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PROMOTING INNOVATION:
THE LAW OF PUBLICLY TRADED CORPORATIONS

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RIETI-CARF POLICY SYMPOSIUM

What Financing Mechanisms and Organizations of Business Entities Best Facilitate Innovation

PROMOTING INNOVATION:
THE LAW OF PUBLICLY TRADED CORPORATIONS

Merritt B. Fox[*]

The ultimate real economy goal of finance is to match scarce savings with the most promising investment project proposals in the economy. It is widely recognized that the most promising projects tend to be innovation based and that new firms are vital to implementation of innovative projects. What is less appreciated is that promoting innovation by facilitating the creation of new firms is a question of the allocation of investment decision making within the economy: reducing the role of internal finance within large established corporations and expanding the role of a particular form of external finance - venture capital.

The employees of large, established corporations are a rich source of innovative project proposals. The physical and organizational assets of these corporations facilitate the discoveries that give rise to ideas for new products and processes. Both theory and experience tell us that such corporations will nevertheless often fail to implement promising project proposals developed by

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their employees. Particularly in the United States, we witness the spin-off phenomenon: one or a group of employees of an established corporation leave to establish a new business based on an idea developed while in their previous employment. A large portion of innovation based new firms are spin-offs.[1] Many of the most important innovation based firms in the economy have grown out of these spin-offs. If these spin-offs had not occurred, these project proposals would have gone to waste.

Minimizing the number of promising innovative project proposals developed by established corporation employees that fail to be implemented is a critical challenge for an economy's system of finance. One component of the challenge is simply better discipline of established corporations so that they themselves pass up fewer of these promising opportunities. There are good reasons to believe, however, that there are limits to capacity of established, large corporations to identify and act on these opportunities. Thus another component is the promotion of spin-offs where established corporations fail to implement promising projects. This component has two aspects: increasing the cash flow out of established corporations so that more funds are available in external capital markets, and

[1] *See*, e.g., Amar Bhide, *How Entrepreneurs Craft Strategies that Work*, 72 HARV. BUS. REV. 150, 151 (1994) (discussing how a large percentage of the founders of the fastest growing companies "replicated or modified an idea encountered through previous employment.")

assuring that the money that is in external markets go to the persons with the best spin-off proposals. This paper explores the role that law, in particular law relating to public equity markets, can play in achieving a system of finance that functions well in these regards.

I. THE EXISTING LEGAL LITERATURE ON START-UPS

The portion of the U.S. economy occuring within firms that have been start-ups within the last few decades and their contribution to the economy's growth is obvious and has attracted much scholarly attention. Much of this attention has focused on the optimal contract between the venture capitalist, who is the provider of private equity, and the entrepreneur who is proposing the investment project that will be the basis of a new firm.[2] Another focus has been rules relating to intellectual property: the restraints put on would-be entrepreneurs because of objections by their former employers based on non-compete clauses, trade secret law, the corporate opportunity doctrine etc. [3]

Start-ups typically receive their initial financing from a venture capitalist,

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[2] *See, e.g.*, D. Gordon Smith, *Venture Capital Contracting in the Information Age*, 2 J. SMALL & EMERGING BUS. L. 133 (1998); Manuel A. Utset, *Reciprocal Fairness, Strategic Behavior & Venture Survival: A Theory of Venture Capital-Financed Firms*, 2002 WIS L. REV. 45 (2002), Paul Gompers & Josh Lerner, *The Use of Covenants: An Empirical Analysis of Venture Partnership Agreements*, 39 J.L.& ECON. 463 (1996).

[3] *See, e.g.*, ALAN HYDE, WORKING IN SILICON VALLEY: ECONOMIC AND LEGAL ANALYSIS OF A HIGH-VELOCITY LABOR MARKET (2003).

not from a public offering of shares. Thus, attention to the role of public equity markets has come in more "through the back door" with Black and Gilson's provocative thesis that the optimal contract is structured around the availability of the venture capitalist's exit through an intial public offering (IPO).[4] Black and Gilson use this thesis to explain why innovation based start-ups occur in much greater numbers in the United States than in Germany or Japan. According to their thesis, the existence of a more vibrant public equity market in the United States makes this optimal form of venture capital contract more available in the United States than elsewhere. This thesis has spawned a considerable literature, much of it affirmatively refining Black and Gilson's basic observations.

What is less appreciated is that Black and Gilson's enormous contribution may yet understate the importance of vibrant equity markets in promoting innovation, especially if "vibrancy" means not just that the market has substantial scale and high liquidity but also that it is well functioning in the sense that it has relatively accurate prices and relative transperacny. The large role that spin-offs play in the U.S. start-up phenomenon means that in understanding innovation, attention must be paid to established corporations as well. This paper addresses several important questions in this regard. How does the way established

[4]Bernard S, Black & Ronald J. Gilson, *Venture Capital and the Strucutre of Capital Markets: Banks versus Stock Market*, 47 J.FIN.ECON. 243 (1996).

corporations function impede implementation of innovative project proposals developed by their employees? What is the role of well functioning equity markets in reducing the number of opportunities missed by these established corporations and in forcing the payout of cash flow when these opportunities are missed? What is their role in steering funds to the most promising venture capital financed spin-offs? And what in turn is the role of securities regulation in all this?

II. LARGE ESTABLISHED FIRM FINANCE PATHOLOGIES

A. The Failure of Established Firm Managers to Identify Good Projects

A pathology arises when an established firm's decision processes fails to identify positive net present value projects that the firm, through its specialization and the resulting accumulation of knowledge, is particularly well positioned to develop. Organizational capacity to identify these opportunities is related both to the incentives for individual firm employees to promote such projects as well as the incentives for employees to help each other in a joint endeavor to develop the ideas that become the basis of such project proposals.[5] There is a tradeoff here because the incentives that encourage cooperation to develop ideas are not the best ones to encourage individual employees to become an investment project

[5] *See* Ronald Gilson & Joseph Bankman, *Why Start-ups?*, 51 STAN L. REV. 289 (1999).

proponent within the firm.[6] Without a strong proponent, the project will never be identified as promising by top management. Even putting this problem aside, there are also good reasons to believe that the way established organizations process information differs from how it is processed in external capital markets in ways that lead to blind spots with regard to innovative ideas.[7]

To some extent the pathology I describe is inevitable: larger established corporations are fertile ground for the development of innovation based ideas but they have inherent problems in their capacity to identify them. Nevertheless, the more top management is motivated to maximize share value, the greater its incentives to minimize the pathology. As noted, whatever the extent of the pathology, spin-offs funded by venture capital significantly reduce its social costs by making available funds for promising projects that employees have the capacity to develop, but the corporations fail to identify. The economy is not hurt by this failure because the project gets implemented anyway. The spin-off phenomenon has an important *ex ante* effect of as well: the possibility of getting rich in a spin-off gives employees substantial incentives to develop positive net present value

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[6] *Id.*

[7] MERRITT B. FOX, FINANCE AND INDUSTRIAL PERFORMANCE: THEORY, PRACTICE AND POLICY (1988). There is empirical evidence of this as well. One study of the semiconductor industry shows the reason that proponents of successful spin-offs took their ideas elsewhere is that top management of employer firms simply did not perceive the ideas to be worth substantial investment. *Id.*

projects even if they work for firms that may ultimately not implement the ideas.[8]

B. Failure to Implement Positive Net Present Value Projects that are Identified.

Another established firm pathology is when an established firm's management does identify a positive net present value project but does not implement it. This happens when managers reject a positive net present value project because they wish to avoid personal risk. Innovative projects tend to have high unsystematic risk. Managers tend to be risk averse because they cannot diversify away the unsystematic risk associated with any individual firm project. If managers can get away with it, they may reject projects with high expected returns if the projects have high unsystematic risk as well, even though such rejections are not in the interests of shareholders or society as a whole. By contrast, portfolio shareholders, who can diversify their holdings, are risk neutral with respect to unsystematic project-level risk. These problems can be ameliorated to some extent by compensation packages that include stock options. The recent corporate scandals in the United States show the limits of that strategy, however, because of the incentives that options create to distort disclosure.

Again, to the extent that management is motivated to maximize share value by other disciplining mechanisms, this pathology will be minimized. Spin-offs

[8]Gilson & Bankman, *supra* note 5.

funded by venture capital can again significantly reduce the social costs of the remaining pathology by making available funds for promising projects proposed by employees that managers identify but fail to implement.

C. Implementing Negative Net Present Value Projects

A third type of pathology arises where an established firm uses its internally generated cash flow to invest in new negative net present value projects. Instead of making these bad investments, such a firm should instead pay out this cash flow to shareholders. Shareholders can then invest these funds better elsewhere in the economy. An example of this pathology includes the seemingly responsible act of using funds labeled by accountants as depreciation to replace worn out plant and equipment, if doing so is a negative net present value project.

There are good theoretical and empirical reasons for believing that this pathology extensively pervades established firms.[9] One reason is a managerial preference for firm growth that is stronger than for maximizing share value. This reason interacts perversely with the two previously discussed pathologies: if the

[9] *See, e.g.*, Michael Jensen, *The Takeover Controversy: Analysis and Evidence*, THE REVOLUTION IN CORPORATE FINANCE (Joel M. Stern & Donald H. Chew Jr. eds., 3d ed. 1998). GORDON DONALDSON, CORPORATE DEBT CAPACITY (1961); William J. Baumol et al., *Earnings Retention, New Capital and the Growth of the Firm*, 52 REV. ECON. & STAT. 345 (1970). For a critical review of these and several other studies, along with an estimate of the magnitude of the effects on the economy, see FOX, *supra* note [ ], at 233-37. *See also* Jensen, *supra* note [ ], at 325; Reinier Kraakman, *Taking Discounts Seriously: The Implications of "Discounted" Share Prices as an Acquisition Motive*, 88 COLUM. L. REV. 891, 898 (1988) (discussing the discounts created by misinivestment of surplus cash flows).

firm passes up innovative positive net value projects, it will have more cash flow on hand and thus be more tempted to invest in negative net present value projects if that is what is the only way to maximize growth. Other reasons can arise externally from the way securities and tax laws function.

III. THE DUAL ROLE OF A WELL FUNCTIONING EQUITY MARKET

A well functioning equity market has relatively accurate share prices and is relatively transparent concerning the businesses of its issuers. I and many other law and finance scholars (the "relevance adherents") believe that a well functioning equity market is vitally important in disciplining management of established firms to find the best projects they can and to pay out the rest in cash and in directing external equity to the best places, including the most promising venture capital exits.[10] Thus transparency and accurate prices in public equity markets are vital to innovation. This position is not without controversy, however. There are skeptics, both theoretical and institutional. The theoretical skeptics seem to take the cash flows generated by established firms as a given, with equity ownership simply a method for investors to store wealth and the stock market

[10] *See*, e.g., John C. Coffee, Jr., *Market Failure and the Economic Case for a Mandatory Disclosure System*, 70 VA. L. REV. 717, 751 (1984), Merritt B. Fox, *Shelf Registration, Integrated Disclosure, and Underwriter Due Diligence: An Economic Analysis*, 70 VA. L. REV. 1005, 1015-25 (1984), Fox, *Disclosure in a Globalizing Market, supra* note [ ], Marcel Kahan, *Securities Laws and the Social Costs of Inaccurate Stock Prices*, 41 DUKE L. J. 977 (1992), Paul G. Mahoney, *Mandatory Disclosure as a Solution to Agency Problems*, 62 U. CHI. L. REV. 1047 (1995).

simply a facility for the trading of financial assets, hedging, diversification, and pooling of risk. In contrast, the relevance adherents see the prices established in the stock market as affecting the efficiency of the real economy.[11] More accurate prices can increase the amount of value added by firms as they use society's scarce resources for the production of goods and services. In a competitive economy, this increase in value added will generally increase both the level of firm cash flows, which the theoretical skeptics take as given, and returns to other factors of production.[12] Greater transparency and share price accuracy perform this function both by improving the quality of choice among new proposed investment projects in the economy and by improving the operation of existing real assets.

As the relevance adherents see it, improved price accuracy in the *primary*

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[11] In ignoring disclosure's effects on the real economy, the theoretical skeptics follow the lead of the bulk of theoretical literature in the area of the economics of disclosure. Most of this literature focuses on the effects of disclosure on the efficiency with which securities are exchanged in the market. The fact that this is the focus of most disclosure economists might appear to give the position of the theoretical skeptics a certain authority, but, in this case, appearances are deceiving. In a comprehensive survey article concerning this literature, Robert Verrecchia sees the focus on the efficiency with which securities are exchanged as reflecting a desire by disclosure economists to take on a intellectual challenge: to show, contrary to the earliest articles in the field, that disclosure can promote efficiency *even* in a pure exchange economy. Robert E. Verrecchia, *Essays on Disclosure*, 32 J. ACCT. & ECON. 97, 160-164. Verrecchia states:

> Researchers had long recognized that production militates against all potential debilitating effects of disclosure, including adverse risk sharing. Consequently, the path that promoted disclosure as a device to yield social value in production and exchange economics was deemed insufficiently provocative. Alternatively, paths that promoted a utility for disclosure in (exclusively) pure exchange settings remained popular because they appeared to be addressing the "disclosure paradox": that is, explaining why it was *not* the case that more disclosure was bad, and not good. *Id.* at 163 (emphasis in the original) (footnotes omitted).

See also G. Kunkel, *Sufficient Conditions for Public Information to Have Social Value in a Production Economy*, 37 J. FIN. 1005 (1982) (maintaining that the problem with the early literature showing that disclosure harmed efficiency is that it focused solely on the exchange of securities and did not account for the disclosure's beneficial effects on the allocation of real resources in the economy).

[12] *See* Fox, *Disclosure in a Globalizing Market, supra* note [ ] at 2561-69.

market for shares produces these social benefits directly. For issuer offerings, greater share price accuracy at a time when an issuer contemplates implementing a new project by means of a new share offering will bring the issuer's cost of capital more in line with the social cost of investing society's scarce savings in the contemplated project. As a result, these savings are allocated more efficiently, going more to the most promising proposed projects in the economy.[13] For venture capitalists, the prospect that the best ventures *ex post* will be indentified accurately at time of the venture capitalist's exit adds to the incentive *ex ante* to find the best investment project ideas to fund. Accurate pricing of venture exits also gives more resources for reinvestment in new projects to those venture capitalists who choose good investment projects in the first place.

Improved price accuracy in the *secondary* market and the disclosure that induces it create social benefits as well, though less directly. Disclosure and more accurate secondary market share prices enhance the effectiveness of the social devices that limit the extent to which managers of established public corporations place their own interests above those of their shareholders (the agency costs of management). To start, additional disclosure and increased share price accuracy, by

[13] *See* Fox, *Retaining Mandatory Disclosure*, note [] *supra* at 1358-63.

signaling when there are problems, assist in both the effective exercise of the shareholder franchise and shareholder enforcement of management's fiduciary duties.[14] They also increase the threat of hostile takeover when managers engage in non-share-value-maximizing behavior. The additional disclosure and more accurate prices make a takeover less risky for potential acquirers and reduce the chance that a value-enhancing acquisition will be deterred by the target having an inaccurately high share price.[15] Finally, by reducing the riskiness associated with holding an issuer's stock in a less than fully diversified portfolio, additional disclosure increases the use of share price based management compensation, which also helps align the interests of managers and shareholders.[16]

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[14] *See* Merritt B. Fox, *Required Disclosure and Corporate Governance*, in 62 L. & CONTEMP. PROBS. 113 (1999). This is obvious when disclosures themselves suggest the possible existence of such a problem. It also can occur when a share price declines, indicating, if the price has a relatively high level of accuracy, that something is amiss.

[15] The market for corporate control is a well-recognized device for limiting the agency costs of management where ownership is separated from control, as in the typical publicly held corporation. More information and the resulting increase in price accuracy improves the control market's effectiveness in performing this role. A potential acquirer, in deciding whether it is worth paying what it would need to pay to acquire a target that the acquirer feels is mismanaged, must make an assessment of what the target would be worth in the acquirer's hands. This assessment is inherently risky and acquirer management is likely to be risk averse. Greater disclosure, however, reduces the riskiness of this assessment. Hence, with greater disclosure, a smaller apparent deviation between incumbent management decisionmaking and what would maximize share value is needed to impel a potential acquirer into action.

Also, when share price is inaccurately high, even a potential acquirer that believes for sure that it can run the target better than can incumbent management may find the target not worth paying for. The increase in share price accuracy that results from greater disclosure reduces the chance that a socially worthwhile takeover will be thwarted in this fashion.

Greater disclosure thus makes the hostile takeover threat more real. Incumbent managers will be less tempted to implement negative net present value projects in order to maintain or enlarge their empires, or to operate existing projects in ways that sacrifice profits to satisfy their personal aims. Those that nevertheless do these things are more likely to be replaced. *See*, Fox, FINANCE AND INDUSTRIAL PERFORMANCE, in A DYNAMIC ECONOMY: THEORY, PRACTICE, AND POLICY 84-91 (1987) (hereinafter Fox, *Finance and Industrial Performance*).

[16] *See* Fox, *Disclosure in a Globalizing Market, supra* note [ ], at 2548-50.

The institutional skeptics accept as a theoretical matter the part of this story concerning the role of accurate share prices in improving capital allocation when issuers issue new shares.[17] As noted above, however, they dismiss the importance of this phenomenon because of the relatively small percentage of all capital projects that are funded by new issues of shares.[18] I have two responses to this. First, the institutional skeptics ignore the role that ongoing disclosure and improved price accuracy in secondary trading markets play in the reduction of the agency costs of management for established firms. Reduction in agency costs not only improves how existing projects are operated. As discussed above, it improves capital allocations as well because misuse of most firms' primary source of capital funds – internal cash flow – is probably the single greatest agency cost of management.[19]

Second, more accurate share prices in the secondary market also improve capital allocation when an established firm uses non-equity external sources of capital such as debt offerings or institutional borrowings. On the supply side, share price can affect the financial cost of a proposed investment project by affecting the

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[17] Stout, *supra* note 17 at 643.

[18] *Id.* at 645-47.

[19] Michael Jensen, *The Agency Costs of Free Cash Flow, Corporate Finance and Takeovers*, 76 AM. ECON. REV 323 (1986); FOX, FINANCE AND INDUSTRIAL PERFORMANCE, *supra* note 23 at 121-150.

terms at which intermediaries are willing to extend the firm these alternative forms of external financing.[20] On the demand side, share price can affect management's willingness to use funds to implement a new project. Share price can affect management's willingness to use debt financing because of the prospect that the firm will subsequently want to counterbalance any new debt with new equity financing in order to maintain its optimal debt/equity ratio.[21] More generally, because of concern with public perceptions, low share price can constrain use of both external and internal funds.[22] Putting these supply and demand factors together, if share price is inaccurately low, management may decide not to pursue relatively promising proposed investment projects. If it is inaccurately high, it may implement relatively unpromising proposed projects. Greater share price accuracy limits this problem.

Finally, the new issue market is, in accordance with the Black and Gilson

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[20] Homer Kripke, THE SEC AND CORPORATE DISCLOSURE: REGULATION IN SEARCH OF A PURPOSE 123 (1979).

[21] Some financial theorists suggest that there is no optimal debt/equity ratio. For the classic statement of this view, see Franco Modilgiani & Merton Miller, *The Cost of Capital, Corporation Finance and the Theory of Investment*, 48 AM.ECON.REV. 261 (1958). The more orthodox view today is, however, that given the significant transaction costs, information asymmetric and taxes existing in the real world, there are factors weighing against both too little debt and too much. Too little debt deprives a firm of its tax deductible interest payments. Too much debt leads to increased agency costs because of the resulting increased divergence between the interests of debt and equity. It also increases the likelihood of bankruptcy, which would involve real costs. For an overview of these points and the responses of the adherents of financial structure irrelevance, see RICHARD A. BREALEY & STEWART C. MEYERS, PRINCIPLES OF CORPORATE FINANCE, 447-466 (5th ed. 1996).

[22] See FOX, FINANCE AND INDUSTRIAL PERFORMANCE, *supra* note 23 at 282-287.

thesis, vital for the functioning of the system of start-ups that is so important for promoting innovation in an economy.

IV. THE ROLE OF MANDATORY DISCLOSURE

Even if one believes that transparency and share price accuracy are important drivers of an economy's economic performance, as the relevance adherents claim, one does not necessarily believe that regulations in the form of mandatory disclosure is necessary. Does mandatory disclosure enhance share price accuracy? Some legal scholars who oppose mandatory disclosure believe not. Legal scholars who favor mandatory disclosure inherently believe that it does.

A. The ineffectiveness position.

Scholars such as Professors Jonathan Macey, Roberta Romano, Homer Kriple and Ed Kitch maintain that mandatory disclosure is relatively ineffective. They believe that most information gets impounded in share prices via other routes. These alternative routes would include voluntary public disclosure by issuers, selective disclosure by issuers to analysts and major investors, insider trading, and independent research by analysts and the news media.[23]

The skepticism of these scholars concerning the effectiveness of mandatory

[23] Jonathan R. Macey, *Administrative Agency Obsolescence and Interest Group Formation: A Case Study of the SEC at Sixty*, 15 CARDOZO L. REV. 909, 928 (1994); Romano, *Empowering Investors*, *supra* note [ ] at 2373-2380; Romano, *Need for Competition*, *supra* note [ ] at 446-464.

disclosure comes in substantial part from the belief that, compared to the incentives of the private actors involved in these other routes, "monopolist" government bureaucrats do not have adequate incentives to ask the right questions.[24] The result, the argument runs, has been an emphasis on historical data, which is of much less value in moving share price toward actual value than would be management projections of future cash flows.[25] Moreover, most responses to the government mandated questions, the ineffectiveness adherents suggest, are either banal boilerplate or have already been revealed voluntarily prior to their appearance in SEC filings.[26] In addition, at least one such adherent, Ed Kitch, maintains that where the government does ask questions that are both of real relevance and the answers to which would not have been produced voluntarily, the proper response would typically involve the release of proprietary information.[27] In these situations, he argues, issuers figure out how to avoid giving meaningful answers.[28]

B. The effectiveness position

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[24] Romano, *Empowering Investors, supra* note [ ] at 2374, 2378-2380. Some economists share this view. *See* ROSS L. WATTS & JEROLD L. ZIMMERMAN, POSITIVE ACCOUNTING THEORY 173-176 (1986) (disclosure regulators act to maximize their own interests).

[25] Homer Kripke, *The SEC, the Accountants, Some Myths and Some Realities*, 45 N.Y.U. L. REV. 1151 (1970).

[26] Romano, *Need for Competition, supra* note [ ] at 458.

[27] Edmund W. Kitch, *The Theory and Practice of Securities Disclosure*, 61 BROOK. L. REV. 763 (1995).

[28] *Id*.

Legal scholars who favor mandatory disclosure, including myself, generally argue that, in the absence of regulation, the existence of externalities will result in a market failure whereby too little information will be impounded in share prices.[29] Implicit in this position is the belief that mandatory disclosure results in meaningful issuer disclosures that would otherwise not be forthcoming and that these disclosures add to share price accuracy.

These scholars argue that the ineffectiveness position adherents' complaint concerning the mandated disclosure's emphasis on historical data, rather than on management projections, has a "glass is half empty" quality. While access to management's particular view of the future is useful, no one – management or outsider – can predict the future except on the basis of facts concerning the world past and present. SEC mandated historical data provides significant raw material for this kind of analysis. The complaint that much SEC induced disclosure appears to be boilerplate misses the important things that are revealed by a minority of

[29] *See, e.g.*, Lucian Bebchuk, *Federalism and the Corporation: The Desirable Limits on State Competition in Corporate Law*, 105 HARV. L. REV. 1435, 1490-91 (1992); Coffee, *supra* note [ ]; Frank H. Easterbrook & Daniel R. Fischel, *Mandatory Disclosure and the Protection of Investors*, 70 VA. L. REV. 669, 672-73 (1984); Fox, *Retaining Mandatory Disclosure*, *supra* note [ ] at 1345-50; Fox, *Issuer Choice*, *supra* note [ ] at 569- 598. Many economics of disclosure theorists use models in which management discloses less because of concerns that disclosure can hurt their firms' competitive positions. For surveys of these models, see Verrechia, *supra* note [ ] at 141-160; Healy & Palepu, *supra* note [ ] at 424-25. There is some empirical evidence supporting this theoretical proposition. Joseph Piotroski finds that a firm is more likely to add financial reporting about one of its individual business segments where it has declining profitability (a condition suggesting that the issuer will suffer less from competitors and potential competitors learning of the issuer's segment profits) or less variability in profitability among its business segments (a condition suggesting that providing only company-wide financial reporting obscures less so that the competitive harm from providing segment reporting is less). Joseph D. Piotroski, *The Impact of Discretionary Segment Reporting Behavior on Investor Beliefs and Stock Prices* 5- 47 (University of Michigan Ph.D. dissertation on file with the author).

issuers when answering the same questions that result in banal, boilerplate answers by the majority of issuers. The minority is prompted to provide significant detail because for them, unlike for the majority, a banal answer alone would be misleading without more disclosure.[30] As for the ineffectiveness adherents' complaint that much of what does appear to be significant in SEC induced disclosures has been previously revealed to the public voluntarily by issuers, the effectiveness adherents reply that these earlier "voluntary" disclosures may well have occurred only because the issuer knew that it would be required to reveal the information in an SEC filing anyway and decided it might as well get credit for getting it out sooner.[31] Without this SEC requirement, the earlier announcement, if it occurred at all, might well not have been as full or as accurate.

V. STRUCTURING MANDATORY DISCLOSURE PROPERLY

Appropriate rules mandating disclosure is not sufficient for a equity market to function well. The rules must be backed by sanctions. There are good reasons to believe that meaningful civil liability for disclosure rule violations should be part of the system of sanctions, in part because government agencies cannot be relied upon to be given the resources or to have the political will to pursue all significant

[30] Fox, *Issuer Choice*, *supra* note [ ] at 594.

[31] *Id.*

violations.[32]

In structuring these sanctions, care needs to be taken that the choice to raise funds through an public offering of equity not be penalized relative to funding projects internally. Otherwise there is a bias in the economy for internal finance by established corporations, which hurts innovation. Efficiency and the availability of funds for venture capital and for venture capital exits requires that management choices between internal and external finance should reflect the social costs and benefits of these choices. Because the social value of an issuer's disclosure is equally great regardless of what source of finance an issuer uses, a system that imposes a greater expected civil liability for a disclosure violation (net of any private gains from the violation) when managers choose one kind of financing rather than another introduces an inefficient distortion.

The current liability system in the United States, which was developed as part of the traditional transactions based system of disclosure regulation, violates the principle that the civil liability system should not introduce such distortions. It imposes significantly heightened risk of liability on *managers and others* if a violation occurs at the time the issuer is publicly offering new securities that, unlike *issuer* liability, is not counterbalanced by greater gains from the violation.

[32]Raphael La Porta, *What Works in Securities Laws* Tuck School of Business at Dartmouth, Working Paper No. 03-22.

This discourages domestic public equity offerings relative to other sources of investment funds.

More specifically, a number of losses arise from such distortion. To the extent that it leads to a use of internal funds, it favors a source of finance that permits management to shield its real investment decisions from the discipline and scrutiny of the market. This is a problem because, as noted earlier, managers may find it in their personal interests to enhance firm size and growth by implementing as many projects as possible even when the projects have an implementing negative net present value.[33] As discussed earlier, there is substantial empirical evidence that managers of firms which rely predominantly on internal finance do just that.[34]

VI. CONCLUSION

Well functioning public equity markets - ones with relatively accurate prices and transperancy - are important for promoting innovation even though much innovative investment is financed by spinoffs using private equity. Properly designed mandatory disclosure regulation is necessary for well functioning public equity markets. Thus, if a country wishes to promote innovation, it cannot ignore the regulation of these markets.

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[33] *See* FOX, FINANCE AND INDUSTRIAL PERFORMANCE, *supra* note [ ], at 121-127; FRANK KNIGHT, RISK, UNCERTAINTY, AND PROFIT (1921); Michael C. Jensen, *Agency Costs of Free Cash Flow, Corporate Finance and Takeovers,* 76 AM. ECON. REV. 323 (1986) (discussing the agency costs resulting from managers using internal financing to engage in unnecessary expansion).

[34] *See* note [ ] *supra*.