

ARTICLES

THE IPO MARKET IN CANADA: WHAT A COMPARISON WITH THE UNITED STATES TELLS US ABOUT A GLOBAL PROBLEM*

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Initial Public Offerings (IPOS) in the world's most important financial markets have been falling for the past decade. This has not been a gentle decline, but a collapse that preceded the 2008 financial crisis and shows no sign of abating. Public companies have been an integral part of developed economies for the past century and their apparent decline has occasioned a great deal of concern in the United States, including recent law reform attempts to reverse the trend.¹

Surprisingly, there has been no analysis of the phenomenon in Canada, where the proliferation of Exchange-traded Funds (ETFs) and the rise and fall of income trust conversions have made trends in this country difficult to see without detailed analysis. Insofar as the Canadian IPO market has been referenced at all in U.S. discussions, it has been said to be in good health, with little change over the last decade, and used as a foil by those arguing something specific to American capital markets has gone wrong.² This is not true, however. The Canadian IPO market has also undergone a severe contraction over the past decade, and the differing regulatory and legal regimes between the two culturally similar, economically-linked countries can tell us a lot about what is, and is

* This is collaborative research and we do not consider the order of author listing to imply otherwise.

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1. United States of America, Bill HR 3606, Jumpstart Our Business Startups Act, 112th Cong, 2012, ss. 101-108.
2. D. Weild and E. Kim, "A Wake-Up Call for America" (Grant Thornton LLP, 2009), at pp. 6-8, online: Grant Thornton <<http://www.grantthornton.ca>>.

not causing the decline of public markets in the United States and elsewhere.

I. INITIAL PUBLIC OFFERINGS IN CANADA

An “initial public offering” or “IPO” refers to the first time a company issues its shares to the public pursuant to a prospectus and in conjunction with listing its shares on a recognized stock exchange. Idiosyncrasies of the Canadian capital markets require some elaboration of this definition, however. First, in most Canadian provinces, broad exemptions from prospectus requirements, particularly the “offering memorandum” exemption, permit large sums of money to be raised from the public.³ Unlike exempt distributions in the United States, these Canadian private placements never give rise to an eventual obligation of the company to register its shares with the appropriate securities commissions. In other words, private Canadian companies can access retail as well as institutional investors without ever needing to conduct an IPO.

The second idiosyncrasy of Canadian capital markets is that the country has always possessed very active junior or “venture” stock exchanges. These are full-fledged public markets with low listing requirements and some special rules designed to protect investors in early stage companies.⁴ The largest of these junior public markets is the tsx Venture Exchange.⁵

Very few institutional investors participate in these markets (outside of oil and gas, the number of institutional participants is insignificant), and trading volumes tend to be low. The mean proceeds for an IPO on the Venture Exchange is \$1.16 million, and the median proceeds are even lower: \$0.35 million.⁶ For these reasons, listing on a venture exchange is invariably seen as a

3. *Prospectus and Registration Exemptions*, ASC NI 45-106, (January 1, 2011); British Columbia Securities Commission, “Exemptions you can use to fund your business: Offering Memorandum Exemption”, online: British Columbia Securities Commission <<http://www.bsc.bc.ca>>; Alberta Securities Commission, “Common Capital Raising Exemptions: What is the ‘Offering Memorandum Exemption?’”, online: Alberta Securities Commission <<http://www.albertasecurities.com>>; D. Seleanu, “Ontario Securities Commission to Review Exempt Market Regime After Calls for Expansion” (Toronto, June 28, 2012), online: Reuters <<http://blogs.reuters.com>>.

4. C. Carpentier and J. Suret, “The Survival and Success of Canadian Penny Stock IPOs” (2011), 36 *Small Bus. Econ.* 101, at p. 103.

5. B. Tingle, *Start-up and Growth Companies in Canada: A Guide to Legal and Business Practice* (Markham, Ontario, LexisNexis Canada Inc., 2005), at p. 264.

6. J.A. Pandes and M. Robinson, “The Canadian Junior IPO Market and the Capital

financing strategy for companies with low capital requirements, not as an exit, major financing initiative, or sign of a growth company's maturation. We do not, therefore, include new listings on the venture exchanges as an "IPO" for the purposes of this paper.

II. WHY CANADA'S IPO MARKET MATTERS

For most of the past century, the IPO market has played an essential part in the development of entrepreneurial companies in Canada and the United States. Nearly all growth companies begin by financing themselves privately. The risks associated with a new business are too large for any but those close to the entrepreneur to advance capital. The usual sources for start-up capital are thus friends and family (whose previous experience with the entrepreneur gives them unique insight into his or her competence and integrity), and angel investors and venture capitalists who generally have no prior experience with the entrepreneur, but instead take an active role in the business, monitoring the entrepreneur's performance carefully.

There is much less private than public money addressing growth companies in Canada, a trend that has been exacerbated in the past decade by the steep decline of venture capital in this country.⁷ In 2007, before the financial crisis, \$30 billion of venture capital was invested in the United States, compared to just over \$2 billion in Canada.⁸ This money is not disbursed equally across Canadian jurisdictions; venture capital tends to be invested close to home.⁹ According to the venture capital industry's statistics, Alberta businesses received a per capita amount of \$20, British Columbia's companies received \$50, and Québec companies received \$70.¹⁰

Pool Program" at p. 10 (forthcoming in *Handbook of Research on IPOs*, M. Levis and S. Vismara, eds. (London, U.K., Edward Elgar, 2013).

7. "While fundraising by Canadian firms picked up ever so slightly in 2011, it was still near 17-year lows and companies invested significantly more than they raised." S. Hurwitz, "Jump-starting Canada's vc Industry", *Private Capital Privé Magazine*, Spring, 2012, at p. 2.
8. R. Brenner and G.A. Brenner, "Venture Capital in Canada: Lessons for Building (or Restoring) National Wealth" (2010), 22 *J. App. Corp. Fin.* 86, at p. 91.
9. See D. Cumming and S. Johan, "Provincial Preferences in Private Equity" (Social Science Research Network, January, 2005), online: Social Science Research Network <<http://ssrn.com/abstract=662181>>.
10. KPMG LLP, "British Columbia Technology Report Card (2012): Assessing Performance – Gauging Potential" (Vancouver, B.C., 2012), at p. 24, online: British Columbia Technology Industry Association (BCTIA) <<http://www.bctia.org/>>. See also Price WaterhouseCoopers LLP, "Alberta's Compe-

Companies in the State of Massachusetts received \$452 per capita; in California the number was \$384 per capita.¹¹ The dearth of institutional capital available to finance Canada's entrepreneurs accounts for the greater reliance Canada has placed on its public markets to supply early stage financing. The regional disparities within Canada explain why the origins of the TSX Venture Exchange are found in western Canada with the Alberta and Vancouver Stock Exchanges.

An IPO thus enables Canadian companies to access significantly more capital than is available in Canada's underdeveloped private markets. Indeed, usually the amounts raised in an IPO dwarf the largest private rounds. Even in the United States, where the ideal of institutional private equity, including venture capital, comes closest to being realized, finance academics observe that, "whereas venture capitalists can provide perhaps \$10-\$40 million in funding throughout a company's life, an IPO allows the company to raise many times that amount in one offering."¹² After an IPO, the large pools of public capital remain available for further financings.¹³

If the initial reason to go public is to access capital, IPOs also reduce the cost of that capital. Private money is more expensive than money raised in the public markets because in the private market investors must be compensated for the expense of monitoring a private company along with the risks and inconvenience of holding illiquid shares. An IPO thus significantly reduces the liquidity premium investors require to hold shares that cannot readily be converted into cash.

IPOs also offer a way for the entrepreneur, his or her employees, and the private investors to sell their shares and exit the investment. No one invests in a start-up without the expectation of eventually realizing a profit. Because "going public is an important venture capital exit strategy, partially closing the exit

tiveness – A Primer for Discussion" (June, 2010) at pg. 19. Relative to the five largest Canadian provinces, six comparable U.S. states and three comparable foreign countries:

In 2007, Alberta had the second lowest number of venture capital deals per capita . . . , the lowest dollar amount of venture capital investment . . . , and accounted for less than 3 per cent of Canada's total venture capital.

11. State Science & Technology Institute (SSTI), *Weekly Digest* (Westerville, Ohio, February 1, 2012), online: <www.ssti.org/Digest/Tables/020112tvc.htm>. In absolute terms, California attracts 40-50% of the venture investment in the United States according to Venture source.
12. W. Megginson and S. Smart, *Introduction to Corporate Finance*, 2nd ed. (Mason, Ohio, Cengage Learning Inc, 2009), at p. 467.
13. Easterbrook, "Corporate Control Transactions" (1982), 91 *Yale L.J.* 698, at p. 736.

could impede start-up financing, and therefore make it harder to get ideas off the ground.”¹⁴ In other words, a decline in the IPO market is nearly always matched by a decline in the capital available for new entrepreneurial ventures.¹⁵

For those new businesses that manage to get financed in the private market, problems in the IPO market mean they must find other ways to provide liquidity to their investors. While venture capitalists often provide themselves with contractual exits in the form of redemption rights or put options, these are seldom exercised.¹⁶ Often even successful companies can’t pay out the sums involved without tripping the corporate prohibitions on distributions to equity holders, and in the case of very successful investments, the contractual exits won’t provide the investors with the return they could get in a market transaction. As for the non-institutional (or “retail”) investors who provide the vast majority of private capital in Canada: they rarely ask for, or receive, independent exit rights.

For these reasons, a decline in the availability or attractiveness of IPOs tends to be matched by a corresponding increase in acquisitions of successful private companies by third parties.¹⁷ In Canada, the acquirers are often much larger foreign companies.¹⁸ Even in the United States, this trend is decried as, “[b]ig corporations . . . eating our young. The young starve for capital before they have the opportunity to reach adulthood, so their true potential will never be known.”¹⁹

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14. F. Edwards and K. Scott, “Statement of the Financial Economists Roundtable on the International Competitiveness of U.S. Capital Markets” (2007), 19 *J. Applied Corp. Fin.* 57.
 15. P. Gompers and J. Lerner, *The Venture Capital Cycle*, 2nd ed. (Cambridge, Massachusetts, MIT Press, 2004), at p. 28. B. Black and R. Gilson, “Venture Capital and the Structure of Capital Markets: Banks versus Stock Markets” (1998), *J. of Fin. Econ.* 243.
 16. D. Cumming and J. Macintosh, “Venture Capital Exits in Canada and the United States” (2003), 53 *U.T.L.J.* 101, at p. 197.
 17. In 2010 and 2012, there was only one IPO exit of a Venture-Capital-backed firm while there were 33 and 29 merger and acquisition (M&A) exits, respectively. Conversely in 2011, when the number of M&A exits dropped to 25, the number of IPO exits increased to 4. Canada’s Venture Capital & Private Equity Association, “Canada’s Venture Capital Market in 2012” (Toronto, 2012), at slide 32, online: Canada’s Venture Capital & Private Equity Association (CVCA) <<http://www.cvca.ca>>.
 18. J. MacIntosh, “Tantalus Unbound: Government Policy and Innovation in Canada” (2012), *The School of Public Policy, SPP Research Papers*, vol. 5.
 19. D. Weild and E. Kim, “Market Structure is Causing the IPO Crisis – And More” (2010) at p. 7, online: Grant Thornton <<http://www.grantthornton.ca>>.

The growth in prominence of acquisitions as an exit strategy relative to IPOs has an impact on the kinds of businesses that get financed and the ambitions of entrepreneurs. IPOs permit a company and its management team to maintain their integrity and culture; the company can continue its growth and possibly become a new corporate giant. In contrast, companies that are acquired are usually incorporated into the larger business and lose their distinctive character and management teams. Imagine what would have happened if Apple or Google had been acquired by IBM or Microsoft early in their existence.

American venture capitalists report that the entrepreneurs they now see are building companies designed to be acquired by Facebook or Google in three to four years, rather than looking to create revolutionary new corporate giants.²⁰ Indeed, in 2010, five large tech companies acquired 134 start-ups — more than the entire number of companies that went public that year.²¹ Venture capitalists are accused of avoiding financing ideas that have no obvious large strategic buyers: “Gone are the days when most venture capitalists would willingly pioneer new industries and technologies (*e.g.*, semiconductors, computers and biotechnology) that have no obvious outlet other than the IPO market.”²²

A collapse in the IPO market is also attended by an increase in the cost of private capital for new businesses. Initial Public Offerings tend to be conducted at higher multiples of earnings than acquisitions and this fact is reflected in the cash flow models early-stage investors use to value private companies. The more likely an IPO is as an exit transaction, the more highly a private investor will value a new business. In addition, problems in the IPO market mean that it takes longer for companies to achieve an exit event.²³ It now takes nearly twice as long for a company to go public in the United States as it did prior to 2000.²⁴ This also impacts the valuations early-stage investors are prepared to give new firms. The harder money is to find and the more expensive it becomes, the less

20. “The Endangered Public Company”, *The Economist*, May 19, 2012, at p. 5.

21. *Ibid.*

22. Weild and Kim, *supra*, footnote 19, at p. 7.

23. The median age of a venture-backed company at IPO in the United States was more than nine years between 2006 and 2011. It was 8.6 years immediately before the 2008 financial crises. Thomson Reuters, “National Venture Capital Association: Yearbook 2012” (2012), at p. 52, online: <<http://www.nvca.org>>.

24. *Ibid.* Aside from representing a near doubling of the historical average prior to 2000, the time these companies spend as private entities exceeds the usual venture capital fund life-cycle and the usual employee stock option term of five years.

valuable starting a new business — with all its attendant risks and sacrifices — is to potential entrepreneurs. In other words, the less a potential entrepreneur is permitted to keep of his business, the higher the opportunity cost of starting it.

Intel went public in 1971, with an \$8 million IPO, a tiny \$53 million valuation and a couple more years of negative earnings in its future. Companies listing on the TSX may be significantly smaller than their peers in other countries, but this does not mean that Canada's IPO market is unimportant.²⁵ The solutions to Canada's well-documented problems with innovation and productivity (the biggest economic challenge the country faces) are intimately connected to the health of its public markets, because those public markets are intimately connected to the health of the ecosystem that supports innovative new business ideas.

It is also the case that the IPO market focuses capital precisely on the fastest growing companies in the country. These are the gazelles, responsible for nearly all net job creation in Canada over the past decade.²⁶ Estimates of the jobs lost as a result of the decline of the U.S. IPO market in the past decade range from 1.88 million to 22 million jobs.²⁷

The final reason IPO rates matter to Canada is that they are closely connected to the general health of its stock exchanges, which are an important social institution in their own right.²⁸ In the United States, for example, the number of public companies

25. C. Nicholls, "The Characteristics of Canada's Capital Markets and the Illustrative Case of Canada's Legislative Regulatory Response to Sarbanes-Oxley", *Maintaining a Competitive Capital Market in Canada: Canada Steps Up: Research Study for the Task Force to Modernize Securities Legislation in Canada*, vol. 4 (Toronto, Task Force to Modernize Securities Legislation in Canada, 2006), p. 127.

26. Industry Canada, "Profile of Growth Firms: A Summary of Industry Canada Research" (March, 2008), at p. 4.

27. IPO Task Force, "Rebuilding the IPO On-Ramp: Putting Emerging Companies and the Job Market Back on the Road to Growth" (October 20, 2011), at p. 1, online: U.S. Securities and Exchange Commission <<http://www.sec.gov>>. M. Kenney, D. Patton and J. Ritter, "Post-IPO Employment and Revenue Growth for U.S. IPOs, June 1996-2010" (2012), online: Kauffman Foundation <<http://www.kauffman.org>>, which finds 1.88 million jobs have been lost because of declining IPO volumes. Governor Jack Markell estimates 10 million jobs have been lost: J. Markell, "Restarting the U.S. Capital Machine", *Wall Street Journal* (March 1, 2012), p. A13.

28. This was particularly evident in the rhetoric surrounding the acquisition of the TMX Group by the London Stock Exchange. See for example the opinions cited in B. Erman and K. Howlett, "Shareholders Reject Proposed Merger of TMX and LSE", *The Globe and Mail*, June 29, 2011.

has declined by 38% since 1997.²⁹ Public markets are the primary agency for imposing transparency on the operations of Canada's most powerful economic institutions. When Canadian stock markets fail to provide sufficient attractions to businesses to become reporting issuers, Canadians see less of what transpires in their country. Companies on the TSX publish quarterly financial reports, disclose material changes to their business in near real-time, describe what their senior executives are paid and how elements of their compensation are calculated, give insight into corporate strategy and reflect on the results of previous decisions. In contrast, private companies operate in a near complete fog of secrecy.

Public markets have also been a great democratizing force in western countries. They have permitted average Canadians to invest in all types of businesses. There are pools of private capital in this country, but almost all of this capital is invested by professional fund managers on behalf of other mediating institutions (government, pension funds, university endowments) or high net-worth investors. The average Canadian has little visibility on these investments and no chance of participating in them directly.

Public markets have traditionally afforded Canadians opportunities to both discover information about corporate activities they might find objectionable, and tools to bring pressure to bear on corporate decision-makers. Talisman Energy's stock price, which declined in the unfavourable publicity surrounding its activities in Sudan, was a factor in the decision to sell those assets.³⁰

In summarizing the effects of the decline of IPOs in the United States, a Department of the Treasury Task Force observed,³¹

These outcomes contradict the spirit and intent of more than 75 years of U.S. securities regulation, which originally sought to provide investor protection through increased information and market transparency, and to encourage broad investor participation through fair and equal access to the public markets.

III. THE DECLINE IN U.S. INITIAL PUBLIC OFFERINGS

There has been a precipitous decline in American IPOs since 2000. Between 1980 and 2000, an average of 311 operating

29. "The Endangered Public Company", *supra*, footnote 20, at para. 4.

30. S. Kobrin, "Oil and Politics: Talisman Energy and Sudan" (2003-2004), 36 N.Y.U.J. Int'l. L. & Pol. 426.

31. IPO Task Force, *supra*, footnote 27, at p. 8.

companies per year went public; in the past decade, the average has been 99 IPOs per year.³² The drop in IPOs has been particularly severe in the case of small companies, defined as businesses with less than \$50 million in inflation-adjusted annual sales. The number of these companies going public declined from 166 a year in the 20 years ending in 2000 to 29 per year in the last decade — a decline of more than 80%.³³

The declines in IPO volume are particularly striking when measured as a proportion of America's Gross Domestic Product (GDP), which has more than doubled since 1980.³⁴ Scholars have long known that IPO activity is related to stock prices, but market-to-book ratios and price-earnings ratios were much lower 1980-1995 than they have been since 2001.³⁵ Apparently the collapse of the IPO market has been unaffected by the recent historically high valuations afforded public companies.

American IPO activity can also be examined in relation to its percentage of the world's GDP. In the 1990s, the United States produced 27% of the IPOs in the world while accounting for 27% of the world's GDP.³⁶ America's share of world GDP increased to 30% in the past decade, but its share of IPOs declined to 12%.³⁷ Undoubtedly, some of this decline is a function of the growth of IPO activities elsewhere in the world during the past decade, but according to the scholars who study the phenomenon, some of the decline is only explainable as domestic weakness.³⁸

32. J. Ritter, "Re-energizing the IPO Market" (2012), at p. 1, online: Social Science Research Network <<http://ssrn.com>>, forthcoming in *Restructuring to Speed Economic Recovery*, M. Bailey and R. Herring, eds. (Washington, D.C., Brookings Press, 2013).

33. Testimony of J. Ritter before the Senate Committee on Banking, Housing and Urban Affairs (March 6, 2012) regarding the "Hearing: Spurring Job Growth Through Capital Formation While Protecting Investors, Part II" at p. 1. Testimony of D. Weild before the U.S. House of Representatives Financial Services Committee Capital Markets and Government Sponsored Entities Subcommittee (June 20, 2012) regarding the "Hearing on Market Structure: Ensuring Orderly, Efficient, Innovative and Competitive Markets for Issuers and Investors" at p. 4; X. Gao, J. Ritter and Z. Zhu, "Where Have All the IPOs Gone?" (Social Science Research Network, 2012), at p. 7, online: Social Science Research Network <<http://ssrn.com>>.

34. The U.S. GDP has increased 117% since 1980. Gao, Ritter and Zhu, *ibid.*, at p. 7.

35. Ritter, *supra*, footnote 32, at p. 6.

36. C. Doidge, G. Karolyi and R. Stulz, "The U.S. Left Behind: The Rise of IPO Activity Around the World" (Social Science Research Network, 2011), at p. 1, online: Social Science Research Network <<http://ssrn.com>>.

37. *Ibid.*

38. *Ibid.*, at p. 14.

The U.S. market's share of IPOs undertaken by companies outside their home jurisdiction, often referred to as "Global IPOs", has (measured in value) declined from 50% of all Global IPOs in 2000 to 5% in 2005,³⁹ and (measured in number) from 48% of all Global IPOs in 2000 to 8% in 2006.⁴⁰ In sum, America is not just generating fewer IPOs domestically, it has become significantly less attractive a market for foreign IPOs. This is the case even as returns in the U.S. market during the past 30 years exceeded those of its international competitors.⁴¹

The finance literature that examines variations in IPO activity has tended to find that swings in the volume of IPOs are strongly correlated to changes in aggregate capital demands of private firms and to investor optimism.⁴² (In other words, changes in the need for capital and changes in the supply and cost of capital.) What makes the decline of IPOs in America over the past decade interesting is that it has persisted regardless of market conditions. The past decade has included years with the most favourable market conditions seen in a generation, but it has made no difference to IPO activity.

The decline of American participation in global IPO activity, well below its actual significance in the world's economy, also suggests that the problem is not just some passing domestic economic malaise. Something fundamental about America's public markets has rendered them less attractive to new companies, including those companies growing rapidly in other countries that might once have thought of going public in the United States.

In sum, we see evidence for a broader problem with American public markets. Since the early 2000s, public companies have been going private at increasing rates.⁴³ Foreign firms not only no longer treat American stock markets as their first choice for raising

39. United States of America, Committee on Capital Markets Regulation, *Interim Report of the Committee on Capital Markets Regulation* (November 30, 2006), at pp. x-xi, online: Committee on Capital Markets Regulation <<http://capmksreg.org>>.

40. L. Zingales, "Is the U.S. Capital Market Losing its Competitive Edge?" (2006), online: Social Science Research Network <<http://ssrn.com>>.

41. S. Bainbridge, "Corporate Governance and U.S. Capital Market Competitiveness" (2010), at p. 5, online: Social Science Research Network <<http://ssrn.com>>.

42. M. Lowry, "Why Does IPO Volume Fluctuate So Much?" (2003), 67 *J. Fin. Econ.* 3; J. Ritter, "Investment Banking and Security Issuance" in G. Constantinides, M. Harris and R. Stultz, eds., *Handbook of the Economics of Finance*, vol. 1A (The Netherlands, Elsevier BV, 2003), at p. 255.

43. J. Kim, *Time Series Analysis of Going Private Transactions Before and After the*

capital, but foreign companies that have long been present in the United States are delisting.⁴⁴

IV. THE DECLINE IN CANADIAN INITIAL PUBLIC OFFERINGS

Obtaining accurate numbers for Canada's IPO market is surprisingly difficult. One U.S. study explained that during the sample period 1980 through 2007, three different sources for TSX IPO data were consulted:⁴⁵

For Canada, the Bloomberg counts are on average 40% lower than for SDC [Securities Data Company's Global New Issues Database] which are, in turn, about 20% higher than those reported to the WFE [World Federation of Stock Exchanges].

For this reason, we have relied only on the most accurate information available: the Financial Post Infomart database for the period 1993-2011. (The database only begins in 1993 — prior to that date, collecting accurate data becomes significantly more difficult, as the U.S. scholars quoted above discovered.)

The U.S. literature on its IPO market is focused on operating companies and that is what concerns us as well. The accepted calculations in the United States for their IPO totals (used throughout the literature as well in this paper), exclude:⁴⁶

[C]lose-end funds, Real Estate Income Trusts (REITs), Special Purpose Acquisition Companies (SPACs) and other blind-pool offers, oil & gas limited partnerships, American Depositary Receipts (ADRs), unit offerings, penny stocks (IPOs with an offer price below \$5 per share), small best efforts offers, bank & S&L IPOs (most of which are conversions into stock companies), and stocks not listed on Nasdaq or the American or New York Stock Exchanges.

The differing nature of Canada's capital markets caused us to relax some of these requirements. First and most importantly, we included all TSX operating company listings, regardless of the initial per share issue price. (In Canada, more than three out of four offerings are priced below \$1 per share, although this includes issuers on the TSX Venture Exchange.)⁴⁷

Sarbanes-Oxley Act (Denton, Texas, University of North Texas, 2010), at p. 19. See also Bainbridge, "Corporate Governance", *supra*, footnote 41, at p. 2.

44. Bainbridge, *ibid.*, at p. 2.

45. Doidge, Karolyi and Stulz, *supra*, footnote 36, at p. 8.

46. Ritter, "Re-energizing", *supra*, footnote 32, at note 2.

47. C. Carpentier, M. Kooli, J.-M. Suret, "Initial Public Offerings: Status, Flows and Dysfunctions" (Industry Canada, 2003), at p. 3.

We also don't exclude any companies because of their industry type, as we are interested in more than the entrepreneurial finance aspect of IPOs. In addition, we are interested in the attractiveness of public markets to business generally, even if no new capital was raised in the course of the IPO.⁴⁸

We do not include trust units, which has the effect of excluding exchange-traded funds (ETFs), REITs and income trusts. This facilitates proper comparison with the U.S. literature (which also excludes them); and very few of these trusts carry on operating businesses.⁴⁹ Most of them (and ETFs are the largest category of new issuer on the TSX) only provide a tax-efficient way for retail investors to hold income-producing assets, as opposed to operating businesses. Some of the income trusts that went public in the middle of the last decade might be considered operating businesses, although most depended on regularly acquiring other companies to replace depleting assets. In the end, however, the sample size includes the period when income trusts were forced to convert back into corporations, and so most of these firms are included in the statistics as an IPO in any event.⁵⁰

Our decisions to vary from U.S. practice (necessitated by the differences between the two markets) probably overstate the health of the Canadian IPO market. They are thus, for our purposes, conservative.

Table 1 sets out the yearly descriptive IPO statistics from 1993-2011. The GDP and GDP Deflator data was obtained from Statistics Canada's CANSIM database. The first thing to note is that between 1993 and 2000 there were an average of 42.6 IPOs on the TSX each year; following 2000 the average was 18.2 IPOs a year — less than half. Even in the best years after 2000, when public markets awash in liquidity tested new highs and commodity prices climbed sharply, TSX IPOs never exceeded the *average* IPO rate prior to 2000.

48. There are thus five demutualizations of insurance companies (Canada Life Financial Corporation, Clarica Life Insurance Company, Industrial-Alliance Life Insurance Company, Manulife Financial Corporation and Sun Life Financial Services of Canada) and two privatizations (Canadian National Railway and Manitoba Telecom Services) included in the IPO counts set out in Table 1.

49. This is the reason, for example, why Industry Canada does not include trusts in its IPO data: Carpentier, *et al.*, *supra*, footnote 47, at p. 4.

50. G. Vandebeek, "No Halloween Treat for Income Trusts" (2006-2007), 80 *CMA Mgmt.* 38; I. Glew and L. Johnson, "Consequences of the Halloween Nightmare: Analysis of Investors' Response to an Overnight Tax Legislation Change in the Canadian Income Trust Sector" (2012), 28 *Can. J. Admin. Sciences* 53, at p. 61; D. Parkinson, "A short history of income trusts", *The Globe and Mail* (October 29, 2010), online: *The Globe and Mail* <<http://www.theglobeandmail.com>>.

During 2005-2007 — very good years in the public markets — Canadian IPO rates reached only three-quarters the average total in the 1990s, and only 40% of that decade's best year.

The statistical picture is complicated, of course, by the dot-com boom in the late 1990s (which might have the effect of uncharacteristically raising IPO rates in that decade) and then by the two bear markets caused by the dot-com collapse and the 2008 financial crisis (which might artificially reduce IPO rates.) While these no doubt influence the IPO picture in particular years, we do not believe they can explain the trend.

In relation to the dot-com boom, it is worth noting that the Canadian market is not particularly oriented towards Internet and information technology stocks, even during the peak in the United States during 1999-2000 (see Table 2).⁵¹ Rather, the Canadian market is largely resource-driven and the historically very low commodity prices of the late 1990s supplied a very strong headwind to the market during this period.⁵² This likely explains, for example, why Canada's IPO market generally *declines* over the course of the 1990s, even as the IPO market in the United States developed a bubble.

In contrast, commodity prices grew strongly during the decade following 2000, and thus served again as a counter-cyclical force during that decade's financial turmoil. In the period 2004-2008, oil prices increased from roughly \$30 a barrel to over \$133 a barrel, in what the IEA eventually categorized as an oil shock.⁵³ The prices of nearly every other commodity Canada produces rose significantly during this period. The World Bank described it as a "commodities boom . . . one of the longest and broadest of the post-World War II period."⁵⁴ The nominal prices of energy and metals increased by

51. See the discussion accompanying footnotes 186-190, as well as C. Carpentier and J. Suret, "The Survival and Success of Canadian Penny Stock IPOs" (2011), 36 *Small Bus. Econ.* 101, at p. 109: "Natural resource companies represent 44.33% of new issues in Canada, reflecting the relative prominence of this activity in that country."

52. R. Duttagupta, *et al.*, "Commodity Price Swings and Commodity Exporters" in International Monetary Fund, *World Economic Outlook: Growth Resuming, Dangers Remain* (Washington, D.C., International Monetary Fund, 2012), at p. 125; "Drowning in Oil", *The Economist*, March 6, 1999, cover, online: [The Economist <http://www.economist.com>](http://www.economist.com).

53. International Energy Agency, *World Energy Outlook 2008*, Chapter One, "Energy Prices". See also the discussion at National Resources Canada, Overview (October, 2010), available online at <http://www.nrcan.gc.ca/energy/publications/sources/crude/issues-prices/1484#figure5>.

54. J. Baffes and T. Haniotis, "Placing the 2006/08 Commodity Price Boom into

230%, and those of food and precious metals doubled.⁵⁵ Given the outsized importance of commodity producers in Canada's economy, it is not surprising that the TSX Composite Index reached its all time high in June of 2008. Even during these relatively ebullient markets, however, Canada's IPO rates experienced only modest improvement, and fell well short of the IPO activity of the 1990s.

Canada's public and private balance sheets were also relatively unscathed by the 2008 financial crisis,⁵⁶ and after a short price shock, commodity prices tended to remain high for the remainder of the sample period.⁵⁷ The TSX Composite Index generated a 30.7% return in 2009, and a 14.4% return in 2010.⁵⁸ Again, however, these favourable market conditions were not accompanied by a return to 1990s levels of IPO activity.

Table 1 provides data on aggregate IPO proceeds in 2011 prices. Similar to the frequency of IPOs, we find that the aggregate proceeds are generally also higher in the 1990s as compared to the 2000s. The highest aggregate proceeds are in 1999 and 2000, with proceeds from IPOs totalling \$6.15 billion and \$6.24 billion, respectively. While these years coincide with the Internet and information technology bubble, we also find high aggregate proceeds in 1997 and 1993, which total \$5.96 billion and \$5.01 billion, respectively. Comparatively, in the 2000s, we find the highest aggregate proceeds to be \$4.85 billion. These trends are also supported when we compute aggregate proceeds as a percentage of GDP. The highest percentages are found in the 1990s, and particular, in 1997 and 1993, where the proceeds as a percentage of GDP are 0.48% and 0.46%, respectively. In contrast, during the 2000s, the proceeds as a percentage of GDP are not nearly as compelling. For example, the highest percentage during this decade is 0.28% in 2010 (which is, incidentally, in the post-financial crisis period).

Perspective" (World Bank Policy Research Working Paper 5371, July, 2010), at p. 1.

55. *Ibid.*, at p. 3.

56. K. Richburg, "Canadian Economy Mostly Unscathed by Global Financial Crisis", *The Washington Post*, October 16, 2008; K. Lynch, "Prudent, perhaps, but the Canadian Model Pays Off", *The Globe and Mail*, August 23, 2012; M. Bordo, A. Redish and H. Rockoff, "Why Didn't Canada Have a Banking Crisis in 2008 (or in 1930, or 1907, or . . .)?" (2011), online: The National Bureau of Economic Research <<http://www.nber.org>>.

57. Duttagupta, *supra*, footnote 52, at p. 125.

58. "TSX Composite Stock Market Index Historical Graph", online at <<http://www.forecast-chart.com/historical-tsx-composite.html>>.

In summary, the Canadian IPO market declined significantly over the past two decades, whether measured by the number of new businesses going public or the amounts raised. Furthermore this decline occurred over a period when the natural resource industries that dominate Canada's economy, and disproportionately contribute to its IPO markets, experienced significant growth in the world prices for their products. Finally, the decline persisted even in years when financial conditions for new listings were exceptionally favourable.

V. PROPOSED CAUSES OF THE IPO DECLINE IN THE UNITED STATES EXAMINED THROUGH THE CANADIAN EXPERIENCE

The collapse of its IPO market has produced a groundswell of analysis in the United States over the past seven years. In addition to various academic studies, the Securities Exchange Commission (SEC), U.S. Department of the Treasury, House of Representatives and U.S. Senate have either established task forces or held hearings to study the issue. In addition to the Treasury task force's report, three other bodies have issued major studies of the problem: the Bloomberg-Schumer Report,⁵⁹ the two Paulson Committee reports,⁶⁰ and the Chamber Report.⁶¹ A variety of different theories have grown out of all of these initiatives in an effort to explain the causes of the decline.

Over the short-term, IPO activity fluctuates according to market conditions, but by the time Americans began to notice the problem of a collapsing IPO market, it was fairly clear the decline was operating independently of any short-term capital market cycles. Prior to these discussions economists believed that the main long-term factor influencing IPO trends was the nature and quality of public market regulation. Securities regulation and the quality of legal institutions appeared to be the cause of the differences in IPO activities across countries.⁶² Indeed, research seemed to suggest

59. M. Bloomberg and C. Schumer, "Sustaining New York's and the U.S.' Global Financial Services Leadership" (2007), online: The City of New York <<http://www.nyc.gov>>.

60. Committee on Capital Markets Regulation, *supra*, footnote 39, and Committee on Capital Markets Regulation, "The Competitive Position of the U.S. Public Equity Market" (2007), online: Committee on Capital Markets Regulation <<http://capmksreg.org>>.

61. U.S. Chamber of Commerce, "Capital Markets, Corporate Governance, and the Future of the U.S. Economy" (2006), online: U.S. Chamber of Commerce <<http://www.uschamber.com>>.

62. R. La Porta, *et al.*, "Legal Determinants of External Finance" (1997), 52 J. Fin.

that companies were going public in markets outside of their home jurisdictions in an attempt to overcome the adverse effects of poor local laws and regulation.⁶³ In effect, companies were using IPOs in foreign markets to “borrow” better securities regulation and legal institutions. Most of the proposed explanations of U.S. decline have therefore concentrated on securities regulation, and it is here that a comparison with Canada, which has chosen different methods to regulate its markets, proves particularly helpful.

1. Regulatory Over-Reach

The initial reaction of many commentators to the decline in IPOs since 2000 was to attribute it to the Sarbanes-Oxley (SOX) regulatory reforms.⁶⁴ The timing seemed to fit, since Sarbanes-Oxley had become law in 2002, right when the effects of the dot-com collapse would have been wearing off, and we could have expected the beginning of a return to normal IPO levels.

It did not help that Sarbanes-Oxley was widely derided as ineffective and too expensive by most market participants and legal scholars.⁶⁵ Enacted in an atmosphere of hysteria and anti-corporate rhetoric following the accounting scandals at Enron, WorldCom, Tyco and others, the Sarbanes-Oxley reforms represented a sweeping change to the legal regime imposed on public companies.

A great deal of the criticism has been focused on the sections that require CEO and CFO certification of financial reports and the company’s internal controls (s. 302), and then require the company’s internal auditors to attest to and report on manage-

1131; R. La Porta, *et al.*, “Law and Finance” (1998), 106 *J. Pol. Econ.* 1113; R. La Porta, *et al.*, “What Works in Securities Laws” (2006), 61 *J. Fin.* 1; H. Chiu, “Can U.K. Small Businesses Obtain Growth Capital in Public Equity Markets? An Overview of Shortcomings in U.K. and European Securities Regulation and Considerations for Reform” (2003), 28 *Delaware J. Corp. L.* 933.

63. A. Shleifer and D. Wolfenzen, “Investor Protection and Equity Markets” (2002), 66 *J. Fin. Econ.* 3, and R. Stulz, “Securities Laws, Disclosure and National Capital Markets in the Age of Financial Globalization” (2009), 47 *J. Accounting Research* 349.

64. M. Stegemoeller and K.-H. Yu, “The Impact of Sarbanes-Oxley on IPOs and High Yield Debt Issuers” in J. Huber, ed., *The Practitioner’s Guide to the Sarbanes-Oxley Act*, vol. 2 (Chicago, Illinois, American Bar Association Publishing, 2008), II-6-1 at p. II-6-4.

65. R. Romano, “Quack Corporate Governance” (2005), 28 *Regulation* 36; Bainbridge, *supra*, footnote 41, at p. 16; Nicholls, *supra*, footnote 25; S. Sibbold, “Assessing Canada’s Regulatory Response to the Sarbanes-Oxley Act of 2002: Lessons for Canadian Policy Makers” (2009), 46 *Alta. L. Rev.* 769.

ment's assessment (s. 404). According to the Paulson Committee, it cost the average public company \$4.36 million to comply with these rules in 2004, the first year the rule was effective.⁶⁶ Larger companies paid an average of \$7.3 million dollars.⁶⁷ Section 404 alone required an average per-company expenditure of 35,000 staff hours.⁶⁸

Another section of Sarbanes-Oxley requires all companies to have audit committees comprised only of independent directors (narrowly and precisely defined), at least one of whom is a "financial expert" (ss. 301 and 407). Even at the time these rules were brought in, it was well known that "the empirical evidence on the efficacy of director independence in general and audit committee composition in specific was, at best, mixed."⁶⁹ The additional responsibilities imposed on audit committees by Sarbanes-Oxley dramatically increased the workload expected of independent directors and thus their compensation, which almost doubled as a percentage of corporate revenue for smaller companies.⁷⁰

Section 402(a) of Sarbanes-Oxley prohibited most loans from companies to their executives, even though most of these sorts of loans were made to assist management in acquiring the company's shares.⁷¹ A further miscellany of rules from Sarbanes-Oxley, the SEC and the stock exchanges themselves imposed other strict requirements on American publicly listed companies that created costs or inconveniences of various sorts. (Audit committees, for example, were required to establish and oversee a whistle-blowing process that conflicted with EU data protection directives.)⁷²

The harsh criminal and civil sanctions associated with the violation of various aspects of Sarbanes-Oxley (particularly s. 404) caused directors' and officers' insurance premiums to more than

66. Paulson Interim Report, *supra*, footnote 39, at pp. 5 and 115.

67. J. Grundfest and S. Bochner, "Fixing 404" (2007), 105 Mich. L.R. 1643, at p. 1646.

68. S. Bainbridge, "The Complete Guide to Sarbanes-Oxley" (2007), online: Social Science Research Network <<http://ssrn.com>>.

69. Bainbridge, *supra*, footnote 41, at p. 16. See also, S. Bhagat and B. Black, "The Non-Correlation Between Board Independence and Long-Term Firm Performance" (2002), 27 J. Corp. L. 231; Romano, *supra*, footnote 65, at pp. 36-37; J. McFarland, "Mr. Dey's About-Face", *The Globe and Mail*, July 17, 2006, p. B1.

70. J. Burns, "Everything You Wanted to Know About Corporate Governance But Didn't Know to Ask", *Wall Street Journal: Special Report on Corporate Governance*, October 27, 2003), at p. R6; Bainbridge, *supra*, footnote 41, at p. 24.

71. Bainbridge, *supra*, footnote 41, at p. 17.

72. *Ibid.*

double in the middle of the last decade.⁷³ Indeed, attempts to estimate the total cost to date of the Sarbanes-Oxley reforms generate astonishingly high numbers. One estimate of the costs experienced by American public companies complying with SOX over four years placed it at \$75 billion.⁷⁴

These costs were higher, of course, in big companies, but disproportionately hurt smaller companies.⁷⁵ In other words, the costs of Sarbanes-Oxley compliance scale, but only imperfectly. For that reason, the SEC continually delayed the implementation of the attestation requirements on smaller issuers.⁷⁶ Then, in 2007, the SEC revised some of the rules enacted under Sarbanes-Oxley in an attempt to lessen the burdens generally, but particularly for smaller companies.⁷⁷ In 2010, the Dodd-Frank Act took the additional step of permanently exempting smaller issuers from the requirement of auditor assessment of internal controls.⁷⁸ It also

73. *Ibid.*, at p. 24.

74. A. Ahmed, *et al.*, "How Costly is the Sarbanes-Oxley Act? Evidence on the Effects of the Act on Corporate Profitability" (2009), at p. 4, online: Social Science Research Network <<http://ssrn.com>>.

75. P. Kamar, P. Karaca-Mandic and E. Talley, "Sarbanes-Oxley's Effects on Small Firms: What is the Evidence?" (2007), online: Social Science Research Network <<http://ssrn.com>>.

76. United States of America, U.S. Securities and Exchange Commission, *Management's Report on Internal Control over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports*, Release Nos. 33-8238 and 34-47986 (June, 2003); United States of America, U.S. Securities and Exchange Commission, *Management's Report on Internal Control over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports*, Release Nos. 33-8392 and 34-49313 (February, 2004); United States of America, U.S. Securities and Exchange Commission, *Management's Report on Internal Control over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports of Non-Accelerated Filers and Foreign Private Issuers*, Release Nos. 33-8545 and 34-51293 (March, 2005); United States of America, U.S. Securities and Exchange Commission, *Management's Report on Internal Control over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports of Companies that are not Accelerated Filers*, Release Nos. 33-8618 and 34-52492 (September, 2005); United States of America, U.S. Securities and Exchange Commission, *Internal Control over Financial Reporting in Exchange Act Periodic Reports of Non-Accelerated Filers and Newly Public Companies*, Release Nos. 33-8760 and 34-54942 (December, 2006).

77. United States of America, U.S. Securities and Exchange Commission, *Commission Guidance Regarding Management's Report on Internal Control Over Financial Reporting Under Section 13(a) or 15(d) of the Securities Exchange Act of 1934*, 33-8810 (June 20, 2007), and United States, Public Company Accounting Oversight Board, *Auditing Standard No 5: An Audit of Internal Control Over Financial Reporting That is Integrated with An Audit of Financial Statements*, PCAOB Release No. 2007-005A (November 15, 2007).

78. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 11-203, 124 Stat. 1376 (2010), at s. 989G (to be codified at 12 U.S.C. § 5301). The SEC

directed the SEC to conduct a study to determine how the burden of s. 404 compliance could be reduced for mid-cap companies.⁷⁹

For those arguing the Sarbanes-Oxley reforms are a primary cause of the IPO drought, the argument is quite simple: by raising the costs of compliance and the risk of criminal and civil liability, Sarbanes-Oxley provides a significant disincentive to go public.⁸⁰ Indeed, companies are quite possibly worth more (measured in cash flows that may be allocated to their shareholders) in the private market where they don't have the burdens of compliance.⁸¹

These figures [the cost of regulatory compliance] can represent a significant amount of an emerging company's earnings before interest, taxes, depreciation and amortization (EBITDA) and can lower the company's market cap based on EBITDA multiples by tens of millions of dollars. Respondents to the [U.S. Department of the Treasury] task force survey listed the regulatory burdens of going public as their primary concern.⁸²

A comprehensive analysis of the cost of SOX compliance attempted to take into account the increases in company value attributable to investors lowering the risk premiums for financial fraud. The study found that, nevertheless, "On net, SOX compliance reduced the market value of firms."⁸³

These arguments seem particularly compelling in light of the research performed in the last half of the decade, providing direct and indirect evidence that Sarbanes-Oxley compliance costs were tied to the increasing trend of U.S. companies going private (although this trend had been building since the early 1990s, well before the enactment of Sarbanes-Oxley). The evidence came from surveys finding that a significant percentage of public companies were considering going private to avoid the new regime.⁸⁴ Many foreign companies delisting in the United States cited Sarbanes-Oxley as a primary cause.⁸⁵ Other studies showed statistically

permanently exempted smaller issues from s. 404(b) compliance on September 15, 2010 (United States of America, U.S. Securities and Exchange Commission, *Internal Control Over Financial Reporting in Exchange Act Periodic Reports of Non-Accelerated Filers*, Release Nos. 33-9142 and 34-62914).

79. Dodd-Frank Act, *ibid.*, at s. 989I.

80. IPO Task Force, *supra*, footnote 27, at pp. 9-12.

81. Ahmed, *supra*, footnote 74, at p. 4: found that in a sample of 1,428 companies, average cash flows declined by 1.3% post-Sarbanes-Oxley.

82. IPO Task Force, *supra*, footnote 27, at p. 9.

83. P. Iliev, "The Effect of SOX Section 404: Costs, Earnings Quality, and Stock Prices" (2010), 65 J. Fin. 1163, at p. 1163.

84. Bainbridge, *supra*, footnote 68, at p. 6.

85. E. Cardenas, "Mexican Corporations Entering and Leaving U.S. Markets: An

significant increases in going private transactions following the passage of Sarbanes-Oxley.⁸⁶

Notwithstanding this evidence, the thesis that the Sarbanes-Oxley era reforms are the primary cause of the decline in IPOs has met with some criticism in the United States. Some scholars point out that the most onerous rules never did come into effect in relation to the smaller issuers that have disproportionately been missing from the IPO market, and that there was no change in IPO rates following the 2007 attempt by the SEC to reduce the impact of the rules.⁸⁷ They also point out that there have been relatively few U.S. firms that have chosen to go public in foreign markets unburdened by the Sarbanes-Oxley regime.⁸⁸

These are not knock-down arguments. Any effect of the 2007 reforms, for example, could easily have been outweighed by other regulatory initiatives that were proposed around the same time. This includes the Public Company Accounting Oversight Board's proposal to require companies to regularly change their audit firms (it is expensive to get a new audit firm up to speed) and the Frank-Dodd Act reforms which were well publicized by 2009. There has been too much regulatory noise in the past five years to feel confident that any one initiative to lighten the regulatory burden will have a material effect on the broader trend.

Similarly, the failure of U.S. firms to seek public listings on foreign markets is not especially helpful. There are a number of barriers to a foreign listing for a U.S. firm, not the least of which is the scepticism that greets a company from the United States, which is still possessed of the deepest and most liquid capital markets in the world, seeking to list its shares in Europe. In our experience it is difficult to escape the perception that such a company has been rejected by the American market, which is in a better position to evaluate the assets, local market conditions and management quality than European bankers and investors.

Impact of the Sarbanes-Oxley Act of 2002?" (2008), 23 Connecticut J. Int'l L. 281.

86. I. Zhang, "Economic Consequences of the Sarbanes-Oxley Act of 2002" (2007), 44 J. Accounting & Econ. 74; M. Wintoki, "Corporate Boards and Regulation: The Effect of Sarbanes-Oxley Act and the Exchange Listing Requirements on Firm Value" (2007), 13 J. Corp. Fin. 229; E. Engel, R. Hayes and X. Wang, "The Sarbanes-Oxley Act and Firm's Going Private Decisions" (2007), 44 J. Accounting & Econ. 116.

87. Gao, Ritter and Zhu, *supra*, footnote 33, at p. 3.

88. C. Caglio, K. Hanley and J. Marietta-Westberg, "Going Public Abroad" (Social Science Research Network, 2011), online: Social Science Research Network <<http://ssrn.com>>.

It is here, therefore, that the experience of Canada is very helpful. Immediately following the 2002 reforms in the United States, several powerful constituencies in Canada advocated the wholesale adoption of Sarbanes-Oxley rules into the country. These included the governments of Canada and Ontario, the Ontario Securities Commission, and large institutional investors like the Ontario Teachers Pension Plan.⁸⁹ The tsx and the Securities Commissions of Alberta and British Columbia resisted this approach, and several years of conflict among Canada's regulators ensued.

Helped, no doubt, by the growing American consensus in the middle of the decade that Sarbanes-Oxley had gotten a number of things wrong, Canadian regulators actually wound up enacting very few of the Sarbanes-Oxley reforms. A major factor influencing the final form of what reforms were enacted in 2004 and 2005 was the much smaller size of Canadian public issuers (even those on the tsx would nearly all be classified as micro-caps in the United States), and the growing sense that Sarbanes-Oxley would compromise their viability as public companies.⁹⁰ As a result, nearly all the reforms effected were in the form of non-binding recommendations of best practices, rather than mandatory rules.⁹¹

In connection with the certification of financial results and internal controls, Canada decided it would not require auditor attestation of internal controls.⁹² This constituted the complete avoidance of the Sarbanes-Oxley s. 404 obligations, the most expensive requirement imposed by that statute. The s. 302 requirements for management certification of the financial statements and internal controls were watered-down by the addition in the Canadian forms of a "reasonable due diligence" qualification in certifying the financial reports and a "reasonable assurance" qualification in relation to the internal financial controls.⁹³ Arguably, the less litigious climate in Canada (discussed

89. Sibbold, *supra*, footnote 65, at p. 783.

90. Nicholls, *supra*, footnote 25.

91. Sibbold, *supra*, footnote 65, at p. 792.

92. *CSA Notice 52-313 – Status of Proposed MI 52-111 Reporting on Internal Control over Financial Reporting and Proposed Amended and Restated MI 52-109 Certification of Disclosure in Issuers' Annual and Interim Findings*, OSC CSA Notice, 29 OSCB 2011 (March 10, 2006):

After extensive review and consultation and in view of the delays and debate underway in the U.S. over the rules implementing section 404 of the Sarbanes-Oxley Act of 2002 . . . we have determined not to proceed with proposed Multilateral Instrument 52-111 [which contained the Sarbanes-Oxley attestation requirements].

93. *Certification of Annual Filings for periods relating to financial years beginning on*

in detail below) further reduces the costs associated with management certification requirements.

Concerned about the difficulty of generally smaller Canadian issuers finding “financial experts”, the Canadian rule relating to audit committees merely required the members of the committee to be independent and financially literate, a much lower standard.⁹⁴ Canada brought in no equivalent rule to the ban on loans to corporate executives. Even the non-binding list of corporate governance practices was issued without the regulators suggesting implicitly or explicitly that they constituted “best” or “preferred” practices, as such a statement would ignore the varying circumstances and sizes of Canadian public companies.⁹⁵

In sum, Canada largely did not adopt the Sarbanes-Oxley reforms. What changes did occur to the corporate governance regime in Canada, were largely framed as discretionary or deliberately watered down. Even before Sarbanes-Oxley was enacted in the United States, the average direct cost of an IPO in Canada was significantly less, weighted by issue size, than in the United States.⁹⁶ The differing treatment of the Sarbanes-Oxley reforms would only have exacerbated these differences. Yet Canada demonstrates the same decline in public listings as the United States, suggesting that Sarbanes-Oxley isn’t the primary cause of the malaise in the IPO market.

It should be noted that while Canada is the most persuasive control for America’s legislative experiments in 2002, given the two countries’ proximity and cultural and financial linkages, it is not the only control available. Evidence from Europe, also unburdened by SOX, suggests its member countries experienced a parallel decline in IPOs following 2000.⁹⁷

or after January 1, 2011, OSC NI 52-109F1, (January 1, 2011); *Certification of Interim Filings for periods relating to financial years beginning on or after January 1, 2011*, OSC NI 52-109F2 (January 1, 2011).

94. *Audit Committees*, OSC NI 52-110 (January 1, 2011) at ss 1.6 and 3.1.

95. Sibbold, *supra*, footnote 65, at p. 791; *Disclosure of Corporate Governance Practices*, ASC NI 58-101, 2799038 v2 (March 17, 2008) and *Corporate Governance Guidelines*, OSC NP 58-201, (June 17, 2005).

96. T. Shutt and H. Williams, “Going to Market: The Cost of IPOs in Canada and the United States” (Ottawa, June, 2000), online: The Conference Board of Canada <<http://www.conferenceboard.ca>>; Industry Canada, “Initial Public Offerings: Status, Flaws and Dysfunctions” (Ottawa, 2003), at pp. 26-27.

97. S. Vismara, S. Paleari and J. Ritter, “Europe’s Second Markets for Small Companies” (2012), 18 *Eur. Fin. Mgmt.* 352, at pp. 358-359, showing that Paris, Milan, Frankfurt and London had a combined average of 79 IPOs a year from 1995-2000 and during the decade that followed, an average of 41 IPOs a year.

2. The U.S. Litigation Climate

Anyone who has sat in the boardroom of a Canadian company contemplating listing its shares on a U.S. stock exchange knows that one of the principal concerns (if not *the* principal concern) is that the move will expose the company to America's litigation regime. Canadian directors are not alone; surveys of foreign issuers find significant concern about the cost of litigation in the United States and the risk of overly-aggressive enforcement actions.⁹⁸ The report commissioned by New York on the competitiveness of its markets found concern not just with America's litigious culture, but the predictability and fairness of the U.S. system.⁹⁹ The CEOs surveyed ranked London, for example, far ahead of the United States on these measures.

Despite this rather well-known feature of the American public markets, not all commentators have considered it as a possible reason for the decline in IPOs.¹⁰⁰ While from 1997 to 2005 there was a constant increase in the both the numbers and settlement values of securities class action filings,¹⁰¹ and while the total amounts paid in these lawsuits actually peaked in 2006,¹⁰² the timing of the decline in IPOs doesn't provide a close fit to the class action trends. The fact is that the legal regime for private class action enforcement didn't change around the time IPOs became dramatically scarcer. Indeed, the only legal changes during the time period under consideration, the Private Securities Litigation Reform Act of 1995 and the Securities Litigation Uniform Standards Act of 1998, were designed to reduce frivolous securities class actions.¹⁰³

Nevertheless, it is possible that America's litigation climate combined with, say, the growing availability of private equity or increasing M&A opportunities, might account for the decline of IPOs. In other words, it might be the case that litigation risk was a

98. H. Jackson, "Summary of Research Findings on Extra-Territorial Application of Federal Securities Law", 1743 PLI/Corp (May 20, 2009) 1243, at p. 1253.

99. Bloomberg and Schumer, *supra*, footnote 59, at pp. 75-77.

100. An exception is Bainbridge, "Corporate Governance", *supra*, footnote 41. But the U.S. Treasury Task Force does not mention it among the many causes they cite.

101. Paulson Committee Report at p. 75.

102. Edwards and Scott, *supra*, footnote 14, at p. 55.

103. Private Securities Litigation Reform Act of 1995, Pub. L. 104-67, 109 Stat. 737 and Securities Litigation Uniform Standards Act of 1998, Pub. L. 105-353, 112 Stat. 3227.

necessary, but not sufficient, condition for the change away from public markets.

In favour of this thesis, the litigation attending the dot-com collapse and the option backdating schemes was peaking during the time IPOs were declining. It is also the case that all evidence suggests that whether framed as a class-action suit or a derivative suit, a great deal of the amount paid out by the corporation, whether by way of settlement or damage award, is paid to the lawyers. Summarizing the way these suits operate in practice, Professor Bainbridge writes, “[l]ike securities class actions, derivative litigation mainly serves as a means of transferring wealth from investors to lawyers.”¹⁰⁴ Professor Bainbridge goes on to provide convincing evidence that there is little gain to the corporate defendants in the form of better governance.¹⁰⁵ Rising rates of litigation would thus mean rising dead-loss costs to companies contemplating a public listing.

The contrast again with Canada, however, is instructive. It has a very different litigation climate compared with the United States.¹⁰⁶ One recent study found that 1,450 suits were filed in Canada per 100,000 people, compared with 3,681 suits in the United Kingdom and 5,806 in the United States.¹⁰⁷ Unlike its southern neighbour, Canada has a “loser pays” scheme that acts as a strong disincentive to frivolous suits (and possibly to risk-averse plaintiffs with good claims).¹⁰⁸ Canada makes much less use of contingency fees, delegates considerable authority to judges to supervise these arrangements and, unlike the United States, subjects them to a “reasonableness” standard.¹⁰⁹ Canadian courts have generally been reluctant to order companies to pay the legal expenses of a derivative action until the conclusion of the suit, so plaintiffs typically need to finance the litigation.¹¹⁰

104. Bainbridge, “Corporate Governance”, *supra*, footnote 41, at p. 11; See also, R. Romano, “The Shareholder Suit: Litigation Without Foundation?” (1991), 7 J. Law, Econ. & Organization 55, and Edwards and Scott, *supra*, footnote 14, at p. 55.

105. *Ibid.* at pp. 10-12.

106. J. Ramseyer and E. Rasmusen, “Comparative Litigation Rates”, Olin Center for Law, Economics and Business (Harvard) Discussion Paper No. 681 (November, 2010), at p. 5.

107. *Ibid.*

108. D. DeMott, “Oppressed But Not Betrayed: A Comparative Assessment of Canadian Remedies for Minority Shareholders and Other Corporate Constituents” (1993), 56 Law & Contemp. Prob. 181, at p. 193.

109. J. Core, “The Directors and Officers’ Insurance Premium: An Outside Assessment of the Quality of Corporate Governance” (2000), 16 J. Law, Econ. & Organization 449, at p. 451, note 2.

Possibly the most important difference between Canada and the United States, however, has been that Canada never developed the fraud-on-the-market doctrine that is an essential underpinning for securities class actions.¹¹¹ For most of the period we are studying, an investor suing on a misrepresentation contained in any secondary market disclosure document, such as financial statements or a press release, had to show they had specifically relied on the misrepresentation to have a cause of action.¹¹² As a Canadian court commented:¹¹³

Reliance is quintessentially an individual issue, because even if the complaints are otherwise common, each member of the class is likely to have relied on the misrepresentation to a greater or lesser extent. The result has been that class proceedings arising out of misrepresentations are frequently not certified.

Private party securities fraud class actions were, in consequence, almost non-existent in Canada until 2006. According to the NERA class action database, only three class actions were filed per year on average in Canada from 1997-2004.¹¹⁴ There were over 3,000 companies trading on Canadian public exchanges during this period.¹¹⁵ Professors Cheffins and Black found that, between 1990-2004, there was only one instance where outside directors of a Canadian company personally paid damages as a result of a lawsuit by a private party, and this was a suit under U.S. securities

110. W. Kaplan and B. Elwood, "The Derivative Action: A Shareholders 'Bleak House'?" (2003), 36 U.B.C. L. Rev. 443, at pp. 464-468.

111. *Basic, Inc. v. Levinson*, 485 U.S. 224 (1988), at pp. 241-242:

The fraud on the market theory is based on the hypothesis that, in an open and developed securities market, the price of a company's stock is determined by the available material information regarding the company and its business . . . Misleading statements will therefore defraud purchasers of stock even if the purchasers do not directly rely on the misstatements.

112. In *Parna v. G. & S. Properties Ltd.*, [1971] S.C.R. 306 (S.C.C.), at p. 316 and *Queen v. Cognos Inc.*, [1993] 1 S.C.R. 87 (S.C.C.), at p. 110, the Supreme Court of Canada set out that the plaintiff's reasonable reliance on the misrepresentation was an essential requirement of the tort.

113. *Metera v. Financial Planning Group* (2003), 126 A.C.W.S. (3d) 898, 2003 ABQB 884, [2003] A.J. No. 1328 (Alta. Q.B.), at para 49. See also the Ontario Court of Appeal's discussion of this issue *Carom v. Bre-X Minerals Ltd.* (2000), 51 O.R. (3d) 236 (Ont. C.A.) at para. 49, leave to appeal refused 157 O.A.C. 399 (note) (S.C.C.).

114. B. Heys and M. Berenblut, "Trends in Canadian Securities Class Actions: 2012 Update" (February 13, 2013), at p. 2, online: NERA Economic Consulting <<http://www.securitieslitigationtrends.com>>.

115. *Ibid.*, at p. 3.

law against a cross-listed company.¹¹⁶ In addition, during this time there were,

... only two reported decisions — both involving preliminary motions rather than full trials — in which outside directors were named defendants in lawsuits under the Ontario Securities Act provision that creates liability for a misleading prospectus.¹¹⁷

The oppression remedy, for which there is no real American equivalent, also wasn't a source of much litigation. Between 1995 and 2001 professors Ben-Ishai and Puri found an average of only one oppression action a year filed against public companies.¹¹⁸ The success rate for suits of this type was quite low, as well.¹¹⁹ (The success rates of oppression suits against public companies was low even relative to the success rates of oppression actions against private companies, as “reasonable expectations” are less likely to arise in connection with public companies.)¹²⁰

This rather hostile environment to civil litigation against public companies was changed somewhat when a new secondary market liability regime came into effect in 2006.¹²¹ This regime provided a statutory cause of action to shareholders for misrepresentations in secondary market disclosure that was analogous to the remedy that had previously been provided for misrepresentations in primary distributions.¹²² Shareholders who have suffered a loss can advance a claim on the basis of misrepresentation without having to show either reliance or causation.¹²³

Significant differences with the U.S. class action regime remain, however. The Canadian private right of action creates a deterrence, rather than a compensation model of civil liability.¹²⁴ Liability

116. B. Cheffins and B. Black, “Outside Director Liability Across Countries” (2006), 84 *Texas L. Rev.* 1385, at p. 1451.

117. *Ibid.*, at p. 1445.

118. S. Ben-Ishai and P. Puri, “The Canadian Oppression Remedy Judicially Considered: 1995-2001” (2004), 30 *Queen’s L.J.* 79, at p. 92.

119. *Ibid.*, at p. 92.

120. See for example, *Aegon Capital Management Inc. v. BCE Inc.* (2008), 301 D.L.R. (4th) 80, 2008 SCC 69 (S.C.C.).

121. Securities Act, R.S.O. 1990, c. S.5 as amended by Keeping the Promise for a Strong Economy Act (Budget Measures) 2002 and Budget Measures Act (Fall), 2004 (OSA); Securities Act, R.S.B.C. 1996, c. 418; Securities Act, R.S.A. 2000, c. S-4 (ABSA).

122. ABSA, *ibid.*, at Part 17; OSA, *ibid.*, at Part XXIII.

123. ABSA, *ibid.*, at s. 203(1); OSA, *ibid.*, at s. 130(1).

124. Toronto Stock Exchange Committee on Corporate Disclosure, “The Interim Report” (1995) at p. 58; CSA Notice 53-302 – *Report of the Canadian Securities Administrators: Proposal for a Statutory Civil Remedy for Investors in the Secondary Market and Response to the Proposed Change to the Definitions of*

under the regime is capped at levels calculated to be painful to the defendants rather than compensatory to the plaintiffs.¹²⁵ Directors and officers are afforded a due diligence defence.¹²⁶ The rules divide disclosure documents into “core” (such as take-over circulars, directors’ circulars, annual information forms, financial statements and MD&A) and “non-core” (everything else, such as press releases). For misrepresentations in non-core documents an element of scienter must be present: either actual knowledge of the falsity of the statement, wilful ignorance or some form of gross misconduct.¹²⁷

The reforms also provide that courts must not only certify class actions, they must approve any settlements.¹²⁸ Previously at least one Canadian court has refused to approve a settlement that provided solely for the payment of money to the plaintiffs’ lawyers on the grounds that it didn’t provide any benefits to shareholders and constituted an abuse of the class action process.¹²⁹ Another court has recently refused to certify a class action that, in its opinion, was unlikely to succeed.¹³⁰ These are discouraging precedents for entrepreneurial litigators. Equally discouraging is the general concern in the Canadian legal community not to allow the new rules to create an American-style litigation climate. This finds explicit or implicit expression somewhere in many judicial decisions on class actions handed down since the changes to the rules.¹³¹

Most importantly for our purposes, the new legal regime did not affect the principal barrier to a U.S.-style litigation culture: the loser pays rules. Plaintiffs (or more properly the law firms representing them) must still pay not only their own costs but

“Material Fact” and “Material Change”, OSC CSA Notice, 23 OSCB 1 (November 3, 2000), at p. 7386.

125. OSA, ss. 138.7(2) and 138.5.

126. *Ibid.*, s. 138.4(2).

127. *Ibid.*, s. 138.4(3).

128. *Ibid.*, s. 138.10.

129. *Epstein v. First Marathon Inc. / Société First Marathon Inc.* (2000), 2 B.L.R. (3d) 30, [2000] O.J. No. 452 (Ont. S.C.J.).

130. *Gould v. Western Coal Corp.*, 2012 ONSC 5184, [2012] O.J. No. 4291 (Ont. S.C.J.).

131. See for example, *Ainslie v. CV Technologies Inc.* (2008), 93 O.R. (3d) 200 (Ont. S.C.J.), additional reasons 2008 CarswellOnt 7735 (Ont. S.C.J.), leave to appeal allowed 2009 CarswellOnt 934 (Ont. S.C.J.), at para. 11:

[T]he CSA recommended this as a means to dissuade plaintiffs from bringing “strike suits” — that is coercive and unmeritorious claims which are aimed at pressuring a defendant into a settlement in order to avoid costly litigation. These had become increasingly frequent in securities class action litigation in the United States . . .

also the costs of the defendants if the action is not successful. This presumably discourages all but the most meritorious lawsuits.

According to the NERA database, since the regime came into effect, the average number of class action suits has increased to the still low amount of 9.5 filings per year.¹³² Half of these suits are either against foreign (usually U.S.-listed) companies or parallel a U.S. class action suit against a cross-listed Canadian company.¹³³ Even if we include these sorts of lawsuits, the new secondary market regime has not materially affected Canada's public markets. During a period that included the 2008 financial crisis (one Canadian lawsuit counted in the sample is against AIG, for example) and the scandals afflicting emerging market (mostly Chinese) issuers, Canadian class action activity is only equal to half of U.S. filings after adjusting for the size of Canada's much smaller capital market.¹³⁴

Indeed, while there are a number of secondary market class actions making their way through the courts, none of them have reached the stage where their merits are evaluated and an award of damages made. Insofar as the new secondary market liability regime had any effect, it was in a vague apprehension that something is changing, and that is not sufficient to account for a drop in the IPO market as pronounced as the one Canada experienced. Nor does it explain why the drop began five years before the legislative changes, or why the best years in the IPO market in the past decade followed the introduction of the new regime. The clear answer is that litigation climate apparently has little to do with the decline in IPOs we see in the statistics.

It is worth noting in this regard that Stanford's Securities Action Clearinghouse suggests there has also been no meaningful long-term increase in the average annual number of lawsuits in the United States over the time period IPOs in that country have been declining.¹³⁵

132. B. Heys and M. Berenblut, "Trends in Canadian Securities Class Actions: 2012 Update", NERA Economic Consulting (February 13, 2013), at p. 2.

133. *Ibid.*, at p. 6.

134. D. Lascaris and D. Bach, "Securities Class Action 'Litigation Unleashed?' Hardly", *The Globe and Mail* (February 14, 2013), online: *The Globe and Mail* <<http://www.theglobeandmail.com>>.

135. Online: Stanford Law School Securities Class Action Clearinghouse in Cooperation with Cornerstone Research <<http://securities.stanford.edu/index.html>>.

3. Changes in Market Structure

Through the last half of the 1990s and first half of the 2000s American securities regulators, including Congress and the Attorney General of New York, made a number of small but fundamental changes to the plumbing of America's capital markets. Several scholars studying the decline of the IPO market hold these changes responsible.¹³⁶ What they believe occurred was the unwitting destruction of the delicate ecosystem that had supported smaller companies in America's public markets.

Fundamental to the erosion of this ecosystem was the progressive reduction of "tick sizes", the smallest increment at which shares can be bought or sold. In four steps these declined 96% from \$0.25 in the early 1990s to \$0.01 (and lower) in 2005. The Order Handling Rules (1997),¹³⁷ Regulation ATS (1998),¹³⁸ Decimalization (2001)¹³⁹ and Regulation NMS (2005)¹⁴⁰ were all designed to increase market efficiency and transparency, but had the indirect effect of reducing the spread that American market makers had traditionally made on trades.¹⁴¹ Smaller public companies tend to raise less money, and fewer trades occur in their stock. The previous large per-share spreads provided the economic incentives for investment banks to follow and make a market in the stock, as well as providing trading profits to pay for research and sales support.¹⁴²

136. Weild and Kim, *supra*, footnote 2; Weild and Kim, "Market Structure", *supra*, footnote 19; Weild, *supra*, footnote 33; D. Weild, E. Kim and L. Newport, "The Trouble with Small Tick Sizes: Larger Tick Sizes will Bring Back Capital Formation, Jobs and Investor Confidence" (2012), online: Grant Thornton <<http://www.grantthornton.ca>> and IPO Task Force, *supra*, footnote 27, at pp. 13-14.

137. United States of America, U.S. Securities and Exchange Commission, *Order Granting Partial Approval and Notice of Filing and Order Granting Accelerated Approval of Amendment No 1 to Proposed Rule Change Relating to Implementation of the Commission's Order Handling Rules*, Release No. 34-38156 (January, 1997).

138. United States of America, U.S. Securities and Exchange Commission, *Regulation of Exchanges and Alternative Trading Systems*, Release No 34-40760 (1998).

139. United States of America, U.S. Securities and Exchange Commission, *Order Directing the Exchanges and National Association of Securities Dealers, Inc to Submit a Decimalization Implementation Plan Pursuant to Section 11A(a)(3)(B) of the Securities Exchange Act of 1934*, Release No. 34-42360 (January 28, 2000).

140. United States of America, U.S. Securities and Exchange Commission, *Regulation NMS*, Release No. 34-51808 (August 5, 2005).

141. Weild, Kim and Newport, *supra*, footnote 136, at p. 3.

142. Weild, Kim and Newport, *ibid.* at p. 3.

The loss of these spreads fundamentally changed the landscape for the smaller and mid-size investment banks that had traditionally taken smaller companies public and then supported them. The first, and most obvious, change was that, “[i]nvestment banks acting as primary underwriters (or bookrunners) today *lose* money supporting small company IPOs after they go public.”¹⁴³ Only big public companies produce the kind of trading volumes that can generate material revenue to an investment bank on one-cent spreads. Many banks left the IPO business as the spread was continually reduced, until only 39 firms were left in 2006, a decline of 77%.¹⁴⁴

The Gramm-Leach-Bliley Act of 1999, which ended the last remnants of the Glass-Steagall Act of 1933, permitted the combination of commercial banks, securities firms and insurance companies.¹⁴⁵ This permitted (and, to some extent, coincided with) a tremendous increase in the concentration of the American financial services industry. Combined with the decline in profitability of trading in the smaller stocks that had been the *raison d’être* for small and medium-sized investment banks, it meant some of the most influential sources for IPOs disappeared into much larger firms: Alex Brown (acquired by Bankers Trust), Montgomery Securities (by Nationsbank), Robertson Stephens (by BankAmerica) and Hambrecht & Quist, one of the main conduits between Silicon Valley and Wall Street (acquired by Chase Manhattan).¹⁴⁶

A small public company has to struggle for attention from investors. Research generated from analysts at the investment banks and disseminated by their sales and support departments has traditionally been very important. Indeed, small company valuation ratios (price-to-earnings and market-to-book ratios) are generally higher with research coverage, lowering the cost of capital for smaller firms.

What sell-side research remained after the decline of small firm economics and the growing concentration of the investment banking industry was dealt further blows by the well-intentioned Fair Disclosure rules in 2000 and Global Settlement in 2003.¹⁴⁷

143. Weild, *supra*, footnote 33, at p. 5. Emphasis in the original.

144. *Ibid.*

145. Financial Services Modernization Act of 1999, Pub. L. 106-102, 113 Stat. 1338 (the “Gramm-Leach-Bliley Act”).

146. Weild and Kim, *supra*, footnote 19, at p. 13.

147. United States of America, U.S. Securities and Exchange Commission, *Final Rule: Selective Disclosure and Insider Trading*, Release Nos. 33-7881 and 34-43154

The fair disclosure rules levelled the playing field between different classes of investors, but in consequence reduced the premium institutional investors would pay for research.¹⁴⁸ The Global Settlement imposed by New York's Attorney General separated research from investment banking (a change that was needed), but led to a further decline of equity research coverage on smaller companies.¹⁴⁹

Both the number of firms covered by sell-side analysts and the number of analysts themselves peaked in the United States in 2002.¹⁵⁰ The decline in sell-side research disproportionately hurt smaller companies not normally covered in the financial press.

While masked somewhat by the dot-com boom and collapse, what these changes to market structure meant, according to proponents of this theory, was a loss of the ecosystem that had both brought new businesses to market, and then supported them afterwards. What was left in its wake was a kind of wasteland dominated by giant, inattentive investment banks, high-frequency trading and a frictionless market characterized by extreme volatility.¹⁵¹ Small firms were essentially left to fend for themselves in this hostile environment.

Beginning in 1996, Canada participated in the gradual trend of reducing tick sizes we have seen in the United States.¹⁵² Currently the TSX mandates tick sizes of one cent for securities selling above \$0.50 and half of a cent for securities selling below that price.¹⁵³ Canada did not, however, suffer the loss of its mid-market and

(2000) and U.S. Securities and Exchange Commission, Press Release, 2003-54, "Ten of Nation's Top Investment Firms Settle Enforcement Actions Involving Conflicts of Interest Between Research and Investment Banking" (April 28, 2003), online: U.S. Securities and Exchange Commission <<http://www.sec.gov>>.

148. Weild and Kim, *supra*, footnote 19, at p. 13.

149. Weild and Kim, *ibid.*, at p. 23.

150. N. Jegadeesh and W. Kim, "Do Analysts Herd? An Analysis of Recommendations and Market Reactions" (2010), 23 *Review Fin. Stud.* 901, at Table 1.

151. High Frequency Trading accounts for more than 50% of stock trading in the United States. N. Popper, "High-Speed Trading No Longer Hurling Forward", *New York Times*, October 14, 2012. The increase in volatility (largely due to the financial crises since 1999) can be seen online at Updated Volatility Charts: estimated daily returns 1885-2013 at <<http://schwert.ssb.rochester.edu/volatility.htm>>. See also: <<http://www.ritholtz.com/blog/2012/01/2011-how-volatile-a-year/>> showing five of the six most volatile years since 1940 have occurred in this century.

152. The TSX reduced the tick from \$0.125 to \$0.05 (for stocks over \$5.00) on April 15, 1996. Further reductions followed gradually.

153. "Minimum Ticks", *rsx Rule 4-404*, (August 26, 2005) in "The Rules of the Toronto Stock Exchange", online: <<http://www.complinet.com>>.

boutique investment banks. It is true that, following a change in federal law in 1987, the big chartered banks each acquired captive investment firms, but concentration in the financial services did not increase significantly through the period tick sizes were declining.¹⁵⁴ Indeed, the investment banking industry in Canada grew over the 1990s and at the end of 2003 included a new high of 207 firms, an increase of 74% from the 119 firms in 1990.¹⁵⁵

It is possible, however, that the growth in investment firms is not paralleled by a growth in the firms active in the IPO market. Some investment firms might be focused on the TSX Venture Exchange or the secondary market, and so in Table 3 we present the TSX underwriter league tables from 1993-2011, and we split the sample into two periods. Panel A presents the league tables for the period January 1, 1993-April 14, 1996, which is the period prior to decimalization in Canada, and Panel B presents the league tables for the period April 15, 1996-December 31, 2011, which is the post-decimalization period.

Interestingly, there are 24 underwriters active in the IPO market in the pre-decimalization period, which is considerably less than the 61 underwriters that are active in the IPO market in the post-decimalization period. There are more independent, non-bank, underwriters at the top of the league tables in the pre-decimalization period, but there are significantly more small underwriters active in the IPO market since the change to decimalization.

It should be noted that Canadian capital market participants do not regard these mid-size firms and boutiques dismissively. Energy boutiques like Peters & Co. and First Energy are considered to be very sophisticated in their field.¹⁵⁶ As shown in Table 3, Canaccord

154. Revenues were concentrated, however, with 73% of all revenues in 2003 generated by the six bank-owned investment firms. This was up from their share of 64% of the industry's revenues in 1990. Department of Finance Canada, "Canada's Financial Services Sector: Canada's Securities Industry" (Ottawa, 2005), at p. 3, online: Department of Finance Canada <<http://www.fin.gc.ca>>.

155. *Ibid.* at pp. 1 and 3.

156. K. Hnatiuk, "Focus, Commitment and Philanthropy Drive FirstEnergy to the Top" (January 22, 2013) *Manitoba Oil and Gas Review*, online: *Manitoba Oil and Gas Review* <<http://manitobaoil.ca>>; K. Mazurkewich, "RBC Comes out No 1 with \$52B in Deals", *The Financial Post*, May 20, 2008, online: FirstEnergy <<http://www.firstenergy.com>>: "FirstEnergy is the lead underwriter of the oil and gas industry in Canada because the team has built deep relationship with management teams . . . private-equity companies come to us if they want to do a deal in energy"; C. Tait, "Potter Takes Top Job in Calgary's Peters & Co.", *Financial Post*, October 4, 2010, online: *Financial Post* <<http://business.financialpost.com>>: "Peters & Co Ltd, a respected independent brokerage in

Genuity, a mid-size firm, has an IPO franchise larger than some of the bank-owned firms.

Measurements of the impact of declining tick prices on the economics of Canada's investment firms are difficult to find, and mixed. Some researchers have argued that because trading volumes didn't increase materially following decimalization, profits must have declined;¹⁵⁷ others have found that trading profits were not adversely affected, and that revenue derived from brokerage commissions appears to have increased.¹⁵⁸ Possibly more definitively, a study undertook to study the prices of TSX "seats" (which permit investment firms to buy and sell shares on the exchange) sold before and after the move to decimalization in 1996.¹⁵⁹ They found that the prices increased in value in the months ahead of decimalization and did not decline afterwards.¹⁶⁰ This suggests that the investment industry expected decimalization to increase its risk-adjusted profits, and that they were not disappointed by the event.

The Canadian experience with the decline in tick prices also does not include a loss of research for smaller issuers. A 2006 study of 100 Canadian issuers spread out equally over 10 different market ranges of capitalization found that while size was positively correlated with analyst coverage, only two issuers under the \$345 million market cap level looking for money had no analyst coverage.¹⁶¹

To someone unfamiliar with Canadian capital markets, the apparent robust health of mid-tier firms and boutiques in this country in an era of general consolidation in the financial industry

Calgary." Peters & Co.'s energy assessments were cited in the *Financial Post* 10 times from November, 2012 to February, 2013.

157. J. Bacidore, "The Impact of Decimalization on Market Quality: An Empirical Investigation of the Toronto Stock Exchange" (1997), 6 *J. Fin. Intermed.* 92.

158. D. Weaver and D. Porter, "Tick Size and Market Quality" (1997), 26 *Fin. Mgmt.* 5.

159. M. Huson, Y. Kim and V. Mehrotra, "Did Decimalization Benefit Members of the Toronto Stock Exchange?" (2006), 45 *Q.J. Bus. Econ.* 49, at p. 49.

160. *Ibid.*, at pp. 63-66.

161. A. Pritchard, "Well-Known Seasoned Issuers in Canada", in *Maintaining a Competitive Capital Market in Canada: Canada Steps Up: Research Study for the Task Force to Modernize Securities Legislation in Canada*, vol. 5 (Toronto, Task Force to Modernize Securities Legislation in Canada, 2006), at p. 17. This conforms with the best research in the United States: Gao, Ritter and Zhu, *supra*, footnote 33, at pp. 14-16, finding that in the period of 2001-2009 (and looking only at IPOs with an initial issue price in excess of \$8, which could be the source of selection-related bias) 95.3% of small company IPOs had analyst coverage in the first year after going public.

must appear counter-intuitive. The answer probably lies in the nature of Canada's public capital markets. Including the TSX Venture Exchange, Canada has the largest number of public companies relative to its population in the world — more than double the next highest country (and four times higher than the United States).¹⁶² However, the 100 largest companies on the TSX account for over 70% of the total value of companies listed on that exchange.¹⁶³ The 1,000 smallest companies on the TSX account for less than 5% of the exchange's aggregate market capitalization.¹⁶⁴ In general, half of the companies on the TSX would be classified as "micro-cap" if they were in the United States and most of the remaining companies would be classified as "small cap."¹⁶⁵

There are strong regional differences in Canada's capital markets. Oil and gas plus "diversified industrials" (which the Alberta Securities Commission indicates predominantly includes oil and gas drilling and service companies) account for 82% of Alberta's public market capitalization.¹⁶⁶ The comparable number for Ontario is 0.6%. In contrast, over 52% of the market capitalization of Ontario-based issuers is in financial services, an insignificant category for Alberta.¹⁶⁷ There are also regional differences in the relative sizes of public companies (British Columbia is the headquarters of more public companies than anywhere else, but has disproportionately fewer companies exceeding \$50 million in value)¹⁶⁸ and in provinces' relative dependence on the exempt market or the TSX Venture Exchange.¹⁶⁹

This combination of an abundance of public companies with relatively few "big" companies (by international standards) and strong regional industry concentrations probably accounts for the health of Canada's mid-tier and boutique securities firms. There are many more niches to occupy, and the economics of Canada's smaller capital markets do not necessarily support the highly concentrated financial industries seen in other jurisdictions.

162. R. Rajan and L. Zingales, "The Great Reversals: the Politics of Financial Development in the Twentieth Century" (2003). 69 *J. Fin. Econ.* 5, at p. 17.

163. Nicholls, *supra*, footnote 25, at p. 154.

164. *Ibid.*

165. *Ibid.*, at pp. 159-161.

166. W. Rice, Affidavit filed in connection with *National Securities Reference*, at para. 150, online: Canadian Securities Law Portal <<http://www.securitieslawportal.ca>>.

167. Rice, *ibid.*, and Alberta Securities Commission, "The Alberta Capital Market: A Comparative Overview 2012 Report" (2012), at p. 16.

168. Alberta Securities Commission, *ibid.*, at pp. 12-14.

169. Rice, *supra*, footnote 166, at paras. 154, 156 and 166.

Canada's experience suggests that decimalization alone did not cause the loss of the mid-tier and smaller securities firms interested in the IPO market. Presumably trading profits declined in Canada just as they did in the United States, but the firms found other ways to make money, including active engagement in the IPO market. It also demonstrates that the recent decline in IPOs occurs even when the infrastructure supporting smaller companies remains intact.

4. Fundamental Economic Change

A minority (but growing) view in the United States is that its public markets' decline is due to some kind of fundamental economic change in the competitive landscape in that country. At its heart, this thesis amounts to a claim that this change has reduced the profitability of small companies. In other words, small companies (of the sort that are newly missing from the IPO market) are worth more as parts of big companies than they are on their own.¹⁷⁰

It is important to note that this is not an argument about whether more money is required to compete in the current economy, as this might actually produce more IPOs. Rather, it is an argument that smaller companies are competitively handicapped by being unable to realize "economies of scope, speed products to market and realize economies of scale."¹⁷¹ The usual example is a large high-tech company's superior ability — through its sheer number of engineers and its control over a vast (usually Asian) supply and distribution chain — to get new technologies polished to a high standard, manufactured and delivered to market quickly.

In this kind of competitive environment it makes more sense for a start-up to sell itself to one of these larger companies than to remain a smaller, independent public company. If Silicon Valley venture capitalists worry that no one is trying to hit for the fences anymore, but merely to get on base so they will be picked up by a bigger company,¹⁷² proponents of this theory argue this is not so much the consequence of the collapsing IPO market as its cause.

The evidence for this thesis is necessarily indirect. First, its partisans point out that newly public small companies have been

170. Gao, Ritter and Zhu, *supra*, footnote 33, at pp. 2 and 3; J. Ritter, "Equilibrium in the IPO Market" (Social Science Research Network, 2011) at 1, online: Social Science Research Network <<http://ssrn.com>>.

171. Gao, Ritter and Zhu, *supra*, footnote 33, at p. 9.

172. See discussion at footnote 22.

less profitable since 2000 than previously. Second, they show that of the firms that do go public, the fraction that are acquired or make acquisitions themselves has increased over time.¹⁷³

Like any analysis that attempts to get at a cause by looking at certain effects, the Economic Change Hypothesis can be criticized on the grounds that the effects it observes could be produced by other causes. For example, until 1991, fewer than half of newly listed small companies had negative earnings. Since then, more than half have negative earnings, with a general trend upwards.¹⁷⁴ This could be an indication that smaller companies are less able to compete; it could be an indication that the last 10 years have presented very difficult economic conditions for smaller companies (including the dot-com collapse and the credit crisis and recession); or it could be due to public markets growing more accepting of companies with negative earnings over the course of the 1990s. This latter explanation is almost certainly an accurate description of what, in fact, occurred during the 1990s, although it may not be the principal cause of the declining percentage of profitable small public companies.¹⁷⁵

Similarly, it is hazardous to suggest that M&A trends among small companies are due principally to fundamental underlying economic changes and not to the past decade's unprecedentedly cheap credit and extraordinary liquidity. It is also difficult to say for sure whether the increasing propensity of small public companies to be acquired is a function of fundamental economic change, or some new feature of public markets that makes remaining on those markets less desirable.

There are some facts, as well, that the fundamental Economic Change Hypothesis does not explain. Why is America attracting a lower percentage of those "Global" IPOs (where the company lists on a foreign country's exchange)?¹⁷⁶ Why are even large company domestic IPOs declining (although not as much as the IPOs of smaller firms)?

In light of what we know about agency costs, how can an advocate of the fundamental Economic Change Hypothesis

173. Gao, Ritter and Zhu, *supra*, footnote 33, at pp. 4 and 5; Ritter, "Equilibrium", *supra*, footnote 170, at p. 28.

174. Gao, Ritter and Zhu, *supra*, footnote 33, at pp. 39 and 40.

175. J. Ritter and I. Welch, "A Review of IPO Activity, Pricing and Allocations" (2002), 57 *J. Fin.* 1795, at p. 1796; D. Valliere and R. Peterson, "Inflating the Bubble: Examining Dot-Com Investor Behavior" (2003), 6 *Venture Capital* 1; Amazon's continuing negative earnings, etc.

176. Doidge, Karolyi and Stulz, *supra*, footnote 36; Zingales, *supra*, footnote 40.

explain the trend towards acquisitions and away from IPOs? The notion that corporate managers act in their self-interest, even when this has the effect of reducing aggregate enterprise value is not only central to nearly every modern description of corporate behaviour, it has consistently proven to have tremendous explanatory and predictive powers.¹⁷⁷

In the literature surrounding entrepreneurial finance, the desirability of IPOs over other forms of exit is well established.¹⁷⁸ Aside from all questions of valuation, “entrepreneurs have a strong preference for having their entrepreneurial firms listed as a public firm . . . [T]hey have a non-pecuniary preference for being the CEO of a publicly-traded firm.”¹⁷⁹ Put simply, if a start-up is acquired, the senior executives are normally fired. Even if they are retained, they have much less authority and control. In addition to the fact that most entrepreneurs place an extremely high value on independence and control,¹⁸⁰ the loss of it means managers have much less scope to award themselves the perquisites and financial compensation that they could have expected if they remained in command of the enterprise.¹⁸¹

This entirely rational preference for IPOs over acquisitions can be seen, for example, in studies of the effects of various venture capital contractual terms on exit strategies. These indicate that the weaker the venture capitalists’ control rights are over the company,

177. M. Jensen and W. Meckling, “Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure” (1976), 3 *J. Fin. Econ.* 305; Gilson and Whitehead, “Deconstructing Equity: Public Ownership, Agency Costs, and Complete Capital Markets” (2008), 108 *Columbia L.R.* 231; R. Fosberg and S. Rosenberg, “Agency Cost Control” (2003), 3 *J. Am. Acad. Bus.* 299.

178. D. Cumming and J. MacIntosh, “A Cross-Country Comparison of Full and Partial Venture Capital Exits” (2003), 27 *J. Banking & Finance* 511; D. Cumming and J. MacIntosh, “Venture Capital Exits in Canada and the United States” (2003), 53 *U.T.L.J.* 101.

179. D. Cumming and S. Johan, *Venture Capital and Private Equity Contracting: An International Perspective* (Malden, Massachusetts, Academic Press, 2009), at p. 592. See also, B. Black and R. Gilson, “Venture Capital and the Structure of Capital Markets: Banks Versus Stock Markets” (1988), 47 *J. Financial Econ.* 243.

180. L. Roberts and P. Robinson, “Home-based Entrepreneurs, Commercial Entrepreneurs and White-Collar Workers: A Comparative Study of Attitudes Towards Self-Esteem, Personal Control and Business Growth” (2010), 23 *J. Small Bus. and Entrepreneurship Research* 333, at pp. 333-335. See also, J. Petty, J. Martin and J. Kensinger, *Harvesting Investments in Private Companies* (Morriston, New Jersey, Financial Services Research Foundation, Inc., 1999).

181. E. Berglof, “A Control Theory of Venture Capital Finance” (1994), 10 *J. Law, Econ. and Organization* 247; T. Hellman, “IPOs, Acquisitions and the Use of Convertible Securities in Venture Capital” (2006), 81 *J. of Financial Econ.* 649; J. de Bettignies, “Financing the Entrepreneurial Venture” (2008), 54 *Mgmt. Science* 151.

the more likely the company is to go public.¹⁸² In other words, when the IPO market is hot, management and investors will both prefer to go public. When the IPO market is in the doldrums (and the IPO market is highly cyclical) then investors would generally prefer for the company to be acquired, which will generate the highest returns to the shareholders, but management will still prefer the company to go public, because management receives additional forms of compensation arising from their positions with the company. Thus, over time, we would expect to see those companies in which venture capitalists have fewer contractual control rights go public at higher rates than those companies in which the venture capitalists are firmly in control. And this is precisely what we do see.¹⁸³

This creates difficulties for the fundamental Economic Change Hypothesis. Either private investors in America's newest companies have gotten much better at controlling agency costs, or something else is going on. We would expect managers to dramatically change their exit preferences if, for example, public markets had changed in a way that made them much less attractive for senior executives, or if the ecosystem of the public markets had placed them out of reach of all but a few lucky firms, but it is unlikely managers have fundamentally changed their preferences. A change in the relative value of acquired firms versus independent firms cannot explain the massive changes in the IPO market so long as we believe managers' self-interest influences corporate strategy.

A comparison with Canada again provides a useful check against the American experience. The composition of Canada's IPO market is very different from that of the United States. Sixty-one percent of the all the companies that went public in the United States between 1990 and 2000 were technology or biotechnology firms.¹⁸⁴ This percentage actually increased in the period 2001-2009 to 70%.¹⁸⁵ In contrast, Table 2 breaks out the industry composition of IPOs in Canada, following the Fama-French industry classifications. Companies in the categories of "computer software" plus "pharmaceuticals" accounted for 12% of the IPOs during this period. While almost certainly this undercounts Canadian companies that, in U.S. statistics would be included as "technology" companies,¹⁸⁶ there seems little chance that the totals

182. Cumming and Johan, *supra*, footnote 179, at p. 629.

183. *Ibid.*, pp. at 649-696.

184. Gao, Ritter and Zhu, *supra*, footnote 33, at Table 3.

185. *Ibid.*

186. For example, it seems likely that at least some of the companies categorized as

would dramatically alter the conclusion that technology and biotechnology companies are not the driving force for Canada's IPO market.

Natural resource companies are, in fact, the dominant source of Canadian IPOs. Table 2 shows that the largest number of IPOs was produced by the petroleum and natural gas sector; the second largest number came from the mining sector. Altogether natural resources (including agriculture) account for approximately 13% of Canada's GDP, but more than half of the country's exports.¹⁸⁷ The natural resource sector in Canada is twice as large as manufacturing as a percentage of GDP.¹⁸⁸ It is not surprising, therefore, that natural resource companies and those with businesses closely tied to natural resources (such as oil field services or construction materials firms) would predominate in Canada's IPO market.

The differences between Canada's and America's traditional IPO participants allow a test of the Economic Change Hypothesis. While it is plausible that the evolution of technology has produced much larger economies of scope and scale for technology firms,¹⁸⁹ it is difficult to see similar changes in the natural resources sector. Certainly it has become more expensive to explore and develop oil reserves over the time period we are studying, for example, but this is not what the Economic Change Hypothesis is about. The need for more capital actually would tend to drive businesses to the public markets where traditionally the largest pools of capital can be found. (This is particularly the case in Canada, given its comparatively small private equity industry.)¹⁹⁰ Instead, the Economic Change Hypothesis argues that the ability of small firms to earn a profit with that money has declined, simply because they are small.

"electronic equipment" or "medical equipment" would be technology companies as opposed to manufacturers or distribution firms.

187. Natural Resources Canada, "Important Facts on Canada's Natural Resources" (Ottawa, October, 2011) at p. 2, online: Natural Resources Canada <<http://www.nrcan.gc.ca>>, and Agriculture and Agri-Food Canada, "An Overview of the Canadian Agriculture and Agri-Food System 2012" (Ottawa, 2012), online: Agriculture and Agri-Food Canada <<http://www.agr.gc.ca>>.

188. Natural Resources Canada, *ibid.*, at p. 4.

189. Gao, Ritter and Zhu, *supra*, footnote 33, at p. 10, identifying that most new technologies in recent years have been introduced by large firms, that the pace of technological change has increased, that long international supply changes have become a significant competitive advantage, etc.

190. CVCA, *supra*, footnote 17.

Allegedly, changes in “information technology” give the advantage to big firms.¹⁹¹ As evidence, most new technologies in recent years have been introduced by large firms, the pace of technological change has increased (affording large firms an advantage as they can bring products to market faster) and Internet comparison shopping has destroyed niches that previously sheltered smaller firms, producing winner-take-all markets.¹⁹² But none of these changes would privilege large natural resource companies. There have been technical changes, such as major improvements in the petroleum industry’s directional drilling and completion techniques, but few have been controlled by a specific producer — rather, engineering and service companies have made them widely available.

Indeed, the decline of IPOs since 2000 in a natural resource-driven economy is particularly astonishing since the last decade has seen massive increases in the prices of nearly every commodity Canada produces.¹⁹³ In comparison, the last half of the 1990s saw a slump in commodity prices, including the lowest prices for oil, on an inflation-adjusted basis, since the Second World War.¹⁹⁴ In other words, IPOs fell in Canada at the same time rising world demand created unprecedented opportunities to generate profits for small and big commodity producers alike.

VI. CONCLUSION

The Canadian IPO market has been declining quietly for the past decade. The parallel decline in America has been (true to dearly-held Canadian stereotypes) much noisier, but none of the explanations given in that country would appear to apply to the Canadian decline. Thus these explanations seem far less persuasive as descriptions of what is going on in America. The Sarbanes-Oxley era regulatory reforms and the litigation climate in America are not responsible for raising the costs of a public listing prohibitively high. The reduction of tick prices did not necessarily

191. Gao, Ritter and Zhu, *supra*, footnote 33, at p. 9.

192. *Ibid.*, at p. 10.

193. Bank of Canada, “Commodity Price Index – Annual”, (January 31, 2013), online: <<http://www.bankofcanada.ca>>.

194. Duttagupta, *supra*, footnote 52; C. Carter, G. Rausser and A. Smith, “Commodity Booms and Busts” (2011), 3 *Ann. Rev. Resource Economics* 87, at pp. 115-116; P. Conceição and H. Marone, “Characterizing the 21st Century First Commodity Boom: Drivers and Impact” (United National Development Program, 2008), at pp. 4 and 11, online: United National Development Program <<http://web.undp.org>>.

produce the loss of small and mid-size securities firms, and the presence of those firms does not apparently make a difference to the decline of North American IPO markets. Finally, whatever the impact of technological change on the competitive position of small firms in the technology industry, the IPO decline can be seen across all industries, including industries like oil and mining, where the possibilities for profit have been quite favourable.

So something else must be keeping small businesses (and some big firms as well) out of the IPO market. While it is beyond the scope of this paper to provide our full explanation for the decline of public markets, we can recommend an examination of the traditional approach scholars take to corporate governance questions: look at the alignment of incentives. The decision to take a company public, finance it privately or allow it to be acquired falls squarely within the ambit of corporate governance. It isn't necessary to discover some particular feature of the IPO market that has changed so as to alter the economics of small public firms. It is sufficient to ask whether the public markets and the legal and regulatory apparatus surrounding them have evolved in a way that provides strong disincentives to managers to take their businesses public.

Since Jensen and Meckling wrote *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, securities regulators, legislators and the legal community have assumed the only corporate governance problem that really matters is preventing agency costs.¹⁹⁵ While the dot-com era accounting scandals, option back-dating schemes and credit crisis suggest that we are far from a satisfactory resolution of the principal-agent problem, we have nevertheless succeeded in dramatically increasing the exposure of managers to shareholder pressure.

The average life-expectancy of public companies has shrunk from 65 years in the 1920s to less than 10 years recently.¹⁹⁶ The average tenure of a CEO fell from 8.1 years in 2000 to 6.3 years in 2009.¹⁹⁷ Senior managers have their remuneration and personal details disclosed and made publicly available for employees, neighbours, family members, future employers and shareholders

195. Jensen and Meckling, *supra*, footnote 177; Fosberg and Rosenberg, *supra*, footnote 177; M. Singh and W. Davidson, "Agency Costs, Ownership Structure and Corporate Governance Mechanisms" (2003), 27 *J. Banking & Fin.* 793; T. Joo (ed.), *Corporate Governance: Law, Theory and Policy* (Durham, North Carolina, Carolina Academic Press, 2010).

196. "The Endangered Public Company", *supra*, footnote 20, at p. 45.

197. *Ibid.*

to peruse at their leisure. CEOs claim that managing shareholders and satisfying various gatekeepers (securities commissions, stock exchanges, proxy advisory firms, auditors) now take up most of their time.¹⁹⁸ Presumably they originally got into business because they wanted to do business, but that isn't what they get in the public markets.

Some business scholars are pointing out that by increasing managers' exposure to the markets, we have unwittingly put them under such extreme pressure that cheating or excessive risk-taking is the only answer.¹⁹⁹ The only way to satisfy a market which takes future expected growth into account in share prices, is to continually improve a company's *rate* of growth. Over the long term this is mathematically impossible. Eventually, accounting fraud or applying increasing amounts of leverage are the only ways to keep a growth rate increasing.

Indeed, some business scholars now argue that the best companies are the ones that pay the least attention to the market.²⁰⁰ The biggest creator of shareholder wealth in the past decade, Apple Inc., was helmed for most of that time by a man famously dismissive of shareholders. Steve Jobs' principal interest was in making cool products and delighting customers.

Meanwhile the market has become a noticeably more hostile place. Trading velocity has increased and the past decade has marked the highest levels of volatility since this began being measured.²⁰¹ In the 1950s, the average time a shareholder held a particular corporation's stock was seven years — now it is six months.²⁰² We live in a time when even the *Harvard Business*

198. L. Kwoh, "Investors Demand CEO Face Time: Bosses Must Juggle More Meetings with Investors, Leaving Less Time to Run Their Companies" *Wall Street Journal* November 29, 2012, online: *Wall Street Journal* <<http://online.wsj.com>>.

199. R. Martin, *Fixing the Game: Bubbles, Crashes, and What Capitalism can Learn from the NFL*, (Boston, Harvard Business Press, 2011).

200. J. Fox and J. Lorsch, "What Good Are Shareholders?" (July-August, 2012), *Harvard Bus. Rev.* 48, online: *Harvard Business Review* <<http://hbr.org>>; Also, R. Kanter, "How Great Companies Think Differently" (November, 2011), *Harvard Bus. Rev.* 66.

201. D. Barton, "Capitalism for the Long Term" (March, 2011), *Harvard Bus. Rev.* 84: "average holding period for us equities has fallen from 7 years to 7 months since the 1970s"; Volatility S&P 500 (^vix), online: Yahoo Finance <<http://www.finance.yahoo.com>>: indicating trends since 1990, peaking in October, 2008.

202. H. Meyerson, "Failures of Shareholder Capitalism", *The Washington Post*, July 11, 2012, online: *The Washington Post* <<http://www.washingtonpost.com>>; J. Bogle, "Restoring Faith in Financial Markets", *The Wall Street Journal*, January 18, 2010, online: *The Wall Street Journal* <<http://online.wsj.com>>:

Review can publish articles with the (entirely un-ironic) title, “What Good Are Shareholders?”²⁰³ In the meantime, shareholders have become more activist and higher maintenance. It is rare for a CEO not to find himself or herself constantly, and often publicly, second-guessed about every decision he or she makes.

When CEOs are actually asked what concerns them about the public markets, they talk about how exhausting and unpleasant they have become. When explaining why Randy Eresman, the CEO of Encana had suddenly announced his retirement, his interim replacement reported, “Randy expressed to a number of board members his fatigue in dealing with the public marketplace.”²⁰⁴ We should take CEOs like Eresman at their word. In attempting to solve one problem, managers failing to act in the best interests of their principal, we may have created another one: the declining public markets. But fundamentally fixing something like this is just a matter of adjusting incentives — and we’re good at that, aren’t we?

A rent-a-stock system has replaced the earlier own-a-stock system. In 2009, the average stock turnover appears to have exceeded 250% (changed hands two-and-a-half times), compared to 78% a decade ago, and 21% barely 30 years ago.

203. Fox and Lorsch, *supra*, footnote 200.

204. D. Healing, “Market Fatigue Drove Encana’s CEO Retirement: Interim Leaders say he Plans No Major Strategy Changes”, *Calgary Herald*, January 14, 2013, online: *Calgary Herald* <<http://www.calgaryherald.com>>.

Table 1: Yearly Descriptive Statistics of TSX IPOs

This table reports the yearly number of TSX IPOs, real GDP growth, and IPO proceeds for the sample period 1993-2011. The IPO proceeds are inflation-adjusted at 2011 prices. Data on the number of IPOs as well as proceeds are obtained from the Financial Post (FP) Infomart database, and GDP data is obtained from Statistics Canada's CANSIM database.

Year	N	Real GDP Growth (%)	Aggregate Proceeds (\$MM 2011)	Aggregate Proceeds (% of GDP)
1993	81	2.96	5,008.62	0.4631%
1994	47	5.41	4,406.87	0.3863%
1995	19	1.39	3,462.91	0.2996%
1996	50	2.73	2,543.47	0.2142%
1997	49	4.40	5,959.29	0.4808%
1998	31	4.36	3,441.38	0.2659%
1999	24	5.93	6,149.75	0.4487%
2000	40	4.07	6,241.94	0.4376%
2001	9	1.28	981.69	0.0680%
2002	6	3.49	871.95	0.0583%
2003	5	1.52	564.39	0.0372%
2004	29	3.68	3,290.98	0.2092%
2005	35	3.11	2,150.13	0.1325%
2006	31	1.90	2,749.18	0.1662%
2007	34	2.54	3,305.51	0.1949%
2008	10	-0.71	585.41	0.0348%
2009	5	-1.36	1,927.10	0.1161%
2010	24	3.35	4,852.27	0.2829%
2011	13	2.22	1,176.43	0.0671%

Table 2: Industry breakdown of TSX IPOs

This table reports an industry breakdown of the number of TSX IPOs and the aggregate IPO proceeds for the sample period 1993-2011. The IPO proceeds are inflation-adjusted at 2011 prices. The industry classifications are based on the Fama-French 49-industry definitions obtained from Professor Kenneth R. French's website.²⁰⁵

Industry	N	Proceeds (MM\$ 2011)
Agriculture	2	155.76
Food Products	3	210.10
Candy and Soda	2	39.35
Beer and Liquor	3	92.30

205. <http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/Data_Library/det_49_ind_port.html>.

Table 2: Industry breakdown of TSX IPOs, cont'd

Industry	N	Proceeds (MMS 2011)
Tobacco Products	–	–
Recreation	2	207.78
Entertainment	12	333.75
Printing and Publishing	5	608.89
Consumer Goods	1	42.36
Apparel	2	118.10
Healthcare	9	550.28
Medical Equipment	6	222.24
Pharmaceutical Products	20	750.57
Chemicals	4	355.33
Rubber and Plastic Products	6	629.58
Textiles	2	93.12
Construction Materials	14	922.13
Construction	7	368.40
Steel Works	5	356.31
Fabricated Products	2	50.44
Machinery	8	247.45
Electrical Equipment	9	609.97
Automobiles and Trucks	6	329.59
Aircraft	2	492.21
Shipbuilding and Railroad Equipment	1	44.46
Defense	–	–
Precious Metals	13	2,485.74
Non-Metallic and Industrial Metal Mining	67	5,589.52
Coal	1	68.21
Petroleum and Natural Gas	72	6,434.16
Utilities	10	1,865.45
Communication	20	4,189.27
Personal Services	4	103.99
Business Services	26	1,047.40
Computer Hardware	5	808.76
Computer Software	46	2,149.78
Electronic Equipment	32	2,803.62
Measuring and Control Equipment	3	193.23
Business Supplies	13	3,269.24
Shipping Containers	–	–
Transportation	8	3,770.30
Wholesale	15	792.55
Retail	18	1,922.36
Restaurants, Hotels and Motels	3	340.91
Banking	5	1,171.60
Insurance	16	8,979.38
Real Estate	5	735.65
Trading	27	3,117.64
Other	–	–

Table 3: Underwriter League Tables for TSX IPOs

This table reports the ranking of underwriters based on aggregate IPO proceeds on the TSX for the sample period 1993-2011. Data on the league tables are obtained from the Financial Post (FP) Infomart database. Panel A presents the underwriter ranking for the period January 1, 1993-April 14, 1996, which corresponds with the period prior to decimalization in Canada, and Panel B presents the league tables for the period April 15, 1996-December 31, 2011, which corresponds with the post-decimalization period in Canada.

Underwriter	N	Proceeds (MMS)
Panel A: January 1, 1993—April 14, 1996		
BMO Capital Markets	14	3,121.82
Wood Gundy Inc.	11	1,405.04
RBC Capital Markets	17	1,378.00
Scotia Capital Inc.	17	1,276.23
Burns Fry Limited	10	1,210.60
Midland Walwyn Capital Inc.	18	444.2
Gordon Capital Corporation	10	255.82
Marleau, Lemire Securities Inc.	12	132.85
Goepel Shields & Partners Inc.	6	99.2
Richardson Greenshields of Canada Limited	4	88.68
Lévesque Beaubien Geoffrion Inc.	4	85.54
Mackie Research Capital Corporation	6	82.5
First Marathon Securities Limited	6	80.21
Cormark Securities Inc.	5	60.44
Macquarie Capital Markets Canada Ltd.	3	35.62
HSBC Securities (Canada) Inc.	2	26.49
TD Securities Inc.	1	25
Loewen, Ondaatje, McCutcheon Limited	2	24.79
CIBC World Markets Inc.	1	24.38
Peters & Co. Limited	4	15.2
Thomson Kernaghan & Co. Ltd.	1	5.75
Jones, Gable & Company Limited	1	1.75
McDermid St. Lawrence Securities Ltd.	1	1.5
Canaccord Genuity Corp.	1	1.5
Panel B: April 15, 1996—December 31, 2011		
BMO Capital Markets	39	6,089.56
CIBC World Markets Inc.	43	5,413.15
RBC Capital Markets	55	5,230.99
Scotia Capital Inc.	18	3,142.57
GMP Securities L.P.	33	2,528.66
Banc of America Securities LLC	12	2,225.98
Morgan Stanley & Co. LLC	7	2,171.21
Goldman, Sachs & Co.	6	1,971.02
TD Securities Inc.	15	1,798.97
Credit Suisse Securities (USA) LLC	6	1,167.34
UBS AG	7	1,114.90
Citigroup Global Markets Inc.	6	861.77
Cormark Securities Inc.	12	745.01

Table 3: Underwriter League Tables for TSX IPOs, cont'd

Underwriter	N	Proceeds (MMS)
Donaldson, Lufkin & Jenrette Securities Corporation	2	586.42
Raymond James & Associates, Inc.	8	573.46
Peters & Co. Limited	11	537.16
Canaccord Genuity Corp.	20	515.31
FirstEnergy Capital Corp.	8	448.65
First Marathon Securities Limited	7	429.37
National Bank Financial Inc.	9	420.13
Macquarie Capital Markets Canada Ltd.	16	359.81
Haywood Securities Inc.	12	329.78
Barclays Bank PLC	2	324.27
Gordon Capital Corporation	8	264.02
Genuity Capital Markets	7	235.07
Midland Walwyn Capital Inc.	9	211.31
Newcrest Capital Inc.	2	197.5
J.P. Morgan Securities LLC	1	189.33
Jefferies & Company, Inc.	2	137.26
Deutsche Bank AG	1	136.52
Blackmont Capital Inc.	5	121.75
Loewen, Ondaatje, McCutcheon Limited	4	109.1
Tristone Capital Inc.	2	107
Dundee Securities Ltd.	4	94.7
Clarus Securities Inc.	3	84.62
Salman Partners Inc.	2	70
Marleau, Lemire Securities Inc.	3	64.32
Lévesque Beaubien Geoffrion Inc.	3	58.77
MGI Securities Inc.	4	58.32
Jennings Capital Inc.	6	55.3
Volpe Brown Whelan & Company, LLC	1	53.14
Mackie Research Capital Corporation	3	51.04
Société Générale S.A.	1	48.67
Evolution Securities Limited	1	39.58
Goepel Shields & Partners Inc.	1	36
Desjardins Securities Inc.	2	33
Acumen Capital Finance Partners Limited	4	30.85
Bear, Stearns & Co. Inc.	1	30.41
D&D Securities Inc.	3	23.26
Richardson Greenshields of Canada Limited	1	23
Wellington West Capital Markets Inc.	2	22.47
Stifel Nicolaus Canada Inc.	3	20.82
Charles Schwab & Co., Inc.	1	15
Byron Capital Markets Ltd.	1	14.38
Wolverton Securities Ltd.	1	9
C.M. Oliver & Company Limited	1	5.47
Union Securities Ltd.	1	4.92
Paradigm Capital Inc.	1	4.79
Jones, Gable & Company Limited	1	3.62
Thomson Kernaghan & Co. Ltd.	1	2.48
GTL Securities Inc.	1	2.02