Investor Exits, Innovation, and Entrepreneurial Firm Growth: Questions for Research

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Investor Exits, Innovation, and Entrepreneurial Firm Growth
Questions for Research

Summary of a Workshop

Stephen A. Merrill, *Rapporteur*

Committee on Investor Exit Strategies and Entrepreneurial Firm Growth

Board on Science, Technology, and Economic Policy

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Preface and Acknowledgments

In 2007 the National Academies' Board on Science, Technology, and Economic Policy (STEP) received funding from the Ewing Marion Kauffman Foundation to hold a workshop to examine the marked change in exit strategies of venture-backed U.S. firms coinciding with the dot-com crash of 2001. In that year there was an abrupt and lasting shift away from taking firms public through initial public offerings (IPOs) and toward mergers with established firms. There had been much discussion of the causes, consequences, and policy implications of the change in exit strategies but little systematic inquiry. The purpose of the workshop was not to answer those questions but to explore the merits, feasibility, and possible directions of research on these topics, in short, to provide guidance to researchers and research sponsors.

A planning committee was appointed composed of Timothy Bresnahan, chair, Stanford University economics department; Lewis Coleman, DreamWorks Animation; Joshua Lerner, Harvard Business School; William Raduchel, independent investor and director; Edward Penhoet, currently with Alta Partners and formerly of the Gordon and Betty Moore Foundation; Leighton Read, Alloy Ventures; and Susan Woodward, SandHill Econometrics. Approximately 30 entrepreneurs, investors, and academic experts in corporate finance, law, and venture economics attended the meeting in Washington. An effort was made to select participants with methodologically and theoretically diverse backgrounds. Future discussion of the issues examined would benefit from additional perspectives, including historians of markets and entrepreneurship, technology specialists, and students of social networks.

This document is a summary report of the discussions that took place at the workshop. The committee's role was limited to planning the meeting. As study director I prepared this summary. The views expressed in the summary are those of the speakers and discussants and are not the consensus views of participants, the planning committee, the Board on Science, Technology, and Economic Policy, or the National Academies. This report has been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise, in accordance with procedures approved by the National Academies' Report Review Committee. The

purpose of this independent review is to provide candid and critical comments that will assist the institution in making its published report as sound as possible and to ensure that the report meets institutional standards for quality and objectivity. The review comments and draft manuscript remain confidential to protect the integrity of the process.

We wish to thank the following individuals for their review of this report: Philip Auerswald, George Mason University; Amy Dittmar, University of Michigan; Melissa Graebner, University of Texas, Austin; Mark Heesen, National Venture Capital Association; William Janeway, Warburg Pincus, LLC; and Martin Kenney, University of California.

Although the reviewers listed above have provided many constructive comments and suggestions, they were not asked to endorse the content of the report, nor did they see the final draft before its release. Responsibility for the final content of this report rests entirely with the author and the institution.

Finally, the National Academies and the STEP Board thank Dr. Robert Litan, Vice President for Research and Policy of the Kauffman Foundation, for making the workshop possible and for contributing significantly to the discussion.

Stephen A. Merrill, *Study Director*

Contents

Summary

The bursting of the dot-com bubble in 2001 coincided with an abrupt and so far lasting change in the development of entrepreneurial venture-backed firms in the United States. Previously, entrepreneurs and investors commonly took viable young firms public through initial public offerings (IPOs). In some well-known cases, these firms subsequently grew into major, globally competitive corporations marketing new products and services and employing large numbers of skilled workers at high wages. Since 2001, venture investors have more frequently exited by selling their companies to established corporations, usually for lower returns. There are concerns among some entrepreneurs, investors, and academics that this change has reduced the potential of young, entrepreneurial firms to contribute to innovation, job creation, international competitiveness, and economic growth. There are also claims that public policies, including securities regulation, have contributed to this result and should be modified or compensated for.

With support from the Ewing Marion Kauffman Foundation, the National Academies' Board on Science, Technology, and Economic Policy (STEP) convened a meeting in 2007 of investors, entrepreneurs, and academic experts in economics, corporate finance, and law to consider the merits and feasibility of additional research addressing the change in investor exit strategies, its causes and consequences.

Workshop participants identified several factors complicating systematic inquiry, including the following:

- It is difficult to distinguish cyclical from secular changes in this proximity to the boom and bust of 1999-2001.
- Technology and industry characteristics affect the viability of IPO versus acquisition exits and these characteristics change over time.
- Demand as well as supply side factors affect entrepreneurial firms and investor incentives.
- Causal linkages, especially with respect to policy influences, are exceedingly difficult to establish.

Nevertheless, various participants suggested a number of research avenues that could be productive and useful:

- Efforts to quantify and rank policies—securities regulation, legal liability, etc.—that almost certainly raise the financial and opportunity costs of undertaking IPOs and sustaining new public companies;
- International comparisons of IPO markets;
- Comparison of exit strategies across technologies;
- Research on what types of innovation are associated with different firm organizational structures and investment sources;
- Research on whether IPOs are occurring later and acquisitions earlier than previously in the life of entrepreneurial companies and what the consequences are of more mature public offerings and of "premature" sell-outs; and
- Efforts to understand how investors' expectations regarding their eventual exit affect the development of entrepreneurial firms in different sectors.

1

Background of the Workshop

The year the Internet economy bubble burst, 2001, marked an abrupt change in private equity markets involving young, entrepreneurial firms. Along with a sharp drop in venture capital placements, according to data reported by Thomson Financial, the number of U.S. initial public offerings (IPOs) plunged 85 percent to 41 from 264 the previous year. Throughout the previous decade the number of IPOs averaged 247 and never fell below 70. In 2004 the market recovered somewhat, but in the following three years the number of IPOs averaged only 52.[1] Further, some U.S. corporate IPO activity gravitated to foreign exchanges, especially to the London AIM market but also to Singapore and elsewhere (Bartlett, 2006).[2] Meanwhile, the number of investor exits by sale of venture-backed companies to established firms—acquisitions—grew correspondingly. Venture investors now routinely expect to sell out to existing firms rather than to take their companies public.[3]

Why is this of interest and possibly concern? Schumpeter's theory of creative destruction, which has had a dominant influence on contemporary entrepreneurship literature (Audretsch, 2002),[4] suggests that new firms with entrepreneurial spirit displace less innovative incumbents, ultimately leading to higher productivity and a higher economic growth rate. Other research suggests that large established corporations are inclined to resist radical change; and when absorbing younger,

[1] Since the workshop was held, the number of IPOs by venture-backed firms has dropped even further, to merely 6 in all of 2008 and 5 in the first half of 2009, according to the National Venture Capital Association and Thomson Reuters. Meanwhile, there were 260 acquisitions in 2008 and 121 in the first half of 2009.

[2] Concern about international competition in the IPO market has, of course, receded with the current financial crisis. The AIM market suffered a far more serious fall than did the NASDAQ exchange.

[3] Of course, the number of venture-backed firms is small compared with the total number of technology-based start-ups in existence in the United States. Branscomb and Auerswald (2002) estimate that there may be as many as 200,000, of the latter, one-third of them with employees. For empirical analysis of the choice between IPOs and acquisitions, see Brau, Francis & Kohers (2003) and Poulsen & Stegemoller (2008).

[4] For a contemporary statement of the thesis by a former R&D executive of a major firm, IBM, see McGroddy, 2001.

smaller enterprises, they tend to retard innovation or at least direct it to incremental changes in existing products, services, and processes.[5] This thesis contributes to the apprehension that in the future there will be fewer Googles, Microsofts, Yahoos, Genetechs, Amgens, Suns, Oracles, and Ciscos.[6] What may matter more than a drop in the number of firms going public and exhibiting average performance is the lower probability of an IPO leading to an exceptional engine of breakthrough technology development and job creation. Another concern is that the shift from IPO to acquisition exits means generally lower returns to venture capital investing and therefore lower venture capital investment, which has played an important role in the development of technology-based firms in the United States since the 1980s.

One line of counter-argument asserts that entrepreneurs who are bought out before they would normally exit by taking their firms public frequently go on to launch new start-ups based on other technologies. In theory, moreover, established firms are better positioned to accept higher risks and nurture new enterprises than if they are subject to the expectations of institutional and individual investors focused on quarterly earning reports. Acquisitions can take many forms and are by no means uniformly hostile to all forms of innovation. In any case, exit outcomes are not necessarily dichotomous or permanent. A venture-backed firm may go public and subsequently become a target of acquisition. Or it may be acquired by an established company and later spun off as an independent firm.

Less discussed but perhaps equally important is how exit strategies affect venture investor and entrepreneur decisions about firm strategy before the point of sale or IPO. The expectation of acquisition may favor investments in some kinds of technologies and discourage investments in others, depending in part on the field. In the case of biopharmaceutical technology, investment in the development of drugs with very large markets attractive to established pharmaceutical houses may be favored over drugs for niche markets that a medium-size biotechnology firm might profitably pursue were it to remain independent. In information technology, the expectation of an acquisition outcome might favor investment in new applications representing relatively little technological advance.

Suppose some of these consequences are real and are judged to be adverse to desirable kinds of technology development and the nation's long-run economic interests. Then several other questions arise. Is the change in the composition of exit outcomes cyclical and in due course self-adjusting or structural and likely to continue in the absence of intervention? What combination of market forces and public policy decisions account for the change? What public policy instruments if any are available to make the domestic IPO route more attractive? What are the pros and cons of possible actions?

To take an example discussed at some length, the IPO recession in the United States and the migration of some IPO activity abroad is sometimes ascribed to changes in securities regulation, in particular the accounting requirements introduced by the Sarbanes-Oxley Act of 2002, passed by Congress in response to the Enron, WorldCom, and Adelphi scandals. This was the most obvious relevant policy change

[5] Regarding the impact of acquisition on innovation, see Ahuja and Katila (2001) and Prabhu, Chandy and Ellis (2005).

[6] Most but not all of these companies had successful IPOs prior to 2000. Google went public in 2004.

of the last decade. On the other hand, it is sometimes argued that while the Act raised the cost to existing investors of going public, it has contributed to a higher, more uniform standard of accounting that has the potential to raise the confidence of outside investors purchasing stock in young, often still unprofitable, but promising entrepreneurial firms.[7]

The many unanswered questions surrounding these phenomena led the National Academies' Board on Science, Technology, and Economic Policy (STEP) in 2007 to seek support from the Ewing Marion Kauffman Foundation, the nation's leading philanthropy focused on illuminating and supporting entrepreneurship, to hold a workshop of investors, entrepreneurs, and academic experts in finance, law, and innovation to discuss these questions. The one-day meeting was held August 2, 2007, at the Academies' headquarters in Washington. A committee composed of seven STEP Board members and others planned the agenda and helped identify the participants, who are listed in Appendix B.

The workshop was organized around four principal questions:

- What are the trends in investor exits from venture-backed firms and do these merit attention?
- What are the determinants of entrepreneurs' decisions to take firms public or to pursue acquisition by established firms?
- What are the consequences of those alternatives for innovation, employment, and the productivity of the economy?
- What public policies strongly influence decisions to build or sell companies?

The workshop participants were not asked to reach any collective judgment about the cyclical vs. long-term nature of the shift from IPOs to acquisitions, nor to evaluate the consequences of the change, nor, in short, to arrive at any consensus findings with respect to the questions listed above. Rather, they were asked to outline research efforts that would improve understanding of the phenomena, identify hurdles to or opportunities for undertaking such research, and suggest what past or prospective public policy actions should be investigated as part of a broader research effort.

[7] The costs and benefits of financial market regulation are, of course, a much bigger question in the aftermath of the 2008 market meltdown.

2

What Are The Facts? Do They Merit Analysis?

At the outset of the workshop three presenters were asked to describe what had happened to venture capital investment and investor exits over the previous decade. Josh Lerner of the Harvard Business School cited data from Venture Economics showing the bubble in venture capital fundraising between 1999 and 2002 (Figure 1), corresponding to the soaring return on venture investments in 1998-1999 (peaking at >175 percent), followed by a strikingly negative rate of return (in the neighborhood of -25 percent) in 2001. (Figure 2)

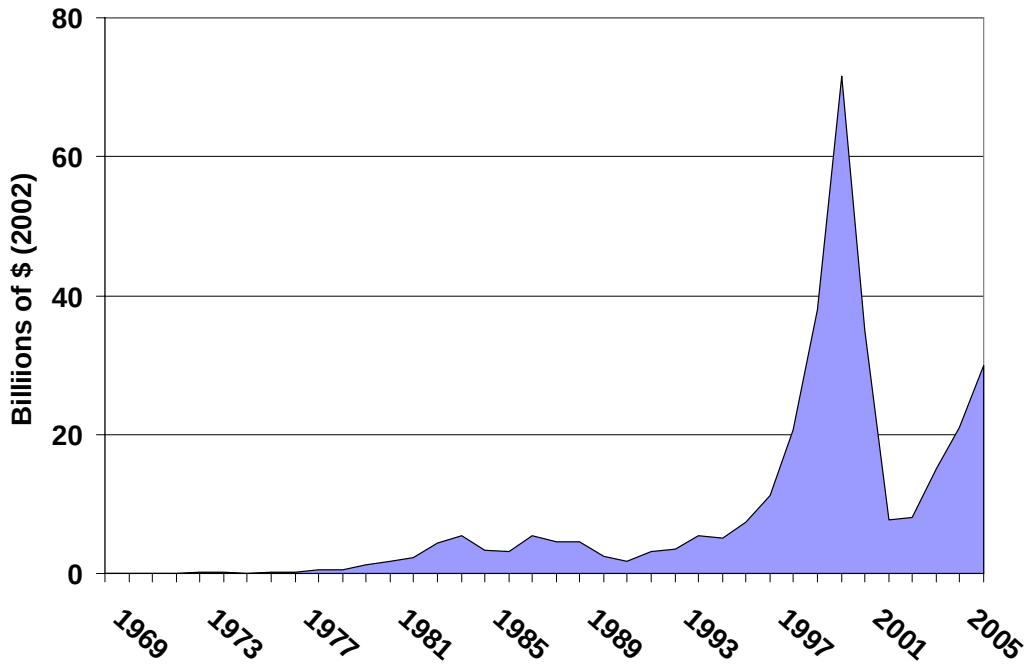

FIGURE 1 U.S. Venture Capital Fundraising (1969-2006). SOURCE: Venture Economics and Asset Alternatives.

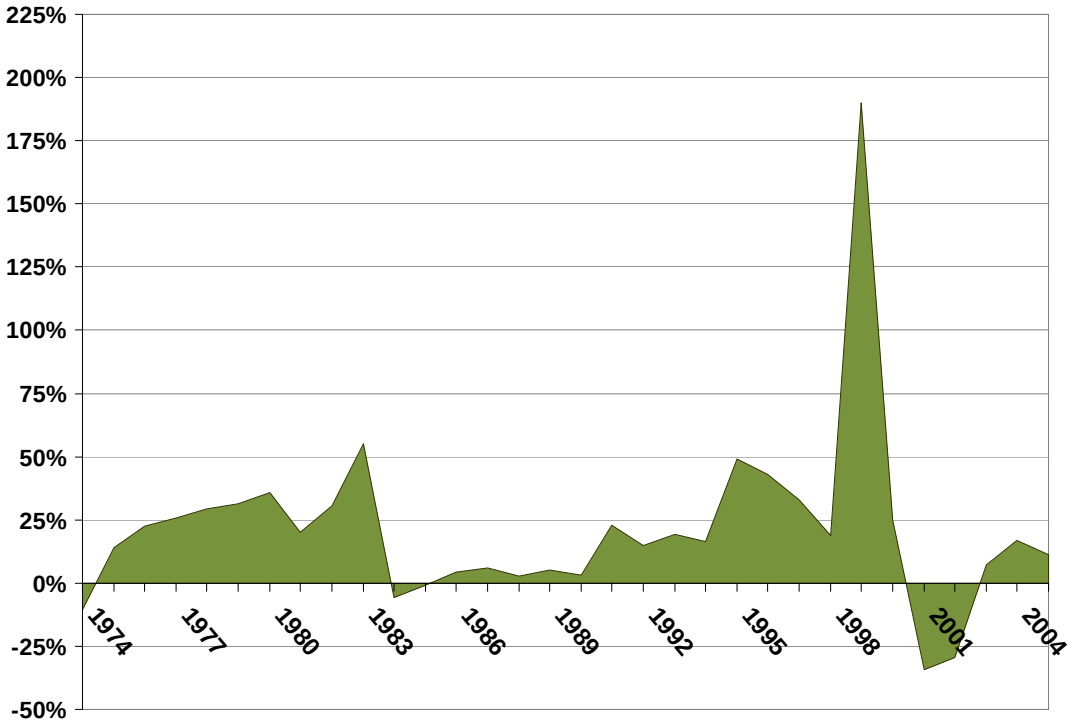

FIGURE 2 U.S. Private Equity Returns (1974-2006). SOURCE: Venture Economics.

Susan Woodward, owner of Sandhill Econometrics, presented results from a proprietary set of data on approximately 20,000 venture backed firms extending back to the late 1980s—virtually the universe of such companies from the point at which they received their first round of venture funding, including those that failed and exited the market by shutting down altogether—nearly one-third of the total number of firms. Woodward's quarterly data through early 2007 (Figure 3) show fluctuating but increasing IPO activity throughout the 1990s followed by a steep drop after the 3rd quarter of 2000, failing to recover even to the level of early 1991. Meanwhile, the number of acquisitions also grew steadily through the 1990s, peaked in 2000 and 2001 but remained quite robust through 2007. (Figure 4)

William Janeway, a partner in Warburg Pincus, presented similar data from another source showing the rise and fall in the annual number of venture backed IPOs between 1980 and 2007, and also suggesting that the median firm age at the time of going public has crept up since 2001 relative to the 1990s. (Table 1)

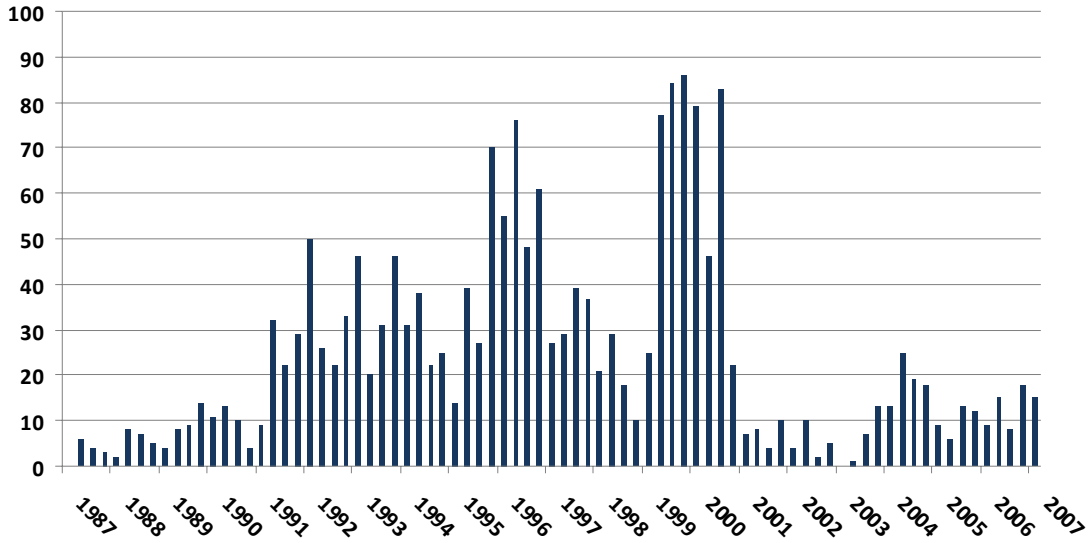

FIGURE 3 Number of Venture-Backed Initial Public Offerings (IPOs) per Quarter. SOURCE: Sand Hill Econometrics.

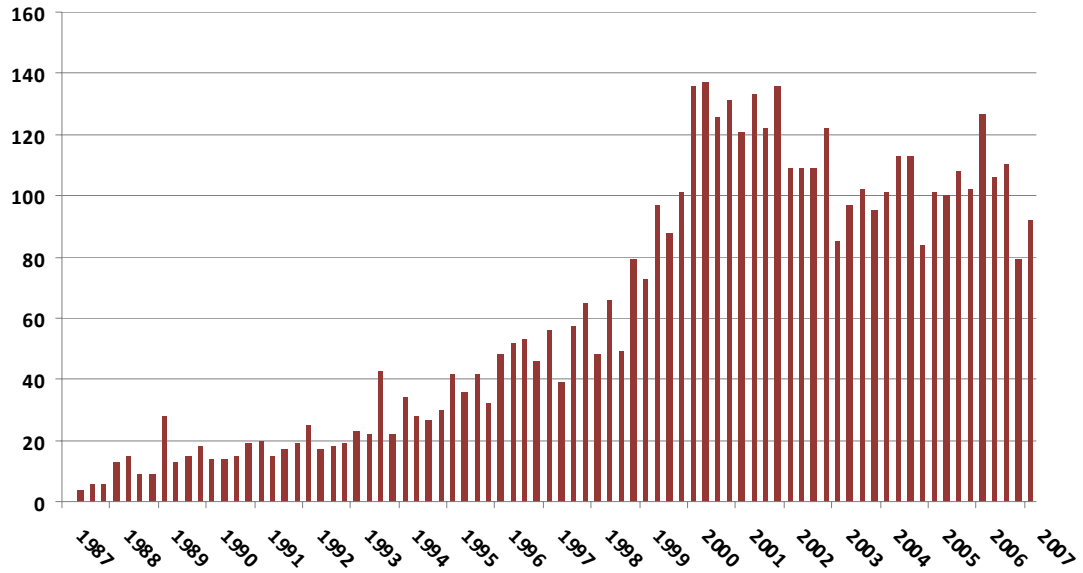

FIGURE 4 Number of Venture-Backed Acquisitions per Quarter. SOURCE: Sand Hill Econometrics.

TABLE 1 Number of Venture-Backed IPOs and Median Age of Company at the time of IPO

Year	Number of IPOs	Med Age at IPO (yrs)
1980	59	9.43
1981	97	6.05
1982	39	3.95
1983	196	4
1984	84	4.63
1985	76	3.8
1986	366	5.57
1987	127	5.35
1988	54	5.29
1989	65	6.39
1990	70	5.96
1991	157	6.66
1992	196	5.88
1993	221	6.73
1994	167	7.53
1995	205	7.47
1996	272	5.66
1997	138	6.37
1998	78	5.24
1999	270	4.31
2000	264	4.93
2001	41	6.05
2002	22	7.47
2003	29	7.83
2004	93	6.75
2005	56	6.13
2006	57	8.1

SOURCE: Venture Expert; Thomson Financial

Following these presentations, there was a lively discussion of the nature of the observed changes in exit strategies. Some participants saw them as a reaction to the lowered level of investment overall in technology-based startup companies after the dot-com crash and thus as part of a regular investment cycle. Other participants emphasized the persistence of the IPO slump after the 2001 market disruption and their inability in light of other market conditions to foresee any future upturn in IPOs for technology-based entrepreneurial firms. Distinguishing cycle from trend is not the only issue. There is also the question of how volatility affects investment decisions. A deep, protracted trough can deter investments despite their having positive expected value.

In fact, there was a range of divergent views expressed at the meeting on the U.S. economy of the late 1990s and turn of the century and the role of the stock market bubble. One view considered the latter an aberration, masking the economy's ability to continue to form new growth-oriented firms at a gradually increasing rate over time. Another view was that there was a genuine boom beneath the bubble, whose bursting halted a long term move toward entrepreneurship and initiated a new trend away from entrepreneurial founding of growth firms in the 21st century. Although few discussants embraced the latter hypothesis that the lower rate of IPOs reflected a long-term decline in the ability of the innovation system of the United States to generate growth from entrepreneurial startups, that hypothesis was not ruled out unequivocally.

Workshop chair Timothy Bresnahan, Stanford University economics professor, summarized this discussion by saying that the role of entrepreneurial growth companies and their association with expanded demand for labor in high-skill, high-wage occupations was substantial enough and the uncertainty about their future contribution was great enough to justify continuing discussion and further research, since such a secular decline would indeed be a troubling change. "Entrepreneurial firms that become established businesses have long sustained the United States' level of aggregate economic growth and well-being," he said. "If changes in public policy were even partly responsible for lowering the effectiveness of entrepreneurial effort and thus the incentive to undertake it, this would be a grave call for policy consideration. Nevertheless, to resolve these questions is a research task of major scope."

Further, Bresnahan inferred from the comments of many participants that the focus of research be should be on the form of investor exit activity rather than on the annual rate of activity as the key study variable. This would help insulate the research from the large changes over this recent time period in U.S. high technology investment climate and especially from the 1999-2001 information technology boom and bust cycle.

3

What Are the Challenges and Hurdles to Research?

Notwithstanding the workshop participants' considerable interest in better understanding the investor exit trends, their causes, and implications, they raised a number of points that make interpretation of recent history problematic and complicate any effort to isolate causal determinants and develop evidence-based policy recommendations. In addition to the difficulty of distinguishing trend from cycle in the IPO versus acquisition time series, these considerations include the role of technology and industry differences and changes in these characteristics over time; the importance of considering "demand" as well as "supply" side factors; the difficulty of determining causal linkages, especially when moving beyond innovation effects to implications for job creation, productivity, and economic growth; and finally, the difficulty of discerning policy influences, not only from other factors but also from one policy instrument to another.

ACCOUNTING FOR TECHNOLOGY AND SECTORAL DIFFERENCES

IPO exits are not uniformly pro- and acquisition exits uniformly anti-innovation. Rather, different kinds of firm organization tend to be associated with different kinds of innovation. Innovations may be categorized in a number of ways; but several participants, following Schumpeter, distinguished between improvements that prolong the life of existing technologies or products—"incremental" innovations—and those that compete with or supplant existing methods—"disruptive" innovations. Incremental innovations tend to be associated with existing firms even when absorbing one or more entrepreneurial firms. The entrepreneurial growth company, on the other hand, is associated with disruptive innovation.

Rosemarie Ziedonis, University of Michigan Ross School of Business, suggested that technology advances may follow a cycle that tends to favor one exit strategy over the other in a particular phase of development. For example, the development of semiconductor technology according to Moore's law of doubling

capacity every 18 months, together with increases in magnetic storage and fiber optic transmission capacity led to rapid strides in increasing computing power and reducing its cost, in turn setting the stage for the Internet. Given the opportunities opened up by the new platform, it may have been natural for entrepreneurs to focus on software applications for the new medium, while continued progress in microelectronics followed a predictable course within the capacity of large established firms such as Intel, AMD, and their equipment suppliers. Thus, following a few early independent commercial successes in Internet applications, it could be expected that acquisitions would dominate in information technology during this period rather than IPOs.

The drug discovery and development field exhibits other, perhaps more permanent, characteristics that favor acquisition over going public, according to David Morgenthaler of Morgenthaler Ventures, Leighton Read of Alloy Ventures, and Ed Penhoet of Alta Partners.[8] The high cost of extended mandated clinical trials and the prolonged uncertainty regarding reimbursement by medical care payers means that only large pharmaceutical houses have the resources and risk tolerance to take innovative products all the way to market. Thus, exit via acquisition is a more common pattern in biotechnology than exit via IPO notwithstanding the well-known exceptions of Genentech and Amgen. Of course, public policy changes could ameliorate these disincentives for entrepreneurial biopharmaceutical firms to go public and remain independent but probably not enough to make a substantial difference. Besides, other factors such as high pharmaceutical marketing costs and the premiums on having brand recognition and extensive sales forces reinforce the acquisition route. Others pointed out it is worth asking whether technological progress across a range of fields has for the time being ceased to offer as many opportunities for building major, stand-alone technology firms. Apart from what some perceive as a slowdown in information technology and remaining high scientific hurdles in biopharmaceuticals, there is uncertainty about the future of nanoscale science and engineering applications and about "green" technologies. Focusing solely on financial markets is one-sided.

TAKING INTO ACCOUNT "DEMAND" SIDE FACTORS

Several participants pointed out that exit strategies are determined not only by influences on investors' and entrepreneurs' behavior but also by characteristics of the market, including characteristics of established firms. For acquisition to be an attractive option there must be willing buyers. Perhaps a good example is again from the pharmaceutical industry. For whatever reasons, the productivity of the R&D operations of a number of major pharmaceutical houses seems to have declined in recent years. Fewer new molecular entities are being filed with the Food and Drug Administration as candidates for clinical trials. Thus young entrepreneurial firms, especially those engaged in the development of biologic therapeutics, are more attractive candidates for acquisition to replenish drug development pipelines. David Morgenthaler characterized most biotechnology companies as "farm clubs" for pharmaceutical companies.

[8] At the time of the workshop, Penhoet was president of the Gordon and Betty Moore Foundation.

DIFFICULTY OF DISTINGUISHING POLICY INFLUENCES

One hypothesis consistent with the decline in IPO activity is that the costs and difficulties of pursuing the public company route to turning an entrepreneurial firm into a successful large-scale firm are rising. An increase in the cost of taking a young company public or an increase in the cost of operating a small public company would help explain a shift in the direction of those seeking to sell entrepreneurial-origin firms to established companies.

As noted above and many workshop participants reiterated, it is frequently argued that changes in securities regulation—especially the Sarbanes-Oxley Act of 2002, which was intended to reduce the risk to outside investors of purchasing stock in public companies through greater uniformity, verification, and transparency in accounting—have disproportionately raised the costs of small, publicly traded firms. The Sarbanes-Oxley reporting requirements have a number of fixed cost elements relating to external auditing and certification by senior management that do not vary a great deal by firm size and are ongoing after an IPO. Lawrence Calcano, formerly of Goldman Sachs, elaborated that in addition to the financial costs of legal and accounting services are opportunity costs that weigh especially heavily on entrepreneurial firm management attention, a scarce resource. It means diverting the attention of senior managers from developing the young firm's operational systems to financial compliance.

Bill Raduchel, independent investor, described an example of regulatory compliance costs from personal experience. He claimed that the new requirements had increased demand for and thus significantly raised the price of recruiting chief financial officers (CFOs) and legal counsel for small publicly traded firms and larger ones alike. But this is adding disproportionately to the administrative costs of the former. Likewise, the consolidation of firms in the market for accounting services—from the "Big 8" to the current "Big 4"—was having the same effect in raising auditing costs.

As Bill Janeway and other workshop participants observed, the problem with testing this fairly well developed, plausible set of hypotheses is that a number of other contemporary policy and market changes also appear to be working in the direction of raising the costs of the IPO option. The following examples were mentioned but not discussed as extensively:

- Investment analyst coverage. Arms length investors in public firms need information about those firms to make informed investment decisions. In 2003, the Securities and Exchange Commission, New York Stock Exchange, National Association of Securities Dealers, and New York Attorney General Eliot Spitzer reached a litigation settlement forcing the largest securities firms to insulate their research and investment banking operations to reduce conflicts of interest. The result was to erode the economics of equity research and especially to curtail analyst coverage of small public companies and new issues including IPOs. According to David Morgenthaler, this forced IPOs to bear more of the cost of equity research while making them less attractive investment opportunities, especially for institutional investors.

- Managers' and directors' liability. In the same period public company managers and directors became more vulnerable to stockholder lawsuits and related enforcement actions by the SEC and state attorneys general. Litigation is expensive and, again, a distraction for senior management focused on firm growth.
- IP litigation. Intellectual property represents another example of increased litigation. The rising number of lawsuits claiming patent infringement was leading to more defensive patenting to fend off litigation. Some participants hypothesized that acquisitions may be fueled in part by the motivation of both sellers and buyers to build patent portfolios that would discourage would-be plaintiffs.

Unable to suggest any countervailing market or policy changes making an IPO a more rather than less attractive exit strategy for investors, some workshop participants thought it would be difficult to disentangle the effects of reinforcing trends in order to identify what policy changes might be warranted and effective in restoring the traditional role of IPOs in high technology firm development. Others, however, considered changes in transaction costs a prime area for study.

DIFFICULTY OF ESTABLISHING CAUSAL LINKAGES GENERALLY

Having considered the cyclical versus secular or structural changes in patterns of investor exits from young entrepreneurial firms and the difficulty of establishing the causes of such changes, several workshop participants expressed the opinion that the most challenging research task, and one critical to bringing about any public policy changes, would be to link exit patterns to macroeconomic effects such as job creation, productivity advances, economic growth, and competitiveness or to stagnation or under-performance in any of those measures of economic performance. Ed Penhoet observed, "There are many correlations, but causality is a challenge."

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What Research Merits Consideration?

Notwithstanding these challenges, many workshop participants suggested topics that merited further exploration and proposed varied lines of inquiry:

- A survey of entrepreneurs and investors could help quantify and rank factors—securities regulation, legal liability, etc.—raising the transaction and opportunity costs of undertaking an IPO and sustaining a small new public company.
- An international comparison of IPO markets would shed light on issues of competitiveness in high technology sectors, including the extent to which disruptive new entrants are being grown abroad.
- A cross-sectoral comparison of how technological progress and market conditions interact to influence exit strategies, firm formation, and growth more generally.
- More research is needed on what types of innovation are associated with different firm organizational structures and investment sources. In particular, examining different patterns of acquisition could improve understanding of how parent companies sustain or stifle certain kinds of innovative activity. Likewise, studies of differences in firms' post-exit performance could shed light on the process of creative destruction and its impact on growth.
- The workshop did not give sufficient attention to the question of whether acquisitions were occurring earlier than previously in the life of entrepreneurial companies and, if so, what are the possible consequences of "premature" sell-outs?
- Surveys and perhaps other methods could illuminate how investors' expectations regarding their eventual exit affect the focus and development of entrepreneurial firms in different sectors.

Finally, it was suggested that any serious effort to investigate the questions raised in the workshop involve a wider range of scholars including historians of markets and entrepreneurship, technology specialists, and students of social networks that influence firm origins, development, and strategies.

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Appendix A

CONFERENCE AGENDA

Thursday - August 2nd, 2007

9:30 AM	Welcome and Introductions: **Tim Bresnahan**, *Chair* Stanford University Remarks: **Bob Litan** Kauffman Foundation
9:45 AM	Overview of the Issues: **Josh Lerner** Harvard Business School
10:10 AM	Exit Strategies Before and After 2001: What Happens After IPO or Acquisition? **Susan Woodward** Sand Hill Econometrics, Inc.
10:35 AM	The Decline of the IPO Market: Causes and Consequences **William H. Janeway** Warburg Pincus LLC
11:10 AM	Roundtable Discussion
12:30 PM	Working Lunch
1:30 PM	Roundtable, Cont.
4:00 PM	Adjourn

Appendix B

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