its creation and dissemination were subsidized by the fixed commission rates established when the brokers were large relative to the customers. Once the institutional customers, who had grown to dwarf the brokers, forced the "negotiation" of commissions trade-by-trade, the demise of fundamental research was a matter of time -- just about the ten years from 1975 to 1985, in fact. Ironically, the gain in transactional efficiency due to the elimination of fixed commissions has been grossly outweighed by the loss in what I will call the "judgmental efficiency" -- efficiency in translating data from information, in extracting the signal from the noise -- of the equity markets.

There is a dilemma here for the firm which is, in my view, inescapable. Kregel has extended Vickers' analysis of the potential tradeoff between operating and financial leverage to point out when the pursuit of growth will induce firms to push back the money capital constraint by raising equity in the public market.(15) Now the cost of public equity ought always to be lower than the cost of private equity due to the (more or less effective) liquidity afforded public equity holders -- and before adjusting further for "Keynes' Premium" that long-term investors expect to earn on their investment in understanding the business behind the shares. And the cost is likely to be markedly lower whenever the capital markets get hitched to a "geared" increase in expected returns.(16) This is why, of course, financially oriented proprietors choose to buy cash whenever they can.

But the lower cost of equity capital in the public markets has its "price." The value of a firm's equity is a strategic tool of management: as incentive/reward for key employees, as a currency for use in acquisitions or mergers, as the determinant through an uncertain future of what the cost of capital will be to fund potential growth. Going public means surrendering the discretionary opportunity to negotiate the value of the firm's equity. And the market to which this power is surrendered is as unforgiving to the individual issuer as it is volatile in aggregate. The inevitability of disappointed expectations in an uncertain world is the last law of the market with which I would leave you.

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The implications of these perspectives for public policy are limited but not insignificant. Certainly, the thrust of the Brady Report on the Crash of 1987 was realistic in identifying the destabilizing effects of computer-based hedging and in seeking to bring derivatives and synthetics under the regulatory control of the SEC. And there is no doubt that the general climate of deregulation a outrance fed the LBO boom, most notably in the case of S&L purchases of junk bonds with brokered deposits. More generally, we are once again experiencing the systemic process of debt being transformed into equity on a scale that will suppress animal instincts and real growth rates for an extended period. In another age, then Treasury Secretary Andrew Mellon is said to have advised then President Hoover that this represented no more (and no less) than "property returning to the hands of its rightful owners."(17) Much of the countervailing initiatives that followed, exemplified by the RFC, were dedicated to providing the long-term equity capital that the markets could not and would not supply. In its charge to liquidate rather than refinance assets, the RTC today represents an inverse and destructive analog to its productive predecessor.

The recapitalization of the American economy -- at least a decade's work -- will be a process composed of countless more or less painful corporate restructurings. It is a process that fundamentally limits the growth potential of that economy, both in real and nominal terms: the systemic deleveraging of capital structures is a powerful disinflationary force. At the core of the recapitalization process will be the forced recognition of the dual nature of equity capital. Vickers' seminal contribution has been to draw out the distinction between the "real capital" aggregated on the asset side of the balance sheet and the "money capital" on the liability side(18). Of that money capital, in turn, the equity whose "value" is a function of the residual reported earnings, actually realized cash flow and potential net asset value of the enterprise is also bundled into share certificates bought and sold in variously inefficient markets.

Market prices will drive equity values to -- and only to -- the point where continuity in the enterprise's activities as a business can be assumed. The last, catastrophic time around -- between 1931 and 1933 -- the market quit. This time, the institutionalized reaction to the Great Depression plus the post-WWII establishment of Big Government capitalism have assured that we face an extended "work-out" rather than general liquidation. Financial policies that foster bull markets in securities would serve massively to ease the pain of adjustment, as excessive debt is refinanced into equity by voluntary exchange outside of the shadow of the bankruptcy courts. Contrariwise, financial policies biased toward fighting last generation's battle against debt-funded inflation would threaten radical and discontinuous increase in the incidence of bankruptcy and the pressures of deflation in the markets both for financial assets and those for goods and services. Whatever the thrust of policy, in this world of irrational expectations the volatile and contingent relationship of share prices and equity values can be relied upon to generate as many opportunities for investment coups as for scholarly deconstruction of M-M's fantasy.

This paper was prepared for a conference on "The Crisis in Finance" at the Jerome Levy Economics Institute of Bard College, held on April 4-6, 1991.

- 2 Douglas Vickers, *Money Capital in the Theory of the Firm*, Cambridge, 1987
- 3 Robin Marris, *The Economic Theory of "Managerial" Capitalism*, New York, 1964
- 4 James Herendeen, *The Economics of the Corporate Economy*, New York, 1975
- 5 Trevor Chamberlain, "Capital Structure and the Survival of the Firm," *JPKE*, Spring 1990, Vol. 12, No.3, pp 404-423.
- 6 In his recent restatement of his thesis, *op. cit.*, Vickers deploys the neoclassical theory of "Perfect financial asset markets" (pp 133 ff). Missing from his discussion of "postclassical perspectives" on neoclassical theory is any focus on the sources and consequences of imperfections in the capital markets (pp 191 ff, esp. pp 205-210).
- 7 For example, see Jeffrey O. Kephart, Tad Hogg, and Bernardo Huberman, "Collective Behavior of Predictive Agents," *Dynamics of Computation Group*, Xerox Palo Alto Research Center, October, 1989.
- 8 Steven M. Fazzari, and Bruce C. Petersen, "Working Capital and Fixed Investment: New Evidence on Financing Constants," November 1991, unpublished; Steven M. Fazzari, R. Glenn Hubbard, and Bruce C. Petersen, "Financing Constants and Corporate Investment," *Brookings Papers on Economic Activity*, 1:1988, pp 141-195
- 9 Yickers, *op. cit.*, p 13.
- 10 Chamberlain, *op. cit.*, p 406.
- 11 Michael Jensen, "Takeovers: Their Causes and Consequences," *Journal of Economic Perspectives*, Vol. 2, No.1, Winter 1988, pp 21-48, ©American Economic Association
- 12 Eg., Bryan Burrough and John Helyar, *Barbarians at the Gate*. HarperCollins, New York, 1990
- 13 Vickers, *op. cit.*, p 183.
- 14 J. M. Keynes, *The General Theory of Employment. Interest and Money*, 1936, p 157.
- 15 J. Kregel, *JPKE*, Winter 1989-90, Yo112, No 2, pp 235
- 16 *Ibid*, p 231. Not that venture capitalists are not subject to periodic "feeding frenzies," but the contractual lack of liquidity that a venture capitalist accepts does tend to dampen the extremes of euphoria.
- 17 C. N. Deyler, "The Ordeal of Herbert Hoover," *Yale Review* III 1963, pp 565.
- 18 Yickers, *op. cit.*, pp 13-14.

