

REVERSING THE DECLINE OF CANADIAN PUBLIC MARKETS

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SUMMARY

It is the best of times for Canada's public markets, it is the worst of times for Canada's public markets. It is an age when markets have been rewarding public companies with the highest valuations seen in generations. It is an age of a rapid decline in Canadian companies opting to go public.

Given that Canada's reliance on public markets is far higher than that of any other country – double that of the next-highest country – we should be alarmed that fewer and fewer companies are choosing to go public. Companies that stay private are, on average, less successful, less productive, less likely to grow into national champions, and more likely to be sold to foreign buyers. The current decline of public markets may go to the heart of what is arguably the biggest long-term policy issue in the country: our innovation gap and declining relative productivity growth.

There is no shortage of advantages for a company to go public. Public companies grow faster, grow larger, become both more productive and efficient, and have cheaper access to capital. An IPO permits early investors to exit while allowing managers to continue to build the company. What is evidently causing more and more Canadian executives to avoid going public, despite all these advantages, is a regulatory and governance ecosystem that has grown increasingly hostile to and distrustful of corporate leadership.

Executives who consider going public face an environment in which their compensation levels will be high; indeed, pay for senior executives at public companies has grown remarkably in recent years. However, because of increasingly onerous regulatory disclosure requirements, earning those

rewards comes at the cost of having their pay disclosed to the public, debated by shareholders and scrutinized by the media.

Companies that go public also face a growing loss of control over their own governance due to pressure to adhere to an ever-evolving list of so-called universal best practices that can run dozens of pages long. These practices exact costs but don't generally improve results. The result is a dominant one-size-fits-all governance model that does not in fact fit many, or even most companies.

The key factor creating this hostile environment is a massive intrusion by outside forces on the powers traditionally exercised by boards and executives. Corporate governance used to arise from the bargaining and experimentation of the private parties that coalesce around corporations. Now governance is frequently imposed ex post on public companies by third parties with their own agendas. Particularly problematic are third-party commercial proxy advisors, ostensibly representing the interests of institutional shareholders. Their short-term, faddish, complex, and value-harming governance practices diverge dangerously from the interests of long-term flesh-and-blood investors.

The innovations over the past three decades in governance rules were designed to reduce agency costs and improve corporate performance. Those that have proven failures at doing so, and there are several, should be scrapped. Rather than helping Canada's markets become stronger, public markets have grown substantially weaker, and rather than making Canadian companies better, we now face an environment where companies would rather sell to a foreign buyer and leave the country, than go public here. The repercussions can only be adverse for Canada.

I. INTRODUCTION

There is no country in the developed world in which public capital markets are more important than in Canada. So it is significant that Canada's markets have been declining for the past three decades. The cause of the decline is obvious from the data: fewer companies are deciding to go public — and this is true in good times and in bad.

If private companies do not go public, they tend to get sold; investors, managers and employees all eventually need to get their investment returns in some form of exit. In many industries, the most likely purchasers for nascent Canadian businesses are foreign. It is not hard to understand the failure of Canada to develop large technology or pharmaceutical sectors as a consequence of promising ventures being sold and their intellectual property commercialized elsewhere.

Canada is not unique; most other developed countries are also seeing a secular decline in their public markets. In fact, the decline in the United States is just as severe. All of the explanations suggested for the decline start with the assumption that something has changed in the economic incentives around going public. This paper will argue that the economic reasons to go public are essentially unchanged, but that the environment for public companies has altered in ways that negatively impact the non-economic considerations of managers and directors. Whereas the usual explanations for the decline in initial public offerings (IPOs) focus on whether changes to the markets have impacted the returns to shareholders, we take agency cost theory seriously and look instead at the motivations of corporate managers.

We conclude by suggesting specific steps that Canadian legislators and regulators could take to improve the likelihood Canadian managers will decide to build their companies in our public markets.

A. CANADA'S PUBLIC CAPITAL MARKETS

Canada's relationship with its public capital markets is unusual in the developed world. Most noticeably, Canada uses public markets more heavily than any other country; its public companies per capita is more than double that of the next highest country, and four times higher than the U.S. and U.K., its most important economic partners (Rajan and Zingales 2003, 17).

Canadian markets are also distinguished by the prevalence of smaller companies. Besides Canada having the most successful public venture market in the developed world, the 1,000 smallest companies on its main stock exchange, the Toronto Stock Exchange (TSX), account for less than five per cent of that exchange's total market capitalization (Nicholls 2006, 125). With very few exceptions, nearly all Canadian public companies would be classified as either "small cap" or "micro cap" if they were listed in another country (Nicholls 2006, 160).

The final characteristic of Canada's public markets is their peculiarly local character. Variations in the development of intermediate financial institutions across the country have meant significant regional variations in Canada's capital markets. In 2017, for example, a vast gulf separated provinces such as British Columbia, Ontario and Quebec

(with, respectively, \$134, \$100 and \$157 of venture capital invested per capita) from provinces such as Saskatchewan and Alberta (with \$12 and \$3.50 of venture capital invested per capita) (CVCA 2018). In regions with fewer institutional pools of capital, retail investors have played a larger role in the financing of new businesses. As a result, Canada's public venture markets are, according to most measures, the most successful in the world (Pandés and Robinson 2013, 138). As well, regions with little private institutional capital (such as Alberta) disproportionately make use of the TSX and its willingness to accept companies that would be considered too small in other marketplaces. Canada's public exchanges have served both as a way for companies to raise money from networks of private investors, and as a way to allow those investors to exit while managers build the business.

B. THE ROLE OF PUBLIC MARKETS

The role of public markets in financing Canadian business should not be understated. To take one example, Canadian businesses received \$3.5 billion in venture capital in 2017, compared to \$71.9 billion in the United States. On a per capita basis, Canadian firms received less than half of the funding from this source as their American counterparts (PWC 2018, 6-7; CVCA 2018). An IPO thus provides Canadian companies with access to significantly more capital than has traditionally been available in the private market. Even in the U.S. there tends to be a limit on the amounts of capital most businesses raise in the private markets. One set of scholars observes that in the U.S., "venture capitalists can provide perhaps \$10 - 40 million in funding throughout a company's life as a private firm, an IPO allows the company to raise many times that amount in one offering" (Megginson and Smart 2009, 467).

More than this, the cost of capital decreases for a company going public because the risk profile of listed securities declines. If an investor is unhappy with the direction of the company or discovers more attractive uses for his or her capital, the investor can sell his or her shares (Butler, Grullon and Weston 2005). This gives rise to the well-known "liquidity premium" and, it is important to remember in the analysis that follows, companies are usually worth more if they are public than if they are private. In fact, the benefits of going public are greater than those produced by enhanced liquidity. As will be discussed later in this paper, research suggests that compared to carefully matched private firms, companies that go public grow faster, react more positively to product market growth opportunities, demonstrate higher labour productivity, are less likely to fail, have greater opportunities to grow through acquisition, and develop more new products (Maksimovic, Phillips and Yang 2017). These benefits make the reluctance of Canadian businesses to go public all the more curious.

While important, the role of stock exchanges in financing businesses is not relevant to the question of decline. If we imagine the liquidity premium disappearing along with a vast increase in the private capital available to Canadian ventures, all that would occur is a temporary gap in IPO rates, as companies that would otherwise have to go public to finance themselves raised the money privately instead. Eventually, however, those companies would show up in the IPO statistics as they went public to provide an exit to their private investors. In the end, every investor needs to get their money out of

the business. This is true for employees and executives as well, regardless of whether they paid for their stock or received it as “sweat equity.” Generally, no one acquires shares or stock options for the pleasure of owning otherwise unprepossessing embossed certificates.

If an investor cannot sell his or her shares in a public secondary market, then the only alternative is for the shares to be sold as part of the sale of the business to a new purchaser. There is the theoretical possibility of a robust secondary market in private securities arising, but there is little evidence such a market exists outside of trades by very sophisticated institutions in well-known billion-dollar unicorns in places such as Silicon Valley (Brown and Wiles 2015, 34, 48; Somerville 2018). The problem is that the futures of most businesses are a function of the complicated interaction of many factors, almost none of which are visible to an investor without significant amounts of investigation. To ameliorate this problem, public markets require the regular publication of continuous disclosure. The presence of analysts and journalists covering public companies, as well as sophisticated investors setting prices, also contribute to creating an environment in which a secondary market in listed securities can arise.

Sales of small and medium-sized enterprises, when they occur in the private market, tend to be of the entire company, usually to a larger company in the same line of business (Gao, Ritter and Zhu 2013, 1690; Nariman, Vasvari and Talmor 2011, 323; Cumming and Johan 2007). The purchaser is thus in an excellent position to understand the risks around the target company and manage it going forward if the executives and employees underperform. The costs associated with investigating and valuing the target company can be amortized across the entire business being acquired, not just a few shares.

Eventually, therefore, virtually all private Canadian companies have a straightforward choice: go public or sell themselves. For the past two decades they have increasingly been opting for the latter.

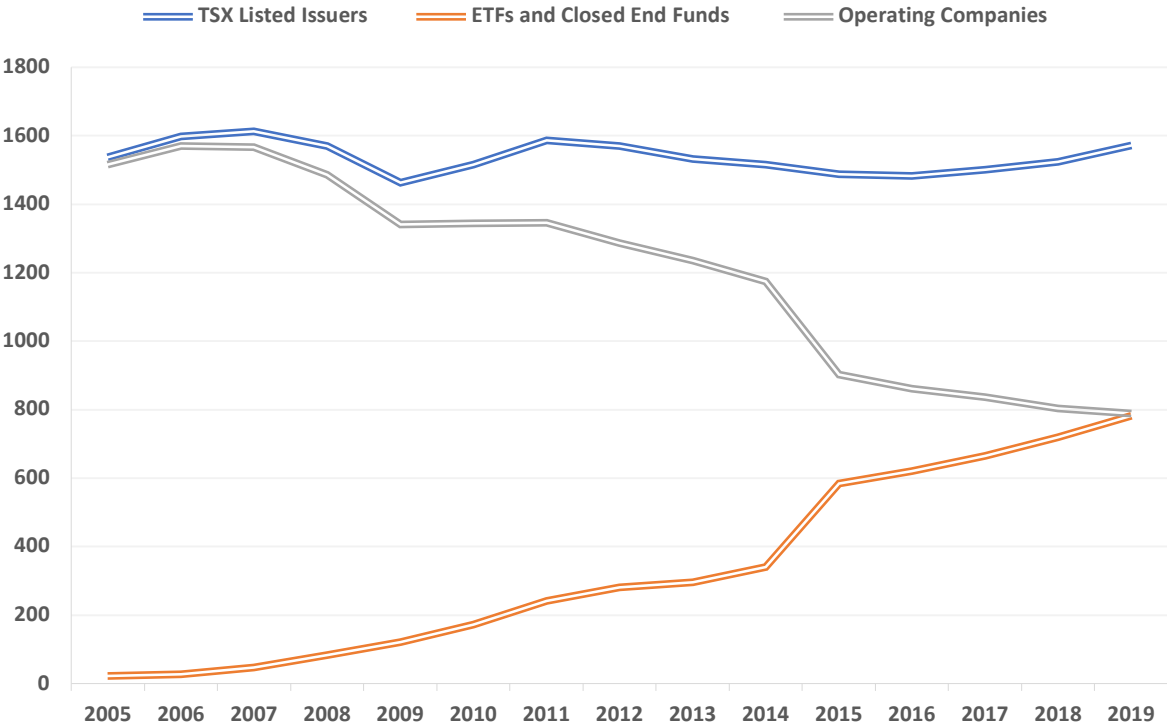
II. THE DECLINE IN PUBLIC MARKETS

A. CANADA

At first glance, the TSX appears to be in rude health. For most of the past decade and a half, the number of listed issuers on the main stock exchange in Canada has stayed roughly around 1,500. But these top-line numbers disguise something important that is going on:

Figure 1: Total Number of ETFs and Closed-End Funds and Number of Operating Companies

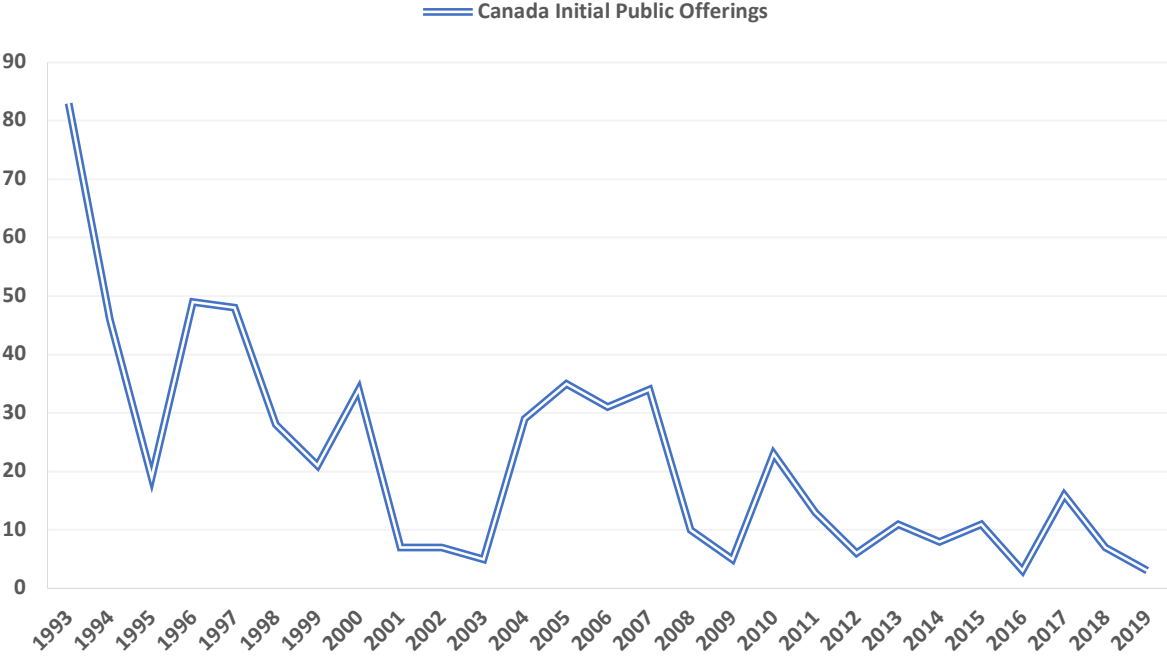
Data compiled from TSX reports.



The apparent stability of the TSX turns out to largely be a function of a steadily increasing number of exchange-traded funds (ETFs) and closed-end funds. If we look at the kinds of operating companies those funds invest in, we find that their numbers have been declining steadily, from a high of 1,515 companies in 2005 to 789 in 2019. This is an astonishing 48 per cent decline in just over a decade. During this time, of course, the population of Canada has been growing, so measured as a percentage of Canada’s population, public companies have declined by nearly 40 per cent (Statistics Canada 2019).

Companies always leave stock exchanges by being acquired, going private or failing. It does not appear, however, that the decline in issuers is primarily a function of increased numbers of companies leaving the TSX. Instead, fewer companies are replacing those that leave:

Figure 2: Declining Canadian IPOs



Note on How the IPO Numbers Were Obtained: Accurate numbers for Canada’s IPO market are difficult to find. As one U.S. study found for the sample period 1980 through 2007, three different sources of TSX IPO data produced very different results:

“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]” (Doidge, Karolyi and Stulz 2011, 8).

We have therefore relied on what appears to be the most reliable information available: the Financial Post Infomart database for the period 1993 - 2019. The database does not contain information prior to this period.

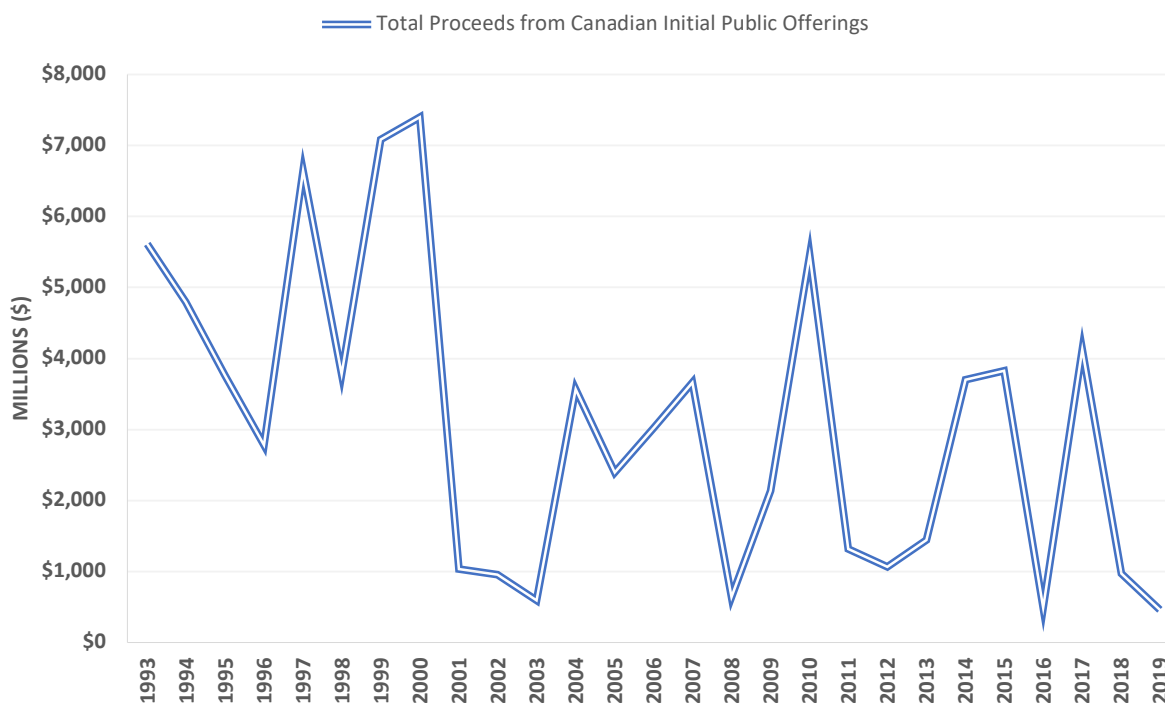
In keeping with the best practices found in the U.S. IPO literature, we exclude trust units (which produces the effect of excluding ETFs, real estate investment trusts (REITS), and income trusts) in order to focus on operating companies (Ritter 2012, 123 n 1). Unlike some U.S. scholars, we do not exclude any IPO offerings on the basis of the initial per-share issue price or the industry. This has the impact of overstating the health of Canada’s public markets relative to those of the U.S.

Between 1993 and 2000, there was an average of 41 IPOs on the TSX each year. Following 2000, the average was below 14 each year. Even in the best years after 2000, when public markets were awash in liquidity and sky-high commodity prices boosted Canada’s corporate profits, TSX IPOs never exceeded the *average* IPO rate prior to 2000 (Carpentier and Suret 2006, 57).¹

¹ Using a different data set and screening criteria, Carpentier and Suret (2006) come up with slightly different totals but the same overall picture.

It is not just the number of IPOs that is declining, but also their size:

Figure 3: Decline in Size of Canadian IPOs



Note: Proceeds are gross proceeds, not including the overallotment option, and are inflation-adjusted 2019 dollars.

The statistical picture is complicated by the dot-com boom in the late 1990s, and then by two bear markets caused by the dot-com collapse and the 2008 financial crisis. While these no doubt can explain the IPO rates of particular years, we do not believe they 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. In the period between 1993 and 2016, for example, we calculate (using the Fama-French industry categories) that only 52 computer software and hardware companies went public in Canada, out of 571 new listings in total.

Instead, the 1990s were a particularly unfavourable time for Canadian businesses because of very low commodity prices during the decade (Dutttagupta et al. 2012, 125; The Economist 1999). This likely explains why Canadian IPOs declined over the course of the decade while, at the same time, the IPO market in the United States was developing a bubble.

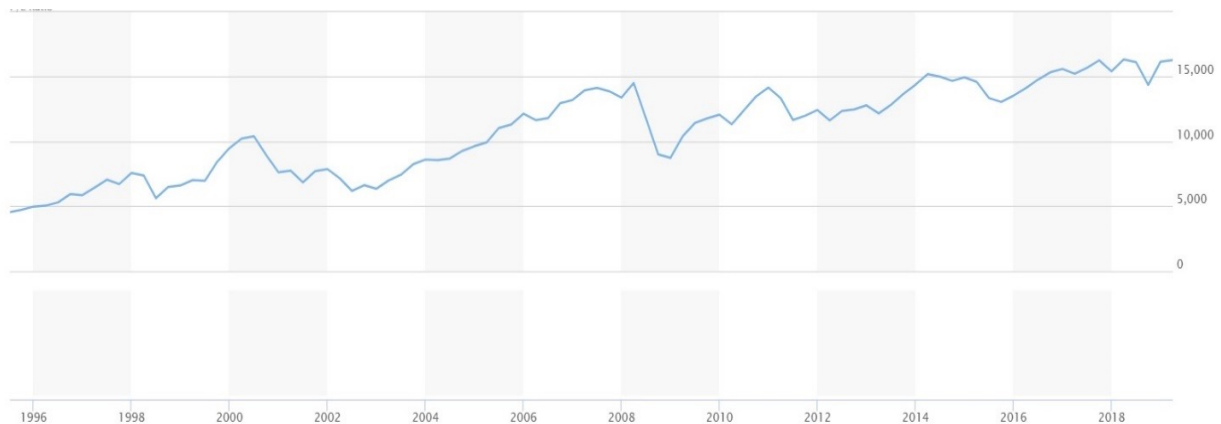
In contrast, the period following 2000 has largely been characterized by very high commodity prices, particularly for the period 2000 through 2014. The World Bank described this period as “a commodities boom...one of the longest and broadest of the post-World War II period” (Baffes and Haniotis 2010, 2). The nominal prices of energy and metals increased by 230 per cent, and those of food and precious metals doubled (Baffes and Haniotis 2010, 3). Oil climbed from roughly US\$30 per barrel to over US\$133 in what the IEA eventually categorized as an oil shock (IEA 2008; NRC 2010).

During the first two decades of the period under study, the IPO rate in Canada moved in precisely opposite directions of what we would predict in light of the prevailing macroeconomic conditions. When times were bad, IPOs occurred at a historically high rate; as times got better, the IPO rate declined and kept on declining. In terms of valuations for public firms, the TSX Composite Index reached a new high in June 2008 (CBC 2009). Clearly, something else is going on.

The 2008 financial crisis had a surprisingly short-lived impact on Canada’s businesses. After a short price shock, commodity prices tended to remain high for the next several years (Dutttagupta et al. 2012, 125). The TSX Composite Index generated a 30.7 per cent return in 2009, and a 14.4 per cent return in 2010. Again, however, these favourable market conditions were not accompanied by a return to 1990s levels of IPO activity. In fact, the period after 2010 is the weakest in the data set: a meagre average of 9.5 companies each year joined the public markets.

It is not just that the value of the TSX Composite Index has grown during the period in which IPOs have declined. One of the factors that has driven the growth of the index is increasingly higher price-to-earnings and price-to-book ratios. Companies are not just worth more if they go public, their value as public companies has actually been growing during the time period we are considering.

Figure 4: Increasing P/E Ratio of S&P/TSX Composite Index from 1996 – 2019

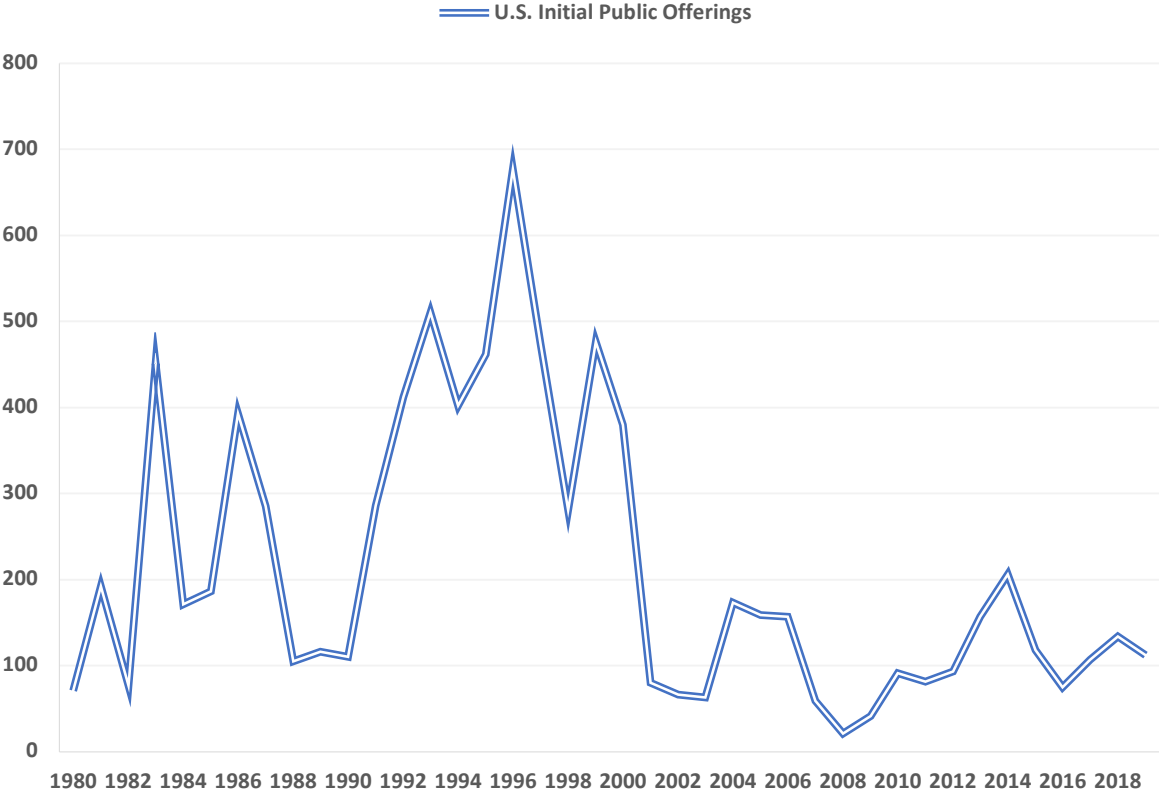


Source: Marketwatch (2019).

B. THE UNITED STATES

The strongest argument that macroeconomic factors are not causing the long-term decline of Canadian markets can be found in the United States. Almost 70 per cent of the U.S. IPOs since 2001 were in technology and biotechnology (versus 15 per cent or so in Canada) (Gao, Ritter and Zhu 2013,1673-1674; Tingle, Pandes and Robinson 2013, 358). Prior to 2000, the American technology sector generated 61 per cent of IPOs in that country (Gao, Ritter and Zhu 2013, 1673-1674). Notwithstanding the radically different industrial composition in the U.S. IPO market, it has seen a downturn that is just as severe:

Figure 5: IPOs in the United States Since 1980



Note: “The net number of IPOs excludes Special Purpose Acquisition Companies (SPACs), closed-end funds, Real Estate Investment Trusts (REITs), unit offers (typically composed of a share plus a warrant to buy a share), IPOs with an offer price of less than \$5.00, commercial banks and savings and loans, companies not promptly listed on the Amex, NYSE, or Nasdaq, master limited partnerships, small best efforts offers (included in the other exclusions column), and foreign companies issuing American Depositary Receipts (6 of which are banks).” (Ritter 2018, 39).

As in Canada, this downturn in American IPOs has persisted through some of the best public markets seen since the Great Depression (Ritter 2012, 128).² Between 1980 and 2000, an average of 310 operating companies per year went public in the U.S.; since then the average has been 99 IPOs per year (Ritter 2012, 128). The drop has been particularly severe among smaller companies of the sort that characterize Canada’s public markets. The number of these smaller firms choosing to go public has declined more than 80 per cent (Ritter Testimony 2012, 8; Weild Testimony 2011, 11; Gao et al 2013, 1669).

The dearth of new firms entering U.S. public markets has meant that, as a whole, its exchanges have declined significantly. About 3,600 companies were listed on American stock exchanges in 2017, less than half the number that existed in those markets in 1997 (Bloomberg 2018).

Importantly, it is not just domestic issuers that are turning away from American public markets. In 2000, the United States attracted 50 per cent in value (48 per cent in

² Market-to-book ratios and price-to-earnings ratios are much higher in the post-2000 period than in the 1980-95 series.

number) of those companies going public on a foreign exchange (Paulson Report 2006, x-xi; Zingales 2007). But even as its share of global GDP has increased (from 27 per cent to around 30 per cent), the number of foreign IPOs on U.S. markets declined, until just prior to the financial crisis of 2007–08 its share of international IPOs was five per cent in value (eight per cent in number) (Paulson Report 2006, x-xi; Zingales 2007). Some of this decline is almost certainly due to improvements in competing international public markets, but according to scholars who study the phenomenon, much of the decline can only be explained as a loss of competitiveness (Doidge et al 2011, 14). Like Canada, the decline has occurred even as financial returns in U.S. public markets over the past 30 years have exceeded those of its international competitors (Bainbridge 2010, 5).

C. CONSEQUENCES OF THE DECLINE FOR CANADA

The decline of public markets seems like a remote problem for most Canadians, but it may go to the heart of what is arguably the biggest economic policy issue in the country: our declining relative productivity growth (St-Amant and Tessier 2018; Mollins and St-Amant 2019; Dion 2009).³ Canada is among the top three countries in per capita expenditures on post-secondary education and has the highest proportion of its adult population who have post-secondary degrees (OECD 2017a, 45, 181). It scores very highly on its relative rates of entrepreneurship (Langford, Josty and Saunders 2016, 21) and on its macroeconomic policies (such as a commitment to free trade). “With less than 0.5 per cent of the world’s population, Canada produces 4.1 per cent of the world’s research papers and nearly 5 per cent of the world’s most frequently cited papers.”(CCA 2012, xii).

Notwithstanding these advantages, Canada’s levels of innovation and productivity growth lag behind nearly all of its developed peers (OECD 2017b, 8-9, 17-22). One of the major culprits has been the failure of the country to produce large-scale technology firms. Canadians come up with the ideas, they start companies, but few large-scale innovative firms exist in the country. As the expert panel on innovation and business strategy reported to the minister of industry, “Canada’s failure to develop a greater number of innovative Canadian-based multinationals has been a key contributor to the country’s overall R&D weakness” (CCA 2009, 7). Given Canada’s strengths in entrepreneurship, research and human capital, where does the failure lie? The expert panel observed, “High-tech names have been vanishing from the radar in Canada at an alarming rate...Worse, most of those companies are selling out too early, before they have a chance to grow into larger, global businesses that could fuel further innovation and success in the tech sector” (Silcoff and Marlow 2012). A study by Cécile Carpentier and Jean Marc Suret (2014) found that roughly half of venture capital (VC) exits in Canada involved the company being sold to a foreign buyer (Teubal and Aynimelech 2003; Scott-Kennel 2013; Davenport N.D.).⁴ Another study found that of 164

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The Bank of Canada attributes this to a weak contribution from the information and communications technologies sector in Canada.

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The phenomenon is also discussed by Teubal and Aynimelech, Scott-Kennel and Davenport (albeit not in a Canadian context).

acquisitions of Canadian technology companies between 2004 and 2012, only a single company was purchased by a Canadian buyer (ITAC 2012). Undoubtedly, those that are not sold to a foreign firm at the time the VC fund exits are sold to foreign buyers at later stages in their development.

It should be noted that, unlike many smaller countries, Canada had virtually unfettered access to the largest consumer markets in the world during the time period the IPO rate was declining. It is not especially challenging, for example, for a Canadian firm to conduct extensive operations in the United States (unlike, say, Israeli or New Zealand-based firms) (Teubal and Avnimelech 2003; Davenport N.D.). In addition to the advantages of NAFTA, there are no time-zone, language or cultural barriers; many large Canadian companies in manufacturing and natural resources in fact operate extensively south of the border. Canadian firms are therefore not compelled, for reasons of market access, to sell themselves to a foreign buyer. Their decision to do so, rather than build a company in Canada's public markets, is the subject of the remainder of this paper.

III. ECONOMIC EXPLANATIONS FOR THE DECLINE

Earlier research outlines the first data on the decline of the IPO market in Canada (Tingle, Pandes and Robinson 2013). It evaluated the most common explanations for the decline provided in the U.S. literature, and argued that the fact Canada is experiencing a parallel decline in a different regulatory and economic environment meant the most common American explanations were unlikely to be correct, as it seems unlikely that identical declines are arising from entirely unrelated causes. Interested readers are referred to this earlier research for these arguments.

Since we published our original research, a new explanation for the IPO decline in Canada has been advanced by Carpentier and Suret (2018) suggesting the possible cause of the decline in Canadian IPOs is the historic long-run underperformance of newly public companies in this country. "...[P]oor performance of Canadian IPOs from 1986 to 2005 could partially explain the decrease in number and increase in size of non-[natural resource] IPOs that we report" (Carpentier and Suret 2018, 125). As noted earlier, the size of Canadian public companies (including those that issue IPOs) is significantly smaller than the companies listed on foreign exchanges. Carpentier and Suret (2018) find that the type of company increasingly missing from the TSX — small non-natural-resource companies — are precisely the kind of companies that are most difficult for investors to accurately price. The result is an IPO market that, according to their calculations, had abnormal negative returns in the period up to 2006 and resembles a lottery in the skewness of its returns. In other words, most IPO companies generate negative abnormal returns, but some of them generate significant positive returns. Buying a new issue is thus analogous to buying a lottery ticket.

There is a vast literature on the ways that the IPO market (and public markets generally) can resemble a lemons market (Akerlof 1970; Carpentier and Suret 2012). This is a market in which the seller has incentives to offer overvalued products and the buyer, aware that he or she lacks the information to properly evaluate the products, insists on a low price. That in turn drives sellers of good-quality projects out of

the market. In the case of private companies, this might account for the increasing preponderance of private sales rather than public offerings.

The lemons hypothesis might explain some part of the decline in Canada's IPO market, but there are reasons to believe it cannot account for most of the phenomena. First, the timing of the decline doesn't fit well with the lemons market hypothesis. It seems unlikely that buyers of new issues would remain in the market for more than a decade (Carpentier and Suret's IPO data set goes back further than ours, to 1986) before responding to poor post-IPO performance. Public markets can make mistakes on corporate valuations, but they tend to be corrected more quickly than this thesis requires (Fama 1970). As well, abnormal returns on the TSX became positive in 2006, according to the study, yet the IPO rate continued to decline.

The second problem is that the lemons hypothesis doesn't seem to fit the U.S. market's IPO decline either. To begin with, we have much longer and more reliable data sets for the U.S. market, so the problem of consistent overpayment is much greater. There would have to be decades of mispricing new issues before the decline in IPOs begins. As well, the size of companies going public in the United States is significantly larger than that of comparable companies in Canada. The average gross proceeds of an IPO in the U.S. are US\$229 million (Ritter 2016, 26-27). Of necessity, an offering of this size generally requires the participation of sophisticated institutional investors. We are unaware of any scholars claiming the decline in the U.S. is caused by the inability of buyers of these new issues to accurately price them.

The third problem is that there is nothing inherently unstable about a lottery market. Canada's venture exchanges have been classic lottery markets and have survived for almost 100 years (Carpentier and Suret 2018). Approximately 75 per cent of venture-capital portfolio companies in the United States do not return investors' capital (Olaison and Sorenson 2014, 196). Only 0.39 per cent of VC-funded firms in that country had an exit value of US\$500 million or more (Hall and Woodward 2010, 1172). Yet the American VC industry survives, notwithstanding its strong lottery-like character.

Fourth, a lemons market produces lower prices not (at least not usually) a buyer's strike. As we have seen, over the period IPOs have been declining, Canada's public markets have been awarding increasingly higher valuations to listed companies (Gao, Ritter and Zhu 2013, 6-7; Tingle, Pandes and Robinson 2013, 329).

Fifth, the lemons market hypothesis would not seem to apply naturally to VC-backed company exits. These are companies whose performance is sufficiently appealing that the VC fund can profitably exit. The companies also have the endorsement of the sophisticated institutions that have not only invested in the business, but who have closely monitored it for years. The usual practice is for investment banks to require the major shareholders (including VCs) to be escrowed for some period, eliminating the incentive for VC firms to mislead the market on expected future performance. But in Canada, we see a decline of IPOs among the presumably very high-quality VC-backed businesses that roughly parallels the decline in IPOs generally (data in possession of authors).

Sixth, there is no direct evidence that Canadian public markets are attracting inferior businesses, as the lemons market hypothesis suggests. In fact, as Carpentier and Suret point out in another paper, the TSX Venture Exchange has a success rate that is “approximately four times the corresponding rate for private VCs” (Carpentier and Suret 2010, 304; Meoli et al. 2018, 88). This doesn’t look like a market where the best businesses are going to sophisticated private investors and the public markets are receiving the rest.

Finally, as detailed in the next section, an IPO produces significant advantages for a company and its managers outside of a possibly enhanced valuation. For example, they don’t lose their jobs in an IPO, whereas this is a high likelihood on a sale. Even if the public markets in Canada were not prepared to value a potential new entrant as highly as an acquirer, there are still many reasons for directors and executives to accept greater dilution and go public. After all, they aren’t exiting the company at the IPO valuation. In fact, an IPO gives directors and officers the opportunity to ride the company’s growth for some time to come. It is rare to find the entrepreneur of a successful company who believes that no more growth lies ahead.

IV. THE DECISION TO GO PUBLIC

Economists naturally gravitate to explanations of corporate behaviour that emphasize its financial impact, particularly on corporate value. What each of the current explanations in America or Canada have in common is identifying something that reduces the value of a business that goes public:

- High rates of frivolous litigation impose costs on shareholders that exceed any public benefit and thus reduce the value of a company exposed to it through the public markets (Bloomberg and Schumer 2007, 75-77, ii).
- Significant alterations to the financial ecosystem surrounding public companies make it more difficult for those companies to attract investors, inform the market about their business, or generate the liquidity needed to maximize corporate value (Weild and Kim 2009, 6-8; Weild and Kim 2010, 7; Testimony of Weild 2012, 4; Weild, Kim and Newport 2012; IPO Taskforce 2011, 13-14).
- A fundamental economic change makes companies, particularly tech companies, more valuable as part of a larger concern than they would be on their own in the public markets (Gao, Ritter and Zhu 2013, 2-3, 9; Ritter 2011, 347).
- Regulation reduces the value of listed issuers by imposing costs without corresponding increases in share value from, say, reducing information asymmetries (IPO Task Force 2011, 9-12; Ahmed et al. 2010, 355; Iliev 2010, 1163).
- Decades of IPO underperformance leads to reluctance on the part of buyers to accept reasonable valuations of new firms (Carpentier and Suret 2018).

As an explanation of the decline of public markets, arguments that depend on economic value are unlikely to be successful. The basic fact of public markets is that providing shareholders with liquidity increases the value of their shares. Companies are almost always worth more when they are public than when they are private, and even if we allowed that one or more of the favoured economic explanations did have the effect

of materially reducing the value of a public listing, a company would still be better off in most cases listing its shares. Indeed, markets have been rewarding public companies with the highest valuations seen in generations during most of the period IPOs have been declining.

IPOs also act as a propellant to corporate growth. A recent study of 892,000 U.S. firms between 1978 and 2008 carefully matched companies that went public with similar firms that stayed private (Maksimovic, Phillips and Yang 2017). It found that:

- The largest and fastest-growing private firms (those in the top one per cent) are 29 times larger than the rest if they go public, and only 14 times larger than the other 99 per cent if they stay private.
- IPO firms grow faster than matched firms in the five years following the IPO, at which time they are much larger than their always-private peers.
- In the five years following an IPO, public firms react more positively to product market growth opportunities than matched private firms.
- The labour productivity of listed firms is higher than or equal to that of matched private companies.
- The failure rate of public companies is lower than that of matched private firms.

There had been some earlier research that suggested publicly listed companies underinvest in response to product market opportunities (Asker, Farre-Mensa and Ljungqvist 2015, 342). A more recent study found that these results are likely driven by failures to properly match similar public and private firms (Maksimovic et al. 2017, 3-4).

Other research on the impact of going public has found:

- Private firms have lower investment rates than public firms (Brav 2009, 263).
- Public firms are more responsive to investment opportunities than are private firms (Gilje and Taillard 2016, 1733).
- Public firms in the medical device industry have higher financing responses and develop more new products than do private firms (Phillips and Sertsios 2017, 1744).
- Public companies, which can use their stock like specie, are more likely to be able to grow by acquiring promising businesses (Maksimovic Phillips and Yang 2013, 2177).

There is considerable evidence, therefore, that corporate value increases in the years immediately following an IPO. It seems unlikely that the explanation for declining public markets has anything to do with declines in corporate value or growth rates.

What if we broadened the inquiry beyond the value of the firm to encompass the economic and non-economic incentives of corporate decision-makers? A decline in IPO rates really just amounts to an increasing tendency of corporate managers to choose to sell the firm rather than go public. We shouldn't expect this is always going to be a matter of maximizing share value in the long run (which, after all, isn't a relevant consideration for the manager of a company that is acquired).

A. WHAT WE KNOW ABOUT THE GOING-PUBLIC DECISION

Research on the motivations of entrepreneurs and executives does not produce any surprises. They are motivated by opportunities for wealth accumulation, of course, but they are also strongly motivated by a desire to enhance their reputation and for control over the new business they are creating (Orhan and Scott 2001; Borgia 2005; Wadhwa et al. 2009; Manish and Sutter 2016). Entrepreneurs, in particular, are motivated by a desire to have significant say in their firms. Surveys find that 62 per cent of entrepreneurs strongly agree with the proposition, “as an entrepreneur you can better control outcomes in your life” (Myers and Hobbs 1986, 659, 670). A desire for greater control, or a conviction that they know better than others, is often the catalyst for starting a new company.

From this perspective, an IPO is a significantly better outcome for an executive than a corporate sale. If a private company is acquired, the senior executives are normally fired, and the entrepreneur loses all control over the business in which she has invested herself for many years. If the entrepreneur is retained, she now finds herself as a cog in a much larger corporate enterprise, running one of possibly many subsidiaries with several layers of management between herself and the CEO of the parent company.

In the public markets, in contrast, the entrepreneur remains in control of the company. In fact, her level of control may actually increase, as private investor representatives on the board of directors are replaced by independent directors and those private investors begin to exit the stock. Public shareholders tend to be much less involved in the management of the company. They are not scaled or organized to closely monitor the businesses in which they invest, they don't normally have any board representation, and they are much more likely to simply exit the stock if they disagree with the decisions of managers (Jackson 2010; Tingle 2020a).

The entrepreneur not only finds herself with greater control and less oversight, but she also has an opportunity to grow the business in the public markets and to receive credit for the enterprise she has created. The opportunities for building a public reputation are obviously much greater for public company CEOs than for their private peers. In the words of one group of researchers, “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” (Cumming and Johan 2009, 592; Black and Gilson 1988, 243). A study of 950 European CEOs found that their most significant drivers are non-financial rewards, which include challenging work, opportunities for advancement, and pride in the companies they are leading and the work they are doing (Baeten 2012).

Research on the IPO decision tends to support this view that, historically, managers have been at least as interested in the non-pecuniary advantages of going public as the more commonly discussed economic incentives. There are two studies that are particularly illuminating (Cumming and Johan 2008; Cumming 2008). In each, the researchers examined the contractual arrangements of VC-portfolio companies, dividing them into groups based on the degree of contractual control possessed by the VCs. VCs are primarily concerned about maximizing the return on their shares, and

IPOs do not always provide the highest valuations when the time comes for the VC to exit. Public markets are volatile (as demonstrated during the time period that interests us by the dot-com collapse and the financial crisis) and the IPO window is significantly affected by investors' risk appetite. Broad economic and political events or trends can keep investors away from smaller businesses with no public-market track record.

We would expect that since the investment horizon of the VC usually determines the exit timing, and this investment horizon operates somewhat independently of public-market conditions, that where the VCs have significant control, the company will either go public or sell itself depending on market conditions. If managers were interested only in wealth accumulation, we would expect to see identical exit patterns from companies they controlled. Instead, the researchers found that the weaker the venture capitalists' control rights, the more likely the company was to go public. This suggests that managers choose to go public at times that VCs — narrowly focused on shareholder returns — would sell the company. This is not due to a lack of alignment. The managers of VC-backed companies usually have significant shareholdings in the company — often larger than that of the VCs. Instead, what it suggests is that non-pecuniary considerations often outweigh narrow economic calculation when making the IPO decision.

B. WHAT HAS CHANGED IN THE PUBLIC MARKETS?

What changes, beginning in the 1990s and continuing to today, might have altered the character of the public markets and thus the non-financial incentives faced by executives? There are several broad trends.

1. Trends in Executive Remuneration

Nothing exemplifies the surprising inability of financial incentives to explain IPO trends better than executive remuneration. The period during which IPO rates declined sharply was marked by astronomical increases in the pay awarded to the senior executives of public companies. Median public-company CEO pay in the United States stayed constant, at about US\$1 million a year, between the 1940s and 1970s (Frydman and Jenter 2010, 78-80). Then it rose by 50 per cent during the 1980s and by a further 128 per cent during the 1990s (ibid., 80). Between 1978 and 2012, average CEO pay of the largest U.S. companies increased by 875 per cent (Mishel and Sabadish 2013, 4; Bebchuk and Grinstein 2005, 286-287; Wells 2012, 49; Conyon 2014, F60; Stiglitz 2012, 25-27).⁵ The ratio of CEO pay to worker pay rose from 29 to one in 1978 to 273 to one in 2012 (Moore 2015, 435; Edmans and Gabaix 2016, 1233; Murphy 1999; Mackenzie 2015, 7-8; Mishel and Sabdish 2013, 4; Kaplan 2008).⁶

⁵ The trend in pay reflects "a real growth rate ... of approximately 4% per annum every year for almost 30 years" (Conyon 2014, F60).

⁶ In Canada, statistics are hard to come by prior to 1995, but in 1998 the average CEO of the 100 largest companies in Canada earned 105 times more than the average Canadian; in 2013 he or she earned 195 times more. The top 50 CEOs earned 269.7 times more than the average Canadian.

Public-company CEO pay has outrun corporate America's returns to shareholders, doubling the growth of the S&P Index over the past 30 years. In 1993, roughly the time IPO rates in Canada began their decline, the remuneration received by the five highest-paid executives of a public company absorbed, on average, five per cent of profits; by 2003, this had doubled (Bebchuk and Grinstein 2005, 302). Obviously, from the narrow standpoint of financial incentives, going public has become increasingly attractive to corporate managers during the period that they have, nevertheless, increasingly decided not to avail themselves of these rewards.

What might explain managerial reluctance to go public are the non-pecuniary changes around executive compensation. These issues are discussed at length in several previously published papers by Tingle (2017a; 2017b). We propose only to summarize some of the arguments here.

a. Disclosure

Beginning in 1993, the securities regulators in Canada began dramatically expanding the disclosure around executive pay (OSC 2003, 1.1.8). They further expanded the disclosure requirements in 2003 (ibid.), 2007 (OSC 2006, 55-58), 2008 (OSC 2008), 2011 (OSC 2011), and 2015 (OSC 2015). In expanding and refining its compensation disclosure rules, Canada was largely just keeping up with developments in the United States and the United Kingdom (Tingle 2017a, 905-906). The outcome of these revisions was to provide considerable detail about what an executive caught by the rules earned, the terms of any applicable bonus or incentive plan, where the executive's pay fell relative to various market measures, and what the executive's equity incentives might hypothetically be worth if all conditions for vesting were met and the equity sold.

In general, people do not like having major aspects of their personal finances made public to anyone, in any area of their life, to peruse at leisure on the internet (IRS 2012, 1-1 to 1-8; Bo, Slemrod and Thorenson 2015). Executives hate having these personal details live forever online. (The rise of "sunshine" laws for provincial employees in Ontario and Alberta generated similar complaints, as well as a backlash when attempted in other provinces) (Webb 2017; Cormier and Ibrahim 2014).

b. Loss of Control

Corporate directors have lost significant amounts of control over public-company remuneration practices since the early 1990s. This loss has arisen in two ways. First, a narrow set of compensation "best practices" has come to dominate the public market. Pay-for-performance and equity incentives are now virtually mandatory features of any executive pay package (Tingle 2017b). One of us has argued elsewhere that these incentivize the wrong behaviour, turn out to be incredibly expensive for the company (they are the sole causes of the vast increase in executive pay), and are inappropriate in many circumstances (ibid.). Managers, themselves, report that they do not believe these schemes materially impact their behaviour (Beer and Katz 2003, 36). Yet, directors apparently feel they have little choice but to use them in order to satisfy public-market expectations (Tingle 2017a, 923-924; Dorff 2014, 246).

The second source of directors' loss of control has arisen from the growing power of shareholders in the area of pay. Some of this power has been given to the shareholders by exchanges (for example, the TSX requires shareholder approval for an expanding number of compensation decisions) (TMX Group 2019, 613(a)(i), 613(h)(iii)). Some of the power has been provided by regulators (such as the U.K. and U.S. say-on-pay rules (Tingle 2017a, 905-906), U.S. tax changes penalizing certain types of pay (Tingle 2017a, 905; Balsam 2012, 3), and the frequent recourse of Canadian regulators to non-binding forms of suasion and guidance) (BCSC 2002; CSA 2009). And some of their power been given up by the companies themselves under pressure from powerful institutional shareholders or advocacy organizations (such as the adoption by Canadian firms of say-on-pay policies) (Bernstein and McDougall 2014, 3).

In many ways, however, the most important force transferring power away from directors has been the rise of proxy advisors such as Institutional Shareholder Services (ISS) and Glass-Lewis (Tingle 2016). These firms produce elaborate and detailed rules about acceptable executive compensation, which companies generally feel obliged to follow (Tingle 2014). Most public-market boards regard the proxy advisors as the de facto regulator of corporate pay practices (Tingle 2017a, 912-924).

c. Reframing Executive Remuneration

Executive remuneration has come to be seen as a kind of theft perpetrated against shareholders and society. Virtually every discussion characterizes it as the outcome of managerial self-dealing and boards too weak or conflicted to stop them (Tingle 2017a, 901-907). This is the case whether the concern is for levels of inequality in society at large (Piketty 2014, 330-332; Tingle 2017b, 390), or for the diversion of cash flows properly belonging to shareholders (Tingle 2017a, 901). The attitude that executives are engaged in sharp practice is found everywhere from the securities regulator requirement that compensation disclosure be accompanied by a graph showing the company's performance relative to its peers, to the rhetoric that surrounds proxy advisors and institutional shareholder corporate governance communications (ISS 2019, 35-41; OSC 2008). This tone is found in media reports on executive compensation as well (Allaire 2018; Global Governance Advisors 2017).

Executives like to believe they are being paid what they are worth, according to their market value, and that they are being paid for the good things they are doing. In practice, the public discussions about their pay will instead be couched in terms of whether, and to what degree, they are exploiting their position.

d. Conclusion

From the perspective of an executive, going public means that he or she will likely receive significantly higher personal pay. However, by going public the company will lose control over the way that pay is to be received; precise details about the executive's pay will be disclosed to all the world; there is a chance that proxy advisors or institutional shareholders will publicly (and humiliatingly) reject the pay package as inappropriate; and the context for nearly all discussions about an executive's pay will usually be that he or she is attempting to get away with something. Thus, when

going public, managers lose significant amounts of control and increase the risk their reputation will be harmed.

2. Trends in Corporate Governance

The modern era of corporate governance began in academia in the 1970s (Mitchell 2006, 265). The first recorded use of the expression “corporate governance” in the United States occurred in *The New York Times* in 1973 (Pargendler 2016, 362; Cheffins 2013, 18). It didn’t appear in the U.K. until *The London Times* used the phrase in 1985. *The Economist* first used it in 1990 (ibid.). The point when corporate governance clearly moved out of the academy and into public markets, however, was with the publication of the 1992 Cadbury Report in the U.K., with its now standard list of corporate governance best practices (Tingle 2018, 230). In Canada, official responses to the corporate governance movement occurred in the report from the Dey committee (1994), revisions of listing rules by the TSX (1995) (Bevans 2005), a follow-up to the Dey report (1999) (ICD 1999), the report from the Saucier committee (2001) (JCCG 2001), further revisions to its governance rules by the TSX (2002) (Tingle 2014, 711), the Canadian response to the U.S. *Sarbanes-Oxley Act* (2005) (Lampe and Spiro N.D) and the current discussions in response to the U.S. *Dodd-Frank Act* and other governance trends in the United States over the past decade (OSC 2013a). These developments made it possible for Professor Ed Waitzer to talk about an entirely new regime of corporate governance in Canada and contrast it to what came before (Vanderpol and Waitzer 2012).⁷

a. *The Loss of Control*

Relatively few corporate governance practices have been imposed on Canadian companies by securities regulators, yet most companies feel compelled to follow the same ever-evolving list of best practices (Tingle 2017). These include, among other examples, things like majority (now supermajority) independent boards, separating the CEO and chair positions, using independent board committees for reviewing audit results and setting remuneration, avoiding directors who sit on too many boards, achieving certain levels of board diversity, engaging in board training exercises and adopting various policies relating to the internal operation of the company. Anyone who has served in a Canadian boardroom in the last 20 years will be able to contribute other examples to this list. Most attempts to summarize the best practices run for dozens of pages, such as those found in the voting guidelines of the proxy advisors (ISS 2019; Glass Lewis 2020), or the Canadian Coalition for Good Governance’s advice for “high performing boards” (CCGG 2020).

Companies feel compelled to follow these best practices for a variety of reasons. Some of the practices are mandated by regulators or the stock exchange (Tingle 2017c, 297). Others are voluntary, but companies must report their practices against the model practices and explain to their shareholders every year why any deviations

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Contrasting the corporate law and securities regimes in Canada and the way the latter has supplanted the former in the governance of public companies.

exist (the “comply or explain” regime) (OSC 2005b). Proxy advisors base their voting recommendations on compliance with the best practices (Tingle 2014, 723).⁸ Institutional investors, particularly the pension funds that dominate the Canadian financial landscape, publish proxy voting guidelines of their own that champion the best practices (Tingle 2018, 237). Trillions of dollars of investment capital are allocated on the basis of ratings or rankings of various companies’ governance practices (Tingle 2018, 224; US SIF Foundation 2014; Canadian Social Investment Organization 2011, 7).⁹ Newspapers, academics, think tanks and advocacy organizations all call out companies that do not adhere to the list of best practices, while giving awards to those that most perfectly reproduce the current recommendations (Tingle 2018, 19; Rose 2007, 889).

While everyone decries “one-size-fits-all” or “check-the-box” best practices, the reality is that these are the way these practices function (Power Corporation of Canada 2012, 8; Canadian Tire Corporation 2012, 2; Gildan Activewear Inc. 2012, 10).¹⁰ Given the sheer scale of the problem of evaluating thousands of public companies’ corporate governance arrangements from the outside, there is no other way for best practices to operate. The practices are also incredibly detailed. It doesn’t sound like it would be too hard to have an independent board of directors, but what counts as “independent” involves dozens of rules (IRC 1993, §162(m); *Dodd-Frank Act* §962; Conyon 2014, F75; Tingle 2016, 777). These details about what counts or not when it comes to compliance with the best practices change from year to year (CSA 2017). A significant amount of board time and corporate resources are devoted to keeping up with changing requirements.

Taken as a whole, the rise of the corporate governance regime we have been considering represents a massive intrusion by outside forces on the powers traditionally exercised by boards and managers. This might be a good thing, but the empirical evidence suggests corporate governance best practices do nothing to improve corporate performance, or to reduce the risk of undesirable events like earnings manipulation (Tingle 2017c, 303-304; Plumtree and Yohn 2010, 41), fraud (Farber 2005, 539; Donelson, McInnis and Mergenthaler 2015), class-action lawsuits (Daines, Gow and Larcker 2010), failing to terminate an underperforming CEO (Fich and Shivdasani 2006), or controlling runaway executive compensation (Tingle 2017a, 922-923).

One of us has written elsewhere about the failure of corporate governance best practices to produce any results we care about, either when considered individually (Tingle 2018; Conyon 2014, F86; Deutsch 2005, 433, 438) or in aggregate (Tingle 2018; Chen and Delmas 2011, 792). There are hundreds of studies, for example, finding

⁸ “ISS recommendations will always influence the outcome of a vote and, depending on the percentage of votes held by institutions that vote in accordance with ISS recommendations, may determine the outcome of a vote.” (Astral Media, 2012, 2)

⁹ In Canada, approximately 20 per cent of all institutional capital is invested according to ethical criteria, most of which, but not all, include corporate governance considerations.

¹⁰ See for example, Power Corporation of Canada, Letter to CSA, 19 September 2012 at 8: “(T)here are legitimate governance differences for controlled companies like Power Corporation and our controlled public company subsidiaries. A ‘one-size-fits-all’ approach is clearly inappropriate.”; and Canadian Tire Corporation, Letter to CSA (20 August 2012) at 2: “We, like many other public companies in Canada and the United States, are concerned that the summary output of proxy advisory firms can be — and in the past has been — inaccurate or incomplete and often reflects a ‘one size fits all’ or doctrinaire approach.”

no evidence that board independence (probably the centre of modern governance practices) leads to better outcomes, with a surprising number of studies suggesting that corporate performance might actually decline (Bhagat and Black 1999, 933; Bhagat and Bolton 2008, 258). To take another example, in relation to separating the CEO and board chair position (another key governance rule), one set of researchers observed in 2011, “we are not aware of a body of literature in corporate governance – or elsewhere – where null results present with such consistency” (Dalton and Dalton 2011, 408; Krause, Semadeni and Cannella 2014, 282).

The modern governance regime thus intrudes itself deeply in the management of Canadian businesses with little evidence of meaningful improvement in corporate performance. There is evidence from patterns of insider share sales that corporations follow externally imposed best practices even when managers know they will adversely impact their firms’ financial performance (Larcker, McCall and Ormazabal 2013). The pursuit of compliance with governance practices takes up significant amounts of board resources, and imposes a rigidity to corporate decision-making that makes it difficult, even impossible, to make the fine-grained, contextual decisions only possible for managers. It seems likely that there is a connection between the rise of the modern corporate governance regime and the simultaneous decline in IPOs. The two trends are almost perfectly matched.

b. The Reputational Harm of Corporate Governance

There is not a single element of the modern corporate governance regime that is not predicated on the notion that corporate managers cannot be trusted. The assumed ever-present risk of managerial misbehaviour, self-dealing, and fraud lies behind the formation of independent board committees, majority and supermajority independent directors, separating the chair and CEO rules, and countless others. The highest-ranked firms in *The Globe and Mail’s* annual “Board Games” feature, which measures adherence to corporate governance best practices and ranks Canadian public companies accordingly, are those companies that have most successfully protected themselves against their own executives. This is not a great environment in which to burnish a CEO’s public reputation for integrity. One regularly encounters a deep anger on the part of corporate managers, combined with a defeated resignation, when some new corporate governance structure is imposed on them with the implicit message they are not to be trusted.

c. Conclusion

Like everyone, a CEO is concerned about her relationship with her boss, the board of directors. Who makes up her boss, how the boss makes decisions and carries out its responsibilities, and the standards applied to the boss’s decisions have, to a significant degree, migrated from firms to external parties. Whereas boards were once comparatively free to establish their own governance arrangements, usually in consultation with the CEO, these are now imposed from outside of the corporation in a way that ignores the most important issues: directors’ and officers’ idiosyncratic

personalities, talents, relationships and morale, the corporation's business strategy, the competitive environment, and succession plans.

Going public thus exposes corporate managers to these time-consuming (and according to the empirical literature, likely economically pointless) best practices and to the criticisms of outsiders armed only with a checklist and no deep understanding of the company (Tingle 2017c; Tingle 2018). Check-the-box exercises that provide little real value will, after an IPO, take up an increasing amount of time for managers and the board (Bozec and Dia 2012). The company will feel compelled to adopt governance structures and practices that are, at the time they are adopted, understood to be worse than the alternatives. These are powerful reasons not to go public. As one past Canadian CEO observed in cautioning other executives from going public, "...going public means having another layer of bureaucracy to deal with" (Shurfelt and Pellegrini 2017; Milne 2013).

3. Shareholder Power

In the 1980s and 1990s, institutional shareholders were seen as an appealing counterweight to corporate boards and managers (Black 1992a; Black 1992b; Black 1992c; Becbuck 2005; Roe 1991). After all, giving shareholders increased influence over the decisions of directors made sense: it was (arguably) the shareholders' money being expropriated by corporate agents. Unsurprisingly, over the next three decades, shareholders' influence over corporate decision-making increased steadily. (Fisch 2010, 884; Gelter 2013, 910-911; Masouros 2012).

The growth in shareholder power occurred through multiple channels:

- The rise of supermajorities of independent directors on corporate boards gave shareholders considerably more influence than they possessed when insiders formed a large constituency on Canada's boards (Spencer Stuart 2014, 2, 30, 33-34; Tingle 2020a). Independent directors have less at stake when a disagreement about strategy arises with a powerful investor and they are more vulnerable to investor action. In particular, independent directors tend to be primarily concerned about their reputation, which in practice means the regard in which they are held by the institutional investor community.
- For these reasons, other corporate governance initiatives, such as splitting the CEO and board chair roles and placing crucial decisions in the hands of independent board committees, further increased the influence of shareholders.
- The TSX changed its rules to permit shareholders to vote on a variety of matters left unmentioned by corporate law. These include: equity compensation arrangements; acquisitions or financing transactions over a certain size; transactions that involve a related party (even if the corporate law rules for managing the conflict have been observed); as well as a variety of other matters (TMX Group 2019, 501(c), 604, 607(g), 608(a), 611(b)(c)(e), 613, 624(n) and 626(c)).
- Shareholder proposals and changing market norms have caused companies to voluntarily adopt advisory say-on-pay votes (Bernstein and McDougall 2014).

Surveys of directors find that almost three-quarters say they would reconsider executive pay plans, even if approved by the shareholders, if shareholder support was unenthusiastic (Thomas, Palmiter and Cotter 2012, 1263).

- The TSX adopted majority voting in 2014, dramatically reducing the barriers to removing individual directors from the board. The targeted director must no longer be beaten by an actual human being with views about the business and a willingness to stake his or her time and reputation on those beliefs. The *Canada Business Corporations Act* reforms in 2018 will remove the last scrap of discretion over whether a board could decide to accept or reject a mandatory resignation from a director defeated in one of these costless recall votes (CBCA 2018, 106(3-3)-159(1), 165(1), 169(1), 251; Bill C-25 2018).
- In Canada, defensive tactics in the face of a takeover bid have always been impossible as a result of decisions of the securities commissions to leave the sale decision in the hands of shareholders. But in the U.S., the combination of the poison pill and staggered boards have provided a near absolute defense to a hostile bid. Staggered boards, the essential element of this defense, have mostly been eliminated from American public markets in the period since 2005, as a result of changing market norms and shareholder proposals (Strine 2014, 475; Bebchuk, Coates and Subramanian 2002; Spencer Stuart 2019, 15).
- Probably the biggest change is the rise of third-party advisory firms, such as Glass-Lewis and Institutional Shareholder Services. They devote significant resources to corporate governance questions (Tingle 2016; Tingle 2014), pressure companies to adopt shareholder-friendly policies (Lipton 2014), punish directors for taking actions without shareholder approval (even when this approval is not required by any regulator) (Tingle 2014, 711-712, 738-739), and serve as a method of co-ordinating shareholder action by crystallizing significant voting blocs around their recommendations (Tingle 2014, 718-722). Studies have shown that boards will take actions they believe correctly to be value destroying to avoid violating a proxy advisory guideline (Altman and Burke 2011).
- The character of investors in the public markets has changed markedly over the time of their decline. Canadian institutional assets total more than \$1.5 trillion, doubling since 2008 (Investment Funds Institute of Canada 2019). Engagement is the second-most prominent investment strategy in Canada, and assets in this category have grown by 25 per cent over the last two years (Responsible Investment Association 2018). Up to 80 per cent of U.S. markets are owned by institutions (McGrath 2017). Research suggests directors and managers will take value-destroying measures to deflect the attention of an activist institutional investor (Eckbo 1990; Ermiture, Ferri and Oesch 2018, 3402; Dos Santos and Song 2009; Mizik 2010; Graham, Harvey and Rajgopal 2006).
- Shareholder power in corporate governance arrangements has grown significantly through informal channels. Surveys suggest over 60 per cent of directors communicate directly with institutional investors (Levit 2019, 2775-2776; Fairfax 2013, 831-832). A high percentage of these discussions result

in the board enacting the changes requested by the shareholder (Kim and Schloetzer 2013; Ernst and Young 2015). This includes making changes to firm operations and the internal allocation of capital (PriceWaterhouseCooper 2016, 2; Smith 1996; Del Guercio and Hawkins 1998; Huson 1997; Carleton, Nelson and Weisbach 1998).

Academic attempts to look at the overall trend find that shareholder power has increased dramatically (Deakin, Sarkar and Siems 2018, 124). The author of the most detailed, book-length treatment of the phenomenon, carefully evaluates, scores and tracks the regulatory and legal developments in the major western economies, concluding that the “natural” trend “is persistently moving towards shareholder empowerment” (Masouros 2012, 271).

a. The Loss of Control

Obviously, the growth of shareholder power has come at the expense of managers and directors; this might be experienced by managers as a negative thing, but it is probably not the main story. Most private companies have representatives of their largest shareholders actually sitting on the board of directors. Quite often these shareholders have powers granted by investor-rights agreements or the terms of the equity instruments they hold that go well beyond those of a mere director (Tingle 2018, 333-380). Even with the changes of the last three decades, therefore, it is very likely that an IPO will lead to a diminishment of shareholder influence over corporate decisions as the board composition changes and the large providers of early-stage finance exit the stock.

The problem is not, therefore, that the total level of shareholder influence changes adversely in an IPO, but that the quality of this influence declines. Whereas venture capital funds or angel investors are usually very close to the company and have a nuanced understanding of its circumstances and people, public investors have significantly less information. The best empirical evidence we have is that the public-market shareholders who insert themselves in corporate decision-making do not understand the particularities of the company or its business, people or markets (Tingle 2020b). This is true regardless of which avenue of shareholder influence we examine: proposals, activist proxy campaigns, or takeovers (Tingle 2020a). In each case, the vast majority of interventions propose one of a limited number of financial engineering techniques to squeeze more money out of the firm for the shareholders (PriceWaterhouseCooper 2016, 2; Gow, Shin and Srinivasan 2014; Zhu 2013; Brav, Jiang and Kim 2015; Brav et al 2014; Coffee and Palia 2016, 590-592; Cremers, Pareek and Sautner 2017; Allaire and Dauphin 2016, 293-294; Denes, Karpoff and McWilliams 2016, 412, panel B tab 2; Brav et al 2008, 1771). Since 1962, American public-market investors have withdrawn more money from corporations than they have invested (Mitchell 2012, 2; Lazonick 2014). Between 2002 and 2012, the net issuance of corporate equity in the U.S. was negative US\$287 billion — and this includes the frantic fundraising of financial institutions in the wake of the 2008 crisis (Fox and Lorsch 2012, 50).

Insofar as non-financial measures are suggested by institutional investors, they tend to be high-level recommendations to terminate the CEO or a director. The reality is

that we have lots of evidence that institutional managers invest little in monitoring corporate governance (Tingle 2016, 767), so what other solution are they like to arrive at? When, for example, an activist shareholder succeeds in getting representation on the board of directors of a target company, the company materially underperforms its peers over the next several years (Martynova and Renneboog 2008). The reality is that most outside public-market investors, managing a portfolio of hundreds of investments, are unlikely to have the kinds of insights that improve the long-term operating performance of specific firms (Denes, Karpoff and McWilliams 2016; Coffee and Palia 2016; Stout 2005, 1441;).

Bigger problems arise from the fact that public-company institutional shareholders often have interests that diverge from those of long-term flesh-and-blood investors. Because they are diversified, institutional investors may wish companies to take on more risk than its undiversified constituencies might think wise. So, for example, the more exposure a bank had to institutional investors, the more profitable it was before the financial crisis and the more likely it was to fail after the crisis (Saghi-Zedek and Tarazi 2015, 371; Gropp and Kohler 2010; Dignam 2013; Ferreira et al. 2013). Some institutional fund managers have reasons to demonstrate a proper commitment to certain political positions pertaining to carbon emissions, tobacco and alcohol, defence contractors, employment practices, populist positions on executive compensation, and environmental matters in order to please the individuals that retain those fund managers: politicians, labour executives, universities, and politically motivated individuals (Tingle 2018).

The most commonly feared conflict arises from the financial incentives experienced personally by professional fund managers. These are almost entirely very short-term (Barker and Chiu 2017). The period for which institutions hold their shares is also very short-term. Over the time period of the rise of institutional money managers, the average hold period for a share on the New York Stock Exchange has fallen from seven years to about six months (Fox and Lorsch 2012, 50). Mutual funds claim an annual turnover of 100 per cent, but investigators report that the vast majority have higher turnovers than claimed, some by as much as 200 per cent (Hawley, Johnson and Waitzer 2011, 5). Hedge funds trade at even faster rates (Hennessee Group LLC 2004). For example, activist hedge funds, which specialize in involving themselves in companies' corporate governance, hold shares on average for 18 months by one measure, and 22 months by another (Brav et al. 2008, 1749; Coffee and Palia 2016, 567 and 572). Half of their investments don't last nine months (Allaire and Dauphin 2014).

This doesn't necessarily mean the corporate governance contributions of institutional shareholders are bad for firms in the long run, but as Delaware's well-respected Justice Leo Strine observes, "if out of this debate among those with short-term perspectives comes optimal policy for human investors with far longer time horizons, that happy coincidence would be remarkable" (Strine 2017, 1876). For recent empirical research studies, which are longer-term and better designed than their predecessors, the trend has in fact been to find that the principal forms of shareholder activism produce corporate underperformance over the long term (Tingle 2020a; Bower and Paine 2017, 8-9).

b. Reputational Harm

Public-market shareholder engagement in corporate governance is often not conducted in the privacy of the boardroom. While most initial approaches by shareholders are made confidentially, they are always accompanied by the threat — often explicit — that a failure of the managers to respond satisfactorily will lead to the publication of the shareholder's concerns (Allaire 2015, 2). Thus, a disagreement over corporate strategy will be made public in a way that never happens in a private company.

In the public campaign, the institutional investor will take advantage of the modern market norms that perceive managers and directors as always imposing unreasonable agency costs on the corporation. Institutional investors cast themselves as defenders of the shareholders' interests, against managers mired in conflicts of interest. Executive compensation is frequently brought up as excessive (even though activist interventions don't result in changes to executive pay practices) (Coffee and Palia 2016, 583). In general, all of the tactics used by a shareholder activist are designed to call into question the integrity and competence of the management and board (Lipton et al. 2019).

Is there a CEO alive who would want to go through this kind of conflict aired on the front pages of the newspaper and on cable business news channels? This is particularly the case given that many will assume the CEO's explanations are only made in order to protect her job and outrageous compensation package.

V. POLICY RECOMMENDATIONS

One obvious place to start in considering changes that might make the public markets more attractive to managers and boards is to examine the various innovations in the market that have occurred in the last three decades. With few exceptions, these changes have adversely impacted corporate managers. That is not an accident; nearly all of the changes were enacted out of a concern to minimize the agency costs generated by negligent or corrupt agents. Of course they made life more difficult for those agents. We would therefore suggest reviewing the innovations of the last few decades that appear to have an outsized effect on corporate boards and executives from the perspective of whether they are worth it. It's that simple: we introduced these innovations to reduce agency costs and improve corporate performance; do they actually do this? If not, they should be scrapped.

Here are a few of our favorite candidates for elimination:

1. Majority Voting

Majority-voting policies are designed to make directors more vulnerable to shareholder action (OSC 2014, 1769; Choi et al. 2016, 1127). The empirical evidence from the U.S., where majority voting was introduced mainly through the initiative of labour-union pension funds, is that shareholders as whole do not see much value in it (Tingle 2020b, 19-23). Indeed, shareholders are much *less* likely to vote against directors if there is a majority-voting regime in place (Choi et al 2016, 1122). Research finds the difference is

not small: the likelihood of a majority “withhold” vote against a director of a company that does not have a majority-voting policy is 19 times higher than if majority voting was in place. Even the percentage of shares cast in director elections declines slightly after adoption of majority voting (Cai, Garner and Walkling 2013, 131-132).

For their part, boards usually ignore the results of majority voting and the targeted director is usually re-elected the following year (Cai et al. 2013, 133; Choi et al 2016, 1122; Becker and Subramanian 2013; Gladman, Grunfeld and Lamb 2012, 3; Kahan and Rock 2014, 2012). To the extent researchers can evaluate the reasons for an abnormal “withhold” vote against a director, they appear to be motivated by a concern to get some corporate governance practice instituted at the company, rather than as a result of economic underperformance or an evaluation of the merits of the targeted director (Ertimur, Ferri and Oesch 2015, 1). Finally, the adoption of majority voting in the U.S. (where it is voluntary) is neither preceded by any evidence of economic underperformance by the company, nor any evidence of governance issues (measured by “withhold” votes in previous years) (Choi et al. 2016, 1146, 1148). The only study to examine long-term performance following adoption of majority voting found that these companies actually lagged their peers in various ways, including return on assets and market-adjusted stock returns (Cai et al. 2013, 132).

The empirical evidence does not need to convince you that majority voting is a bad idea, it only needs to suggest that perhaps the TSX and the Canadian government should not make it mandatory. Let companies and their shareholders decide whether it should form part of the corporate contract.

2. Staggered Boards

Most of the business corporations acts in Canada provide for the election of a staggered or “classified” board. This is a board on which directors can be elected for three-year terms, so only one-third of the directors come up for election each year. The idea behind them is to insulate directors from short-term pressures to advance shareholder interests. An analogue would be the six-year terms of U.S. senators: a body of empirical research finds that senators are much more likely to make difficult, unpopular decisions in the first four years of their term, then make populist decisions (and concentrate on the delivery of pork to their states) in the last two years (Fair 2009, 59; Conconi, Facchini and Zanardi 2014, 104).

In the United States, research initially found that staggered boards reduced firm value (Bebchuk and Cohen 2004; Faleye 2007; Bebchuk, Cohen and Ferrell 2009; Cohen and Wang 2013; Mahoney and Mahoney 1993, Masulis, Cong and Xie 2007). There were several problems with this early research, such as reverse causality and a focus on a period of time when few companies were either adopting or eliminating staggered board structures (Cremers, Litov and Sepe 2017, 425; Amihud, Schmid and Soloman 2018a, 13). More recent research on much larger data sets has found that staggered boards are either positively associated with an increase in firm value (Cremers, Litov and Sepe 2017, 431, 441; Cremers and Sepe 2016, 103-104; Cremers and Sepe 2017a, 3) or they produce no material change in firm value (Amihud, Schmid and Solomon 2018a; Amihud, Schmid and Solomon 2018b, 98; Bates, Becher and Lemmon 2008).

When natural experiments arise around the adoption or removal of classified boards as a result of exogenous shocks, the research finds that removal of a classified board structure caused “economically and statistically significant reductions in firm value... both in absolute terms and relative to declassifications occurring [at other firms]” (Cremers and Sepe 2017a, 2; Cremers and Sepe 2017b). Interestingly these wealth effects were particularly pronounced at firms with high R&D expenditures. These studies include looking at the wealth effects arising from the Harvard Shareholder Rights Project’s activism around removing staggered boards (ibid.), the introduction of a law that automatically imposed staggered boards on all Massachusetts-incorporated companies (Daines, Xin Li and Wang 2018), various regulatory and legislative events affecting staggered boards (Larcker, Ormazabal and Taylor 2011), and the adoption of “dead hand pills,” which function very much like a staggered board in a takeover context (Gleason and Klock 2008). In every case the staggered board was value-enhancing, its removal value-destroying.

In terms of the impact of staggered boards on various corporate governance activities, research finds that staggered boards are just as likely to terminate a CEO as boards elected annually (Cremers, Litov and Sepe 2017, 427). The presence of a staggered board has no impact on the amounts paid to executives or the pay structures used by companies (Cremers, Masconale and Sepe 2017). Rather than a device for managerial entrenchment (which is how they have generally been regarded by academics, activist shareholders, and proxy advisors) research suggests companies with staggered boards deliver the same returns to shareholders in the event of a hostile takeover bid as peer companies with annual elections (Bates, Becher and Lemmon 2008, 674).

When we look at proxies for a longer-term board and managerial outlook, it appears staggered boards do better than their peers. We have already seen that research-intensive companies disproportionately lose value when their boards are de-staggered. A study of American banks found that classified boards were roughly 19 to 26 per cent less likely to require state bailouts in the wake of the 2008 financial crisis (Ferreira et al. 2013).

The research around staggered boards is discussed in the broader context of empirical research around shareholder power in Tingle (2020a). Again, it is not our intention to convince anyone that staggered boards are always, and in every circumstance, valuable. We are only suggesting that the various provincial and federal governments consider amending their incorporation statutes to provide firms with the option of creating meaningful staggered boards. At present, various jurisdictions permit staggered boards, but then provide a method for shareholders to easily interrupt their operation, removing the only rationale for having one in the first place. The TSX rules also require annual elections of all directors (TMX Group 2019, 461.1-461.4). Perhaps the decision of whether a firm would benefit from greater distance from the short-term desires of the market should be left to the firms themselves, rather than to regulators. If there is a concern that shareholders would be powerless to withstand the adoption of staggered boards by self-interested directors, the history of the United States provides reassurance. In the past decade, activist shareholders have successfully de-staggered virtually every large company in American public markets (Cremers, Masconale and

Sepe 2017, 425; Cremers and Sepe 2016). Surely the decision can safely be left to boards, shareholders, and other corporate constituencies.

3. Executive Compensation

At the end of 30 years of regulatory meddling in executive compensation arrangements, there is no evidence any of it has been successful. As discussed earlier in this paper, since the early 1990s, when this meddling by regulators and legislators began, CEO pay has climbed according to every possible measure: in absolute terms, relative terms, and as a percentage of profits.

The mechanism responsible for nearly all of the increase in executive pay has been the tying of that pay to shareholder returns through the use of equity incentives and performance-pay schemes (Tingle 2017b). The use of these pay structures has been encouraged by securities regulators' evolving rules around compensation disclosure and by the policies and voting recommendations of proxy advisors (Tingle 2017a). At least one study has shown that boards will adopt pay practices they know are value-destroying to accommodate proxy advisors' recommendations (Larcker, McCall and Ormazabal 2013; Bloom and Milkovich 1998; Baek and Pagan 2002). Justice Strine, one of the most-highly regarded voices in American corporate law, describes the effect of the change in compensation practices: "top corporate managers have been promised pay packages way out of line with other managers, but in exchange must focus intently on stock price growth and be willing to treat other corporate constituencies callously if that is necessary..." (Strine 2017, 1872).

Most scholars who have examined the research on performance-pay schemes have concluded that there is little evidence they improve corporate performance, and some evidence they harm it (Strine 2017, 1903). A summary of this research is in Tingle (2017c). Empirical studies have also found that pay-for-performance schemes are positively associated with financial fraud and accounting restatements (Frey and Osterloh 2005, 97; Harris and Bromiley 2007, 362; Denis, Hanouna and Sarin 2006, 470; Becher, Campbell II and Frye 2005, 1759; Cheng and Farber 2008, 1246; Spindler 2009, 2). As Kevin Murphy, one of the leading researchers in the area, summarizes, "[u]nfortunately, although there is a plethora of evidence on dysfunctional consequences of poorly designed pay programs, there is surprisingly little evidence that higher pay-performance sensitivities lead to higher stock-price performance" (Murphy 1999, 2359).

Equity-incentive schemes in turn appear to have no impact on firm performance (Tingle 2017b). For example, major meta-studies in 2003 (Dalton et al. 2003, 16) and 2007 (Sanchez-Ballesta and Garcia-Meca 2007, 887-888) have found executive equity exposure has no impact on corporate operational outcomes. As the authors of the largest of these studies conclude, "the results of our meta-analyses do not support agency theory's proposed relationship between ownership and firm performance" (Dalton et al. 2003, 20).

Equity-incentive schemes appear to be positively associated with earnings manipulation (Burns and Kedia 2006, 37; Cheng and Warfield 2005, 443; Bergstresser and Philippon 2006, 514; Efendi, Strivastaga and Swanson 2007, 1030), disclosure

failures (Aboody and Kasnik 2000, 75), fraud (Johnson, Ryan and Tian 2009, 116-117; Peng and Roell 2008, 142; Denis, Hanouna and Sarin 2006, 468; O'Connor et al. 2006, 492-493; Harris and Bromiley 2007, 362), larger restructurings and layoffs (Dial and Murphy 1995, 305; Brookman, Chang and Rennie 2007, 260), voluntary corporate dissolutions (Mehran, Nogler and Schwartz 1998, 320), and reductions in R&D and capital expenditures (Edmans, Fang and Lewellen 2017, 2230).

We think it is time for regulators to get out of the executive compensation business. Fixing pay practices for public companies will be complicated, because of the role played by influential private parties, such as proxy advisors and shareholder activists. However, a great deal of their work depends on regulators mandating exhaustive disclosure around compensation practices. We believe virtually all of the disclosure rules around executive compensation should be eliminated, with the possible exception of the total amount paid to senior managers and directors. Companies can decide how much detail to report about the various components and terms of their compensation arrangements. This will allow them to decide how many inputs to provide proxy advisors for their various calculations and eventual evaluation of the firm's adherence to the advisors' best practices.

If there is concern that boards will use the lack of mandatory disclosure to keep material information from their shareholders, reassurance can be drawn from two facts in the literature. First, shareholders can look after themselves. From the voluntary adoption of say-on-pay schemes, to the adoption and eventual discarding of stock options, boards have faithfully reflected changing shareholder views of appropriate compensation practices (Tingle 2017a). Second, shareholders are part of the problem. They had a significant role in the adoption of the equity incentives and pay-for-performance schemes that greatly increased executive compensation in the first place (ibid.). There is plenty of evidence from private equity (Jackson 2013, 652) and say-on-pay voting (Gordon 2009, 343; Conyon 2014, F83) that companies are paying their executives in exactly the ways shareholders favour. Giving boards slightly more power to resist shareholder pressure and relieving executives of potentially embarrassing public disclosure about their pay, might lead to better outcomes in our failing public markets.

4. Corporate Governance Best Practices

As discussed elsewhere in this paper and at greater length in Tingle (2017c) and Tingle (2018), there is little evidence that corporate governance best practices produce superior outcomes. There is considerable evidence, however, that one-size-fits-all governance structures produce worse outcomes, particularly for smaller companies of the sort that predominate in Canada's capital markets (Tingle 2017c). For example, it can be beneficial to a firm to have the CEO and board chair position combined in circumstances where there are significant levels of complexity and research activity (He and Wang 2009; Boyd 1995, 304). Director "busyness" or "overboarding" appears to be negatively associated with corporate performance for large companies, but for younger and less established firms these types of directors produce significant benefits (Field, Lowry and Mkrtchyan 2013). Independent directors appear to be more valuable in industries that are relatively non-technical (Duchin, Mastusaka and Ozbas 2010); they cause underperformance in companies with significant R&D activity (Coles, Daniel

and Naveen 2008) or facing complex risk-management issues (Leisen and Swan 2018; Erkens, Hung and Matos 2009).

Canada's securities regulators deserve a great deal of credit for refraining from following the United States into *Sarbanes-Oxley*-style governance regulation in the aftermath of the Enron-era frauds (Sibbold 2009). However, the comply-or-explain regime produced by *National Policy 58-201 – Corporate Governance Guidelines* has been interpreted by issuers as the bare minimum for a board concerned with faithfully discharging its responsibilities, so it has been adopted nearly universally (Salterio and Conrad 2009). Canadian regulators briefly considered retracting National Policy 58-201 in 2008 (CSA 2008). They should revisit the question. If there is a collection of best practices that produce clearly superior outcomes for firms and shareholders, no one has yet discovered it (Tingle 2018). Securities commissions should, therefore, simply withdraw from the field.

The securities commissions should also consider doing away with *National Instrument 52-110 – Audit Committees*. This policy mandates audit committees composed entirely of independent directors for TSX issuers. At least seven studies have found little evidence that wholly independent audit committees outperform other arrangements (Tingle 2017c). Other attempts to measure the value of independent directors on audit committees using accounting restatements (Zhang 2012, 54; Agrawal and Chadha 2005), third-party evaluations of reporting quality (Felo, Krishnamurthy and Solieri 2003), the contents of earnings announcements (Anderson, Deli and Gillan 2003), and rates of accounting fraud (Farber 2005; Donelson, McInnis and Margenthaler 2015) have all found no benefit to having the types of audit committees established by National Instrument 52-110. It never made much sense that an audit committee comprised entirely of individuals with little personal experience of the firm or its business and accounting practices would serve as an effective check on management failures that somehow managed to escape the firm's auditors.

These days, most of the pressure to adopt corporate governance best practices arise from third parties (Tingle 2018). But it would be a symbolically important message if Canada's securities regulators withdrew their implicit endorsement of one-size-fits-all corporate governance practices.

5. Proxy Advisors

Proxy advisory firms are complicit in virtually every trend discussed in this paper. They promote and enforce the executive compensation, corporate governance and shareholder-empowerment practices that empirical research has repeatedly shown to be ineffective or destructive (Tingle 2014). There is considerable evidence of bias and mistakes being made in the work they perform (Tingle 2016). In consultations conducted in 2012 by securities regulators in Canada and the United States, the overwhelming majority of letters sent by companies or law firms expressed concern about the quality of proxy advisors' contributions to corporate governance (OSC 2013b; SEC 2020).

At the time, securities regulators largely left the proxy advisory industries' practices intact, though the U.S. Securities and Exchange Commission (SEC) has recently taken steps that suggest it has had second thoughts. In 2018, the SEC withdrew the no-action letters it issued in 2004 advising that institutional shareholders could fulfill their fiduciary duties to clients by relying on the opinions of third-party proxy advisory firms (SEC 2018). In August 2019, the SEC announced that it regarded proxy advisors' work to be solicitations under federal proxy rules (although it left certain exemptions available to proxy advisors intact) (SEC 2019a). The announcement made clear, however, that the SEC believes proxy advisors' work is subject to the antifraud provisions of the U.S. Exchange Act, punishing "opinions, reasons, recommendations or beliefs" expressed in a solicitation that are false or misleading, or that fail to state a material fact required to make the statement not false or misleading (ibid.).

Finally, in November 2019, the SEC proposed amending certain rules to further discipline the quality of voting recommendations produced by proxy firms (SEC 2019b). The most significant of these would provide public companies with greater opportunities to challenge adverse advice. The report of Ontario's Capital Markets Modernization Task Force, released in July 2020, recommended Canadian regulators adopt a similar approach to regulating the advice of proxy advisors (Ontario 2020).

One of us has previously recommended Canadian securities commissions adopt three distinct measures to ameliorate the obvious failures in the market for proxy advice (Tingle 2017b; Tingle 2016). First, Canadian regulators should clarify (as the SEC did in its August 2019 release) that institutional shareholders are not obliged to vote their shares in circumstances where that is not in the interests of the client or where an agreement to this effect has been reached with the client. This would relieve funds that compete on low costs, such as exchange-traded funds, from having to vote their shares, something that often involves simple reliance on proxy advisors' voting recommendations (Bebchuk and Hirst 2019). Given the considerable evidence of poor-quality votes from institutional shareholders, Canadian regulators should also make it clear that if the fund managers are not expending the time to independently inform themselves on the matters before the shareholders, they should refrain from voting.

Second, securities regulators should require proxy advisors to provide issuers with an opportunity to review their proxy voting recommendations before those recommendations are made public. At present, many Canadian firms never receive copies of the proxy voting recommendations at all, or if they do, it is after the fact (Tingle 2016). This means that, in the event of factual errors or differences in opinion, issuers are often unable to engage the voting recommendations before proxies are submitted. It is difficult to see how good voting outcomes could be produced by this arrangement.

Finally, Canadian securities commissions should require proxy advisors to include materials from issuers in their proxy voting advice. These materials (which could include a hyperlink) can provide a brief explanation by the issuer why they believe the proxy advisor is in error or why they disagree with the proxy advisors' assessment of the best interests of the corporation. Something similar to this has been proposed in the SEC's November 2019 announcement and in the July 2020 report from Ontario's Capital

Markets Modernization Task Force (SEC 2019b; Ontario 2020, 24). This would allow, for example, companies to point out the reasons why they feel the proxy advisors' preferred governance or compensation structures are mistaken, at least in the case of their specific firm. Exposure to the reasons for the conflicting advice from the company and the proxy advisors could only lead to institutional investors making better-informed voting decisions.

VI. CONCLUSION

The managers of private companies are not a species apart. They want the same things we all do, and many of these things are not financial: respect, a good reputation and a certain amount of peace, control, collegiality and freedom. They also want money, of course, but there isn't a lot that has plausibly changed for the worse in the financial rewards for an executive who takes a company public. Where there have been changes to the financial incentives, they have occurred in only one of Canada or the U.S., and yet the unaffected market shows an identical pattern of decline.

What has changed in both markets, in much the same way and at roughly the same time, is the diminishment of the chance corporate managers will achieve their non-financial goals. When the CEO of a private company tells you in relation to going public, "who would want that?" he is not talking about financial outcomes. He is talking about a life in the public market that looks uncomfortable, miserable, out of control and riskier than life in a private company. It is entirely rational for him to sell a successful business, take his money and, if he decides to start another project, to do it again in the private markets.

Although this makes sense for Canada's entrepreneurs, it is bad for the country. Companies that do not go public are nearly always sold. They don't become national champions, they don't move up the value chain, they don't create more jobs or generate more human capital, they don't diversify the economy or increase competition. In most of the knowledge industries that Canadian politicians and policy-makers care the most about, they simply cease to exist in this country. For example, one study found that roughly half of successful exits of VC-backed companies in Quebec resulted in the business migrating out of the country, leaving "truncated companies with declining activities" (Carpentier and Suret 2014, 3). Canadian regulators and politicians should begin thinking about how they can bring the IPO market back.

REFERENCES

- Aboody, David and Ron Kasnik. 2000. "CEO Stock Option Awards and Timing of Corporate Voluntary Disclosures." *Journal of Accounting and Economics* 29, no. 1: 73-100.
- Agrawal, Anup and Sahiba Chadha. 2005. "Corporate Governance and Accounting Scandals." *Journal of Law and Economics* 48, no. 2: 371-406.
- Ahmed, Anwer S., Mary Lea McAnally, Stephanie J. Rasmussen and Connie D. Weaver. 2010. "How Costly is the Sarbanes-Oxley Act? Evidence on the Effects of the Act on Corporate Profitability." *Journal of Corporate Finance* 13, no. 3: 352-369. DOI: <https://doi.org/10.1016/j.jcorpfin.2009.11.003>.
- Akerlof, George A. 1970. "The Market for 'Lemons': Quality, Uncertainty and the Market Mechanism." *The Quarterly Journal of Economics* 84, no. 3: 488-500.
- Allaire, Yvan. 2015. "The Case for and Against Activist Hedge Funds." Institute for Governance of Public and Private Organizations. <https://igopp.org/en/the-case-for-and-against-activist-hedge-funds-2>.
- Allaire, Yvan. 2018. "How Canadian Companies Can Improve Executive Pay—Before Activists Do It for Them." *Financial Post*. April 5. <https://business.financialpost.com/opinion/how-canadian-companies-can-improve-executive-pay-before-activists-do-it-for-them>.
- Allaire, Yvan and François Dauphin. 2014. "Activist Hedge Funds: Creators of Lasting Wealth? What Do the Empirical Studies Really Say?" *Institute for Governance of Private and Public Organizations*. https://igopp.org/wp-content/uploads/2014/07/IGOPP_Article_Template2014_Activism_EN_v6.pdf.
- Allaire, Yvan and Francois Dauphin. 2016. "The Game of Activist Hedge Funds: Cui Bono?" *International Journal of Disclosure Governance* 13: 279-308.
- Altman, Kenneth L. and James F. Burke. 2011. "Proxy Advisory Firms: The Debate Over Changing the Regulatory Framework: An Analysis of Comments Submitted to the SEC in Response to the Concept Release on the U.S. Proxy System: Special Report." The Altman Group. <https://www.yumpu.com/en/document/read/38495662/special-report-on-proxy-advisory-firms-ast-fund-solutions>.
- Amihud, Yakov, Markus Schmid and Steven Davidoff Solomon. 2018a. "Do Staggered Boards Matter for Firm Value?" *Journal of Applied Corporate Finance* 30, no. 4: 61-77.
- Amihud, Yakov, Markus Schmid and Steven Davidoff Solomon. 2018b. "Settling the Staggered Board Debate." *University of Pennsylvania Law Review* 166, no. 1: 1475-1510.
- Anderson, Kristen L., Daniel N. Deli and Stuart L. Gillan. 2003. "Board of Directors, Audit Committees, and the Information Content of Earnings." John Weinberg Center of Corporate Governance, Working Paper Series WP 2003-04.

- Asker, John, Joan Farre-Mensa, and Alexander Ljungqvist. 2015. "Corporate Investment and Stock Market Listing: A Puzzle?" *Review of Financial Studies* 28, no. 2: 342-390.
- Astral Media Inc., Letter to Canadian Securities Administrator, *CSA Consultation Paper 25-401: Potential Regulation of Proxy Advisory Firms*, <http://www.osc.gov.on.ca/en/36504.htm> (September 21 2012).
- Baek, H. Young and Jose Pagan. 2003 "Executive Compensation and Corporate Production Efficiency: A Stochastic Frontier Approach." *Quarterly Journal of Business Economics* 41, no. 1-2, 27-41.
- Baeten, Xavier. 2012. "CEO Motives." VLERICK Business School. Accessed October 13, 2020. <https://www.vlerick.com/~media/corporate-marketing/our-expertise/pdf/CEOMotivespdf.pdf>.
- Baffes, John and Tassos Haniotis. 2010. "Placing the 2006/08 Commodity Price Boom into Perspective." World Bank Policy Research Working Paper 5371.
- Bainbridge, Stephen. 2010. "Corporate Governance and U.S. Capital Market Competitiveness." UCLA School of Law, Law-Econ Research Paper No. 10-13.
- Balsam, Steven. 2012. "Taxes and Executive Compensation." Economic Policy Institute Briefing Paper No. 344. www.epi.org/publication/taxes-executive-compensation.
- Barker, Roger M. and Iris H. Y. Chiu. 2017. *Corporate Governance and Investment Management: The Promises and Limitations of the New Financial Economy*. Cheltenham, U.K.: Edward Elgar Publishing.
- Bates, Thomas W., David A. Becher and Michael L. Lemmon. 2008. "Board Classification and Managerial Entrenchment: Evidence from the Market for Corporate Control." *Journal of Financial Economics* 87, no. 3: 656-677.
- Bebchuk, Lucian A. 2005. "The Case for Increasing Shareholder Power." *Harvard Law Review* 118, no. 1: 833-914.
- Bebchuk, Lucian A. and Alma Cohen. 2004. *The Costs of Entrenched Boards*. Cambridge: National Bureau of Economic Research.
- Bebchuk, Lucian A., Alma Cohen and Allen Ferrell. 2009. "What Matters in Corporate Governance?" *Review of Financial Studies* 22, no. 2: 783-827.
- Bebchuk, Lucian A., and Yaniv Grinstein. 2005. "The Growth of Executive Pay." *Oxford Review of Economic Policy* 21, no. 2: 283-303.
- Bebchuk, Lucian A. and Scott Hirst. 2019. "Index Funds, and the Future of Corporate Governance: Theory, Evidence, and Policy." *Columbia Law Review* 119, no. 1: 2029-2146.
- Becher, David A., Terry L. Campbell II and Melissa B. Frye. 2005. "Incentive Compensation for Bank Directors: The Impact of Deregulation." *The Journal of Business* 78, no. 5: 1753-1778.

- Becker, Bo and Guhan Subramanian. 2013. "Improving Director Election." *Harvard Business Law Review* 3, no. 1: 2-34.
- Beer, Michael and Nancy Katz. 2003. "Do Incentives Work? The Perceptions of a Worldwide Sample of Senior Executives." *Human Resource Planning* 26, no. 3: 30-44.
- Bergstresser, Daniel and Thomas Philippon. 2006. "CEO Incentives and Earnings Management." *Journal of Financial Economics* 80, no. 3: 511-529.
- Bernstein, Sean and Andrew MacDougall. 2014. "Say on Pay 2014: Losing Steam in Canada." Osler, Hoskin & Harcourt LLP. <https://www.osler.com/en/resources/governance/2014/proxy/say-on-pay-2014-losing-steam-in-canada>.
- Bevans, Phillip G. 2005. "Corporate Governance—The New Rules." Minden Gross LLP. Accessed April 9, 2019. [http://www.mindengross.com/docs/articles/corporate-governance---the-new-rules---phillip-bevans-\(feb-04\)](http://www.mindengross.com/docs/articles/corporate-governance---the-new-rules---phillip-bevans-(feb-04)).
- Bhagat, Sanjal and Brian Bolton. 2008. "Corporate Governance and Firm Performance." *Journal of Corporate Finance* 14, no. 3: 257-273.
- Bill C-25, *An Act to amend the Canada Business Corporations Act, the Canada Cooperatives Act, the Canada Not-for-profit Corporations Act and the Competition Act*, 42nd Parliament, 2008. <https://www.parl.ca/DocumentViewer/en/42-1/bill/c-25/royal-assent>.
- Black, Bernard S. 1992a. "Agents Watching Agents: The Promise of Institutional Investor Voice." *UCLA Law Review* 39, no. 1: 811-894.
- Black, Bernard S. 1992b. "The Value of Institutional Investor Monitoring: The Empirical Evidence." *UCLA Law Review* 39, no. 4: 895-940.
- Black, Bernard S. 1992c. "Institutional Investors and Corporate Governance: The Case for Institutional Voice." *Journal of Applied Corporate Finance* 5, no. 3: 19-32.
- Black, Bernard S. and Ronald J. Gilson. 1988. "Venture Capital and the Structure of Capital Markets: Banks Versus Stock Markets." *Journal of Financial Economics* 47, no. 3: 243-277.
- Bloom, Matt and George Milkovich. 1998. "Relationships Among Risk, Incentive Pay, and Organizational Performance." *Academy of Management Journal* 41, no. 3 283-297.
- Bloomberg. 2018. "Where Have All the Public Companies Gone?" Accessed April 8, 2019. <https://www.bloomberg.com/opinion/articles/2018-04-09/where-have-all-the-u-s.-public-companies-gone>.
- Bloomberg, Michael and Charles Schumer. 2007. *Sustaining New York's and the U.S.' Global Financial Services Leadership*. Accessed October 13, 2020. https://apps.americanbar.org/buslaw/committees/CL116000pub/materials/library/NY_Schumer-Bloomberg_REPORT_FINAL.pdf.

- Bo, Erlend E., Joel Slemrod and Thor O. Thorensen. 2015. "Taxes on the Internet: Deterrence Effects of Public Disclosure." *American Economic Journal: Economic Policy* 7, no. 1: 36-62. <https://www-jstor-org.ezproxy.lib.ucalgary.ca/stable/pdf/24465942.pdf>.
- Borgia, Daniel. 2005. "Motivation to Become an Entrepreneur." *International Journal of Entrepreneurial Behaviour & Research* 11, no. 1: 42-57.
- Bower, Joseph L. and Lynn S. Paine. 2017. "Spotlight on Managing for the Long Term: The Error at the Heart of Corporate Leadership." *Harvard Business Review*, May-Jun 2017.
- Boyd, Brian K. 1995. "CEO Duality and Firm Performance: A Contingency Mode." *Strategic Management Journal* 16, no. 4: 301-312.
- Bozec, Richard and Mohamed Dia. 2012. "Convergence of Corporate Governance Practices in the Post-Enron Period: Behavioural Transformation or Box-Checking Exercise?" *Corporate Governance* 12, no. 2: 243-256.
- Brav, Alon et al. 2014. "Shareholder Power and Corporate Innovation: Evidence from Hedge Fund Activism." *American Economic Association*. <https://www.aeaweb.org/conference/2015/retrieve.php?pdfid=357>.
- Brav, Alon, Wei Jiang and Hyunseob Kim. 2015. "The Real Effects of Hedge Fund Activism: Productivity, Asset Allocation and Labor Outcomes." *Review of Financial Studies* 28, no. 10: 2723-2769.
- Brav, Alon, Wei Jiang, Randall S. Thomas and Frank Partnoy. 2008. "Hedge Fund Activism, Corporate Governance, and Firm Performance." *Journal of Finance* 63, no. 4: 1729-1775.
- Brav, Omer. 2009. "Access to Capital, Capital Structure, and the Funding of the Firm." *Journal of Finance* 64, no. 1: 263-308. <https://doi.org/10.1111/j.1540-6261.2008.01434.x>.
- British Columbia. British Columbia Securities Commission ("BCSC"). 2002. *51-304 Report on Staffs Review of Executive Compensation Disclosure*. October 30.
- Brookman, Jeffrey T., Saeyoung Chang and Craig G. Rennie. 2007. "CEO Equity Portfolio Incentives and Layoff Decisions." *Journal of Financial Research* 30, no. 2: 259-281.
- Brown, Keith C. and Kenneth W. Wiles. 2015. "In Search of Unicorns: Private IPOs and the Changing Markets for Private Equity Investments and Corporate Control." *Journal of Applied Corporate Finance* 27, no. 3: 34-48.
- Burns, Natasha and Simi Kedia. 2006. "The Impact of Performance-Based Compensation on Misreporting." *Journal of Financial Economics* 79, no. 1: 35-67.
- Butler, Alexander W., Gustavo Grullon, and James P. Weston. 2005. "Stock Market Liquidity and the Cost of Issuing Equity." *Journal of Financial and Quantitative Analysis* 40, no. 2: 331-348.

- Cai, Jay, Jacqueline L. Garner and Ralph A. Walkling. 2013. "A Paper Tiger? An Empirical Analysis of Majority Voting." *Journal of Corporate Finance* 21, no. 1: 119-135.
- Canada Business Corporations Act* ("CBCA"), RSC 1985, c C-44.
- Canadian Coalition for Good Governance ("CCGG"). 2020. *Building High Performance Boards*. Canadian Coalition for Good Governance. https://ccgg.ca/wp-content/uploads/2019/03/building_high_performance_boards_branding-update_2020.pdf.
- Canadian Securities Administrator. ("CSA"). 2008. *Request for Comment: Proposed Repeal and Replacement of National Policy 58-201, National Instrument 58-101, and National Instrument 52-110 and Companion Policy 52-110CP*. December 19. <https://www.albertasecurities.com/-/media/ASC-Documents-part-1/Regulatory-Instruments/2018/10/3080680-v1-CSA-Notice-re-58-201-NI-58-101-NP-58-Pub-Dec-19-2008-Final.ashx>.
- CSA. 2009. *Report on Staff's Review of Executive Compensation Disclosure, CSA Staff Notice 51-331*. 32 OSCB 9599. November 20.
- CSA. 2017. *CSA Consultation Paper 52-404: Approach to Director and Audit Committee Member Independence*. https://www.osc.gov.on.ca/documents/en/Securities-Category5/csa_sn_20171026_52-404_committee-member-independence.pdf.
- Canadian Social Investment Organization. 2011. *Canadian Socially Responsible Investment Review 2010: A comprehensive survey of socially responsible investment in Canada*. riacanada.ca/wp-content/uploads/CanadianSRIRReview2010.pdf.
- Canadian Tire Corporation. 2012. "Canadian Securities Administrators Consultation Paper 25-401—Potential Regulation of Proxy Advisory Firms." Comment Letter. Canadian Tire Corporation. https://www.osc.gov.on.ca/documents/en/Securities-Category2-Comments/com_20120820_25-401_collverr.pdf.
- Canadian Venture Capital and Private Equity Association ("CVCA"). 2018. "VC and PE Canadian Market Overview: 2017." Accessed June 19, 2019. https://www.cvca.ca/wp-content/uploads/2018/03/Q4-2017_Canada-Report-ENG_Final.pdf.
- Carleton, Willard T., James M. Nelson and Michael Weisbach. 1998. "The Influence of Institutions on Corporate Governance through Private Negotiations Evidence from TIAA-CREF." *Journal of Finance* 53, no. 4: 1335-1362.
- Carpentier, Cécile, and Jean-Marc Suret. 2006. "Bypassing the Financial Growth Cycle: Evidence from Capital Pool Companies." *Journal of Business Venturing* 21, no. 1: 45-73.
- Carpentier, Cécile and Jean-Marc Suret. 2010. "The Canadian Public Venture Capital Market." *Strategic Change: Briefings in Entrepreneurial Finance* 19, no. 7-8: 303-323.
- Carpentier, Cécile and Jean-Marc Suret. 2012. "Entrepreneurial Equity Financing and Securities Regulation: An Empirical Analysis." *International Small Business Journal* 30, no. 1: 41-64.

- Carpentier, Cécile and Jean-Marc Suret. 2014. "Post-Investment Migration of Canadian Venture Capital-Backed New Technology-Based Firms." *Cirano Scientific Series* No. 2014s-27.
- Carpentier, Cécile and Jean-Marc Suret. 2018. "Three Decades of IPO Markets in Canada: Evolution, Risk and Return." *Accounting Perspectives* 17, no. 1: 123-161.
- CBC. 2009. "TSX down 35% in 2008." January 1. Accessed October 13, 2020. <https://www.cbc.ca/news/business/tsx-down-35-in-2008-1.814643>.
- Cheffins, Brian. 2013. "The History of Corporate Governance." In *Oxford Handbook of Corporate Governance*, eds. Mike Wright et al., vol.1, 46-64. Oxford: Oxford University Press.
- Chen, Chien-Ming and Magali Delmas. 2011. "Measuring Corporate Social Performance: An Efficiency Perspective." *Production and Operations Management* 20, no. 6: 789-804.
- Cheng, Qiang and David B. Farber. 2008. "Earnings Restatements, Changes in CEO Compensation, and Firm Performance." *The Accounting Review* 83, no. 5: 1217-1250.
- Cheng, Qiang and Terry D. Warfield. 2005. "Equity Incentives and Earnings Management." *The Accounting Review* 80, no. 2: 441-476.
- Choi, Stephen J., Jill E. Fisch, Marcel Kahan and Edward B. Rock. 2016. "Does Majority Voting Improve Board Accountability?" *University of Chicago Law Review* 83, no. 3: 1119-1180.
- Coffee, John C. and Darius Palia. 2016. "The Wolf at the Door: The Impact of Hedge Fund Activism on Corporate Governance." *Journal of Corporate Law* 41, no. 3: 545-608.
- Cohen, Alma and Charles C.Y. Wang. 2013. "How do Staggered Boards Affect Shareholder Value? Evidence from a Natural Experiment." *Journal of Financial Economics* 110, no. 3: 627-641.
- Coles, Jeffrey L., Naveen D. Daniel and Lalitha Naveen. 2008. "Boards: Does One Size Fit All?" *Journal of Financial Economics* 87, no. 2: 329-356.
- Collins, Sean. 2008. *Proxy Voting by Registered Investment Companies: Promoting the Interests of Fund Shareholders* (Washington, D.C.: Investment Company Institute, Research Perspective 14). <http://www.ici.org/pdf/per14-01.pdf>.
- Committee on Capital Markets Regulation. *Interim Report of the Committee on Capital Markets Regulation*. 2006. Available from <https://www.capmktsreg.org/wp-content/uploads/2018/10/Interim-Report-of-the-Committee-on-Capital-Markets-Regulation.pdf> ("Paulson Report").
- Conconi, Paolo, Giovanni Facchini and Mauricio Zanardi. 2014. "Policymakers' Horizon and Trade Reforms: The Protectionist Effect of Elections." *Journal of International Economics* 94, no. 1: 102-118.

- Conyon, Martin J. 2014. "Executive Compensation and Board Governance in U.S. Firms." *Economic Journal* 124, no. 574: F60-F89.
- Cormier, Ryan and Mariam Ibrahim. 2014. "Stormcloud Bursts on Sunshine List as Judge Grants Injunction Against Including Prosecutor Salaries." *Edmonton Journal*. January 31. <http://www.edmontonjournal.com/business/stormcloud+bursts+sunshine+list+judge+grants+injunction+against+including+prosecutor/9453722/story.html>.
- Council of Canadian Academies ("CCA"). 2009. "Innovation and Business Strategy: Why Canada Falls Short—The Expert Panel on Business Innovation." Accessed August 6, 2020. <https://cca-reports.ca/wp-content/uploads/2018/10/2009-06-11-innovation-report-1.pdf>.
- CCA. 2012. "The State of Science and Technology in Canada, 2012: The Expert Panel on the State of Science and Technology in Canada." Accessed October 13, 2020. http://itac.ca/wp-content/uploads/2013/07/StateofST2012_fullreportEN.pdf.
- Cremers, K.J. Martjin, Lubomir P. Litov and Simone M. Sepe. 2017. "Staggered Boards and Long-Term Firm Value, Revisited." *Journal of Financial Economics* 126, no. 2: 422-444.
- Cremers, K.J. Martjin, Saura Masconale and Simone M. Sepe. 2017. "CEO Pay Redux." *Texas Law Review* 96, no. 2: 205-278.
- Cremers, K.J. Martjin, Ankur Pareek and Zacharias Saunter. 2017. "Short-Term Investors, Long-Term Investment and Firm Value." ECGI. https://ecgi.global/sites/default/files/2._short-term_investors_2._long-term_investments_and_firm_value.pdf.
- Cremers, K.J. Martjin and Simone M. Sepe. 2016. "The Shareholder Value of Empowered Boards." *Stanford Law Review* 68, no. 1: 67-148.
- Cremers, K.J. Martjin and Simone M. Sepe. 2017a. "Board Declassification Activism: Why Run Away from Evidence?" SSRN (unpublished). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2991854.
- Cremers, K.J. Martjin and Simone M. Sepe. 2017b. "Board Declassification Activism: The Financial Value of the Shareholder Rights Project." SSRN (unpublished). <https://ssrn.com/abstract=2962162>.
- Cumming, Douglas J. 2008. "Contracts and Exits in Venture Capital Finance." *The Review of Financial Studies* 21, no. 5: 1947-1982.
- Cumming, Douglas and Sofia Johan. 2007. "Preplanned Venture Capital Exits." *European Economic Review* 52, no. 1: 1209-1241.
- Cumming, Douglas J. and Sofia Johan. 2008. "Information Asymmetries, Agency Costs and Venture Capital Exit Outcomes." *Venture Capital* 10, no. 3: 197-331 DOI: 10.1080/13691060802151788.
- Cumming, Douglas J., and Sofia Johan. 2009. *Venture Capital and Private Equity Contracting: An International Perspective*. Malden, Mass.: Academic Press.

- Daines, Robert M., Shelley Xi Li and Charles C.Y. Wang. 2018. "Can Staggered Boards Improve Value? Evidence from the Massachusetts Natural Experiment." *Harvard Business School, Working Paper no. 16-105*. https://www.hbs.edu/faculty/Publication%20Files/16-105_554d24a7-64bf-4f71-9b51-4d3391971106.pdf.
- Daines, Robert M., Ian D. Gow, David F. Larcker. 2010. "Rating the Ratings: How Good are Commercial Governance Ratings?" *Journal of Financial Economics* 98, no. 3.
- Dalton, Dan, and Catherine Dalton. 2011. "Integration of Micro and Macro Studies in Governance Research: CEO Duality, Board Composition, and Financial Performance." *Journal of Management* 37, no. 1: 404-411.
- Dalton, Dan R., Catherine M. Daily, S. Trevis Certo and Rungpen Roengpitya. 2003. "Meta-Analyses of Financial Performance and Equity: Fusion or Confusion?" *The Academy of Management Journal* 46, no. 1: 13-26.
- Davenport, Sally. N.D. "Where Does International Entrepreneurship End?: Exploring Entrepreneurial Exit from Internationalised SMEs Through Trade Sales." Victoria Management School, Working Paper Series 01-09. https://www.victoria.ac.nz/som/researchprojects/workingpapers/publications/01-09_Davenport.pdf.
- Deakin, Simon, Prabirjit Sarkar, and Mathias Siems. 2018. "Is There a Relationship Between Shareholder Protection and Stock Market Development?" *Journal of Law Financial and Accounting* 3, no. 1. DOI: 10.17863/CAM.20298.
- Del Guercio, Diane and Jennifer Hawkins. 1999. "The Motivation and Impact of Pension Fund Activism." *Journal of Financial Economics* 52, no. 3: 293-340.
- Denes, Matthew, Jonathan M. Karpoff and Victoria B. McWilliams. 2016. "Thirty Years of Shareholder Activism: A Survey of Empirical Research." *Journal of Corporate Finance* 44, no. 1: 405-424.
- Denis, David J., Paul Hanouna and Atulya Sarin. 2006. "Is There a Dark Side to Incentive Compensation?" *Journal of Corporate Finance* 12, no. 3: 467-488.
- Dey, Peter. 1994. "Where Were the Directors? Guidelines for Improved Corporate Governance in Canada." European Corporate Governance Institute. <http://www.ecgi.org/codes/documents/dey.pdf>.
- Dial, Jay and Kevin J. Murphy. 1995. "Incentives, Downsizing, and Value Creation at General Dynamics." *Journal of Financial Economics* 37, no. 3: 261-314.
- Dignam, Alan. 2013. "The Future of Shareholder Democracy in the Shadow of the Financial Crisis." *Seattle University Law Review* 36, no. 2: 639-694.
- Dion, Richard. 2009. "Interpreting Canada's Productivity Performance in the Past Decade: Lessons from Recent Research." *Bank of Canada Review*. Accessed on October 13, 2020. <https://www.bankofcanada.ca/wp-content/uploads/2010/06/dion.pdf>.
- Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 11-203, 124 Stat. 1376 (2010), s. 989G (to be codified at 12 U.S.C. § 5301).

- Doidge, Craig, George A. Karolyi, and René M. Stulz. 2011. "The U.S. Left Behind: The Rise of IPO Activity around the World." National Bureau of Economic Research Working Paper No. w16916.
- Dorff, Michael B. 2014. *Indispensable and Other Myths: Why the CEO Pay Experiment Failed and How to Fix It*. Berkeley, Calif.: University of California Press.
- Donelson, Dain C., John M. McInnis and Richard Mergenthaler Jr. 2015. "The Effect of Corporate Governance Reform on Financial Reporting Fraud." *Journal of Law, Finance and Accounting*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2138348.
- Dos Santos, Joao and Chen Song. 2009. "Analysis of the Wealth Effects of Shareholder Proposals." Volume II. U.S. Chamber of Commerce/Workforce Freedom Initiative. May. http://www.workforcefreedom.com/sites/default/files/analysis_wealth_effects_volume2.pdf.
- Duchin, Ran, John G. Matsusaka and Oguzhan Ozbas. 2010. "When are Outside Directors Effective?" *Journal of Financial Economics* 96, no. 2: 195-214.
- Duttagupta, Rupa, John Bluedorn, Adrea Pescatori and Stephen Snudden. 2012. "Commodity Price Swings and Commodity Exporters." In *International Monetary Fund, World Economic Outlook: Growth Resuming, Dangers Remain*, 125-169 Washington, D.C.: International Monetary Fund.
- Eckbo, Espen B. 1990. "Valuation Effects of Greenmail Prohibitions." *Journal of Quantitative Analysis* 25, no. 4: 491-505. DOI: <https://doi.org/10.2307/2331012>.
- Edmans, Alex, Vivian W. Fang and Katharina A. Lewellen. 2017. "Equity Vesting and Investment." *The Review of Financial Studies* 30, no.7: 2229-2271.
- Edmans, Alex and Xavier Gabaix. 2016. "Executive Compensation: A Modern Primer." *Journal of Economic Literature* 54, no. 4: 1232-1287.
- Efendi, Jap, Anup Srivastava and Edward P. Swanson. 2007. "Why Do Corporate Managers Misstate Financial Statements? The Role of Option Compensation and Other Factors." *Journal of Financial Economics* 85, no. 3: 667-708.
- Erkens, David, Mingyi Hung and Pedro Matos. 2009. "Corporate Governance in the 2007-2008 Financial Crisis: Evidence from Financial Institutions Worldwide." SSRN. <https://www.fdic.gov/bank/analytical/cfr/bank-research-conference/annual-9th/matos-p.pdf>.
- Ernst and Young. 2015. "Four Takeaways from Proxy Season 2015." [http://www.ey.com/Publication/vwLUAssets/EY-four-takeaways-from-proxy-season-2015/\\$File/EY-four-takeaways-from-proxy-season-2015.pdf](http://www.ey.com/Publication/vwLUAssets/EY-four-takeaways-from-proxy-season-2015/$File/EY-four-takeaways-from-proxy-season-2015.pdf).
- Ertimur, Yonca, Fabrizio Ferri and David Oesch. 2015. "Does the Director Election System Matter? Evidence from Majority Voting." *Review of Accounting Studies* 20, no. 1: 1-41.

- Ertimur, Yonca, Fabrizio Ferri and David Oesch. 2018. "Understanding Uncontested Director Elections." *Management Science* 64, no. 7: 3400-3420.
- Fair, Ray C. 2009. "Presidential and Congressional Vote-Share Equations." *American Journal of Political Science* 53, no. 1: 55-72.
- Fairfax, Lisa. 2013. "Mandating Board-Shareholder Engagement?" *University of Illinois Law Review* 2013, no. 3: 821-858.
- Faleye, Olubunmi. 2007. "Classified Boards, Firm Value, and Managerial Entrenchment." *Journal of Financial Economics* 83, no. 2: 501-529.
- Fama, Eugene. 1970. "Efficient Capital Markets: A Review of Theory and Empirical Work." *The Journal of Finance* 25, No. 2: 383-417.
- Farber, David. 2005. "Restoring Trust after Fraud: Does Corporate Governance Matter?" *Accounting Review* 80, no. 2: 539-561.
- Felo, Andrew J., Srinivasan Krishnamurthy and Steven A. Solieri. 2003. "Audit Committee Characteristics and the Perceived Quality of Financial Reporting: An Empirical Analysis." SSRN (unpublished). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=401240.
- Ferreira, Daniel, David Kershaw, Thomas Kirchmaier and Edmund-Philipp Schuster. 2013. "Shareholder Empowerment and Bank Bailouts." IDEAS/RePEc Working Paper Series. Accessed April 10, 2019. <http://ideas.repec.org.ezproxy.lib.ucalgary.ca/p/eht/lserod/56083.html>.
- Fich, Eliezer M. and Anil Shivdasani. 2006. "Are Busy Boards Effective Monitors?" *Journal of Finance* 61, no. 2: 689-724.
- Field, Laura, Michelle Lowry and Anahit Mkrtchyan. 2013. "Are Busy Boards Detrimental?" *Journal of Financial Economics* 109, no. 1: 63-82.
- Fisch, Jill E. 2010. "Securities Intermediaries and the Separation of Ownership from Control." *Seattle University Law Review* 33, no. 4: 877-888.
- Fox, Justin and Jay Lorsch. 2012. "What Good Are Shareholders?" *Harvard Business Review* 90, no. 7-8: 49-57. <https://hbr.org/2012/07/what-good-are-shareholders>.
- Frey, Bruno S. and Margit Osterloh. 2005. "Yes, Managers Should Be Paid Like Bureaucrats." *Journal of Management Inquiry* 14, no. 1: 96-111.
- Frydman, Carola and Dirk Jenter. 2010. "CEO Compensation." *Annual Review of Financial Economics* 2, no. 1: 75-102.
- Gao, Xiaohui, Jay R. Ritter, and Zhongyan Zhu. 2013. "Where Have All the IPOs Gone?" *Journal of Financial and Quantitative Economics* 48, no. 6: 1663-1692.
- Gelter, Martin. 2013. "The Pension System and the Rise of Shareholder Primacy." *Seton Hall Law Review* 43, no. 3: 909-970.

- Gildan Activewear Inc. 2012. "CSA Consultation Paper 25-401: Potential Regulation of Proxy Advisory Firms." Comment letter to OSC. Gildan Activewear Inc. https://www.osc.gov.on.ca/documents/en/Securities-Category2-Comments/com_20120921_25-401_mathewsl.pdf.
- Gilje, Erik P. and Jerome P. Taillard. 2016. "Do Private Firms Invest Differently than Public Firms? Taking Cues from the Natural Gas Industry." *Journal of Finance* 71, no. 4: 1733-1778. DOI: 10.1111/jofi.12417.
- Gladman, Kimberly, Agnes Grunfeld and Michelle Lamb. 2012. "The Election of Corporate Directors: What Happens When Shareholders Withhold a Majority of Votes from Director Nominees?" IIRC. <https://perma.cc/R6AW-B8ZL>.
- Glass Lewis. 2020. "Guidelines: An Overview of the Glass Lewis Approach to Proxy Guidance." https://www.glasslewis.com/wp-content/uploads/2016/11/Guidelines_Canada.pdf.
- Gleason, Katherine I. and Mark S. Klock, 2008. "Is There Power Behind the Dead Hand? An Empirical Investigation of Dead Hand Poison Pills." *Corporate Ownership and Control* 7, no. 1: 370-379.
- Global Governance Advisors. 2017. "Pay vs. Performance: How Do Canada's CEOs Stack Up?" *The Globe and Mail*. June 11. <https://www.theglobeandmail.com/report-on-business/careers/management/executive-compensation/how-does-canadian-ceo-pay-compare-to-their-performance/article35217741/>.
- Gordon, Jeffrey N. 2009. "'Say On Pay': Cautionary Notes on the UK Experience and the Case for Shareholder Opt-In." Columbia Law and Economics Working Paper No. 336.
- Gow, Ian D., Sa-Pyung Sean Shin and Suraj Srinivasan. 2014. "Consequences to Directors of Shareholder Activism." Harvard Business School Working Paper No. 14-701.
- Graham, John R., Campbell R. Harvey and Shiva Rajgopal. 2006. "Value Destruction and Financial Reporting Decisions." *Financial Analysts Journal* 62, no. 6: 27-39.
- Gropp, Reint and Matthias Kohler. 2010. "Bank Owners or Bank Managers: Who Is Keen on Risk? Evidence From the Financial Crisis." Discussion Paper no. 10-013. <https://ub-madoc.bib.uni-mannheim.de/2907/1/dp10013.pdf>.
- Hall, Robert E., and Susan E. Woodward. 2010. "The Burden of the Nondiversifiable Risk of Entrepreneurship." *American Economic Review* 100, no. 3: 1163-1194.
- Harris, Jared and Philip Bromiley. 2007. "Incentives to Cheat: The Influence of Executive Compensation and Firm Performance on Financial Misrepresentation." *Organizational Science* 18, no. 3: 350-367, 543-544.
- Hawley, James, Keith L. Johnson and Edward J. Waitzer. 2011. "Reclaiming Fiduciary Duty Balance." *Rotman International Journal of Pension Management* 2, no. 2: 4-16.

- Hennessee Group LLC. 2004. *10th Annual Hedge Fund Manager Survey*. Press Release. <http://www.hennesseegroup.com/releases/release20040802.html>.
- He, Jinyu and Heli C. Wang. 2009. "Innovative Knowledge Assets and Economic Performance: The Asymmetric Roles of Incentives and Monitoring." *The Academy of Management Journal* 52, no. 5: 919-938.
- Huson, Mark. R. 1997. "Does Governance Matter? Evidence from CalPERS Interventions." University of Alberta Working Paper no. 97-03.
- Information Technology Association of Canada ("ITAC"). 2012. *The Issue: Building Stronger Tech Companies in Canada*. https://itac.ca/uploads/research/the_issue_building_stronger_tech_companies_in_canada.pdf.
- Iliev, Peter. 2010. "The Effect of SOX Section 404: Costs, Earnings Quality, and Stock Prices." *Journal of Finance* 65, no. 3: 1163-1196. DOI: <https://doi.org/10.1111/j.1540-6261.2010.01564.x>.
- Institute of Corporate Directors ("ICD"). 1999. *Report on Corporate Governance, 1999: Five Years to the Dey*. Toronto: Institute of Corporate Directors. <http://www.ecgi.org/codes/documents/5years.pdf>.
- Institutional Shareholder Service ("ISS"). 2019. *Canada Proxy Voting Guidelines for TSX-Listed Companies: 2015 Benchmark Policy Recommendations*. Institutional Shareholder Services. November 18. <https://www.issgovernance.com/file/policy/active/americas/Canada-TSX-Voting-Guidelines.pdf>
- Internal Revenue Services ("IRS"). 2012. *Disclosure & Privacy Law Reference Guide*. <https://www.irs.gov/pub/irs-pdf/p4639.pdf>.
- International Energy Agency ("IEA"). 2008. "Energy Prices." *World Energy Outlook 2008*. Accessed April 5, 2018. <https://webstore.iea.org/download/direct/769>.
- Investment Funds Institute of Canada. 2019. *2018 Investment Funds Report*. Investment Funds Institute of Canada. January. <https://www.ific.ca/wp-content/uploads/2019/01/IFIC-2018-Investment-Funds-Report.pdf/21611/./TAG-SpecRprProxyAdv.pdf>.
- IPO Task Force. 2011. *Rebuilding the IPO On-Ramp: Putting Emerging Companies and the Job Market Back on the Road to Growth*. U.S. Securities and Exchange Commission.
- Jackson, Gregory. 2010. "Comment: A New Financial Capitalism? Explaining the Persistence of Exit Over Voice in Contemporary Corporate Governance." *European Management Review* 5, no. 1: 23-26.
- Jackson, Robert. 2013. "Private Equity and Executive Compensation." *UCLA Law Review* 60:3 638-677.
- Johnson, Shane A., Harley E. Ryan and Yisong S. Tian. 2009. "Managerial Incentives and Corporate Fraud: The Sources of Incentives Matter." *European Finance Review* 13, no. 1: 115-145.

- Joint Committee on Corporate Governance (“JCCG”). 2001. *Beyond Compliance: Building a Governance Culture*. (“Saucier Committee Report”). http://www.ecgi.org/codes/documents/beyond_compliance.pdf.
- Kahan, Marcel and Edward Rock. 2014. “Symbolic Corporate Governance Politics.” *Boston University Law Review* 94, no. 6: 1997-2043.
- Kaplan, Steven. 2008. “Are US CEOs Overpaid?” *Academy of Management Perspectives* 22, no. 2: 5-20.
- Kim, James and Jason D. Schloetzer. 2013. “Global Trends in Board-Shareholder Engagement.” The Conference Board Director Notes DN-V5N20.
- Krause, Ryan, R. Semadeni and A. A. Cannella. 2014. “CEO Duality: A Review and Research Agenda.” *Journal of Management* 40, no. 1: 256-286
- Lampe, Jonathan and Mark Spiro. N.D. “Corporate Governance Developments in Canada.” Goodmans LLP. <http://www.goodmans.ca/docs/Corporate%20Governance%20Developments%20in%20Canada.pdf>.
- Langford, Cooper H., Peter Josty and Chaud Saunders. 2016. “2016 GEM Canada National Report.” *Global Entrepreneurship Monitor*. Accessed October 13, 2020. <http://thecis.ca/wp-content/uploads/2016/04/GEM-Canada-Report-2016.pdf>.
- Larcker, David F., Allan L. McCall, and Gaizka Ormazabal. 2013. “Proxy Advisory Firms and Stock Option Repricing.” *Journal of Accounting & Economics* 56, no. 2, 3: 149-169.
- Larcker, David F., Gaizka Ormazabal and Daniel J. Taylor. 2011. “The Market Reaction to Corporate Governance Regulation.” *Journal of Financial Economics* 101, no. 2: 431-448.
- Lazonick, William. 2014. “Profits without Prosperity: Stock Buybacks Manipulate the Market and Leave Most Americans Worse Off (The Big Idea).” *Harvard Business Review* 92, no. 9: 47-55.
- Legislative Proposals to Promote Job Creation, Capital Formation, and Market Certainty: Hearing on H.R. 112, Day 1, Before the Subcommittee on Capital Markets and Government Sponsored Enterprises of the Committee on Financial Services*. 112th Cong. 107. 2011. (Statement of David Weild, Senior Advisor-Grant Thornton) (“Weild Testimony”).
- Leisen, Dietmar and Peter L. Swan. 2018. “When the Remedy is the Problem: Independent Boards, Short Termism, and the Subprime Crisis.” 31st Australasian Finance and Banking Conference.
- Levit, Doron. 2019. “Soft Shareholder Activism.” *Review of Financial Studies* 32, no. 7: 2775-2808.
- Lipton, Martin. 2014. “Some Thoughts for Boards of Directors in 2015.” *Harvard Corporate Governance* (blog). <https://corpgov.law.harvard.edu/2014/12/02/some-thoughts-for-boards-of-directors-in-2015>.

- Lipton, Martin, Steven A. Rosenblum, Karessa L. Cain and Sabastian V. Niles. 2019. "Wachtell Lipton on Dealing with Activist Hedge Funds and Other Activist Investors." *The CLS Blue Sky Blog*. February 4. <http://clsbluesky.law.columbia.edu/2019/02/04/wachtell-lipton-on-dealing-with-activist-hedge-funds-and-other-activist-investors/>.
- Mackenzie, Hugh. 2015. "Glory Days: CEO Pay in Canada Soaring to Pre-Recession Highs." Canadian Centre for Policy Alternatives. Accessed October 13, 2020. <https://www.policyalternatives.ca/publications/reports/glory-days>.
- Mahoney, James M. and Joseph T. Mahoney. 1993. "An Empirical Investigation of the Effect of Corporate Charter Antitakeover Amendments on Stockholder Wealth." *Strategic Management Journal* 14, no. 1: 17-31.
- Maksimovic, Vojislav Gordon M. Phillips and Liu Yang. 2013. "Private and Public Merger Waves." *Journal of Finance* 68, no. 5: 2177-2217. DOI: <https://doi.org/10.1111/jofi.12055>.
- Maksimovic, Vojislav, Gordon M. Phillips, and Liu Yang. 2017. "Do Public Firms Respond to Investment Opportunities More than Private Firms? The Impact of Initial Firm Quality." National Bureau of Economic Research Working Paper No. 24104. <http://www.nber.org/papers/w24104>.
- Manish, G.P. and Daniel Sutter. 2016. "Mastery versus Profit as Motivation for the Entrepreneur: How Crony Policies Shape Business." *Journal of Entrepreneurship and Public Policy* 5, no. 1: 95-112.
- MarketWatch. "S&P/TSX Composite Index." Accessed on June 11, 2019. <https://www.marketwatch.com/investing/index/gspstse/charts?countrycode=ca>.
- Martynova, Marina, and Luc Renneboog. 2008. "A Century of Corporate Takeovers: What Have We Learned and Where Do We Stand?" *Journal of Banking & Finance* 32, no. 10: 2148-2177.
- Masouros, Pavlos. 2012. *Corporate Law and Economic Stagnation: How Shareholder Value and Short-Termism Contribute to the Decline of the Western Economics*. Leiden: Eleven International Publishing.
- Masulis, Ronald W., Cong Wang and Fei Xie. 2007. "Corporate Governance and Acquirer Returns." *Journal of Finance* 62, no. 4: 1851-1889.
- McGrath, Charles. 2017. "Pensions and Investments: 80% of Equity Market Cap Held by Institutions." Accessed June 18, 2019. <https://www.pionline.com/article/20170425/INTERACTIVE/170429926/80-of-equity-market-cap-held-by-institutions>.
- Megginson, William and Scott Smart. 2009. *Introduction to Corporate Finance*. 2nd ed. Mason, Ohio: Cengage Learning Inc.
- Mehran, Hamid, George E. Nogler and Kenneth B. Schwartz. 1998. "CEO Incentive Plans and Corporate Liquidation Policy." *Journal of Financial Economics* 50, no. 3: 319-349.

- Meoli, Michele, Ari Pandes, Michael J. Robinson and Silvio Vismara. 2018. "Can Spending Time in the Minors Pay Off? An Examination of the Canadian Junior Public Equity Markets." *Journal of Small Business Management* 56, no. 1: 88-107.
- Milne, Celia. 2013. "Should Your Company List on the Venture Exchange?" May 27. *The Globe and Mail*. <https://www.theglobeandmail.com/report-on-business/small-business/sb-money/should-your-company-list-on-the-venture-exchange/article12143592/>.
- Mishel, Lawrence and Natalie Sabadish. 2013. "CEO Pay in 2012 Was Extraordinarily High Relative to Typical Workers and Other High Earners." *Economic Policy Institute* 367, no. 1. www.epi.org/files/2013/ceo-pay-2012-extraordinarily-high.pdf.
- Mitchell, Lawrence E. 2006. "On the Direct Election of CEOs." *Ohio University Law Review* 32, no. 2: 261-286.
- Mitchell, Lawrence E. 2012. "Whose Capital; What Gains? Why the U.S. Economy Needs to Change Incentives." *Brooking Institution Issues in Governance Studies*, 49, no. 1.
- Mizik, Natalie. 2010. "The Theory and Practice of Myopic Management." *Journal of Marketing Research* 47, no. 4: 594-611.
- Mollins, Jeff and Pierre St-Amant. 2019. "The Productivity Slowdown in Canada: An ICT Phenomenon?" Bank of Canada Staff Working Paper 2019-2. <https://www.bankofcanada.ca/wp-content/uploads/2019/01/swp2019-2.pdf>.
- Moore, Marc. 2015. "Corporate Governance, Pay Equity, and the Limitations of Agency Theory." *Current Legal Problems* 68, no. 1: 431-464. DOI: <https://doi.org/10.1093/clp/cuv002>.
- Murphy, Kevin J. 1999. "Executive Compensation." *Handbook of Labor Economics*, eds. Orley Ashenfelter and David Card, vol. 3B, 2485-2563. Amsterdam, Netherlands: Elsevier.
- Myers, Donald D. and Daryl J Hobbs. 1986. "Technical Entrepreneurs—Are they Different?" *Frontiers of Entrepreneurship Research*.
- Nariman, Fardeen, Florin Vasvari and Eli Talmor. 2011. *International Private Equity*. Chinchest, U.K.: John Wiley & Sons Ltd.
- Natural Resources Canada ("NRC"). 2010. "Overview." *Review of Issues Affecting the Price of Crude Oil*. Accessed October 13, 2020. <https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/energy/pdf/eneene/pdf/pcopdp-eng.pdf>.
- Nicholls, Christopher. 2006. "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, 133-200. Toronto: Task Force to Modernize Securities Legislation in Canada.

- O'Connor, Joseph P., Richard L. Priem, Joseph E. Coombs and K. Matthew Gilley. 2006. "Do CEO Stock Options Prevent or Promote Fraudulent Financial Reporting?" *Academy of Management Journal* 49, no. 3: 483-500.
- Organisation for Economic Co-operation and Development ("OECD"). 2017a. "Education at a Glance 2017." Accessed August 6, 2020. <https://doi.org/10.1787/eag-2017-en>.
- OECD. 2017b. "Policies for Stronger and More Inclusive Growth in Canada." Accessed September 22, 2020. https://www.oecd-ilibrary.org/economics/policies-for-stronger-and-more-inclusive-growth-in-canada_9789264277946-en;jsessionid=mvfd3K0eEMvAGzYE6LqOhB-f.ip-10-240-5-134.
- Olaison, Lena and Bent Meier Sorenson. 2014. "The Adject of Entrepreneurship: Failure, Fiasco and Fraud." *International Journal of Entrepreneurial Behaviour & Research* 20, no. 2: 193-211.
- Ontario. 2020. *Capital Markets Modernization Taskforce: Consultation Report*. July. <https://files.ontario.ca/books/mof-capital-markets-modernization-taskforce-report-en-2020-07-09.pdf>.
- Ontario Securities Commission ("OSC"). 2003. *Notice of Commission Approval of National Instrument 51-102 Continuous Disclosure Obligations, Companion Policy 51-102CP, Rule 51-801 Implementing National Instrument 51-102 Continuous Disclosure Obligations and Companion Policy 51-801CP and Related Instruments*. OSC Notice 1.1.8, 26 OSCB 8150. www.osc.gov.on.ca/documents/en/SecuritiesCategory5/rule_20031219_51-102-51-801_approv.pdf.
- OSC. 2005b. *National Instrument 58-101, Disclosure of Corporate Governance Practices*. https://www.osc.gov.on.ca/documents/en/SecuritiesCategory5/rule_20050617_58-101_disc-corp-gov-pract.pdf.
- OSC. 2006. *National Instrument 51-102 Continuous Disclosure Obligations* (OSC Notice, 29 OSCB (Supp-2)). www.osc.gov.on.ca/documents/en/SecuritiesCategory5/rule_20061013_51102_supplement.pdf.
- OSC. 2008. *Notice Form 51-102F6 Statement of Executive Compensation*. OSC CSA Notice.
- OSC. 2011. *Amendments to Form 51-102F6 Statement of Executive Compensation and Consequential Amendments*. OSC CSA Notice, 34 OSCB 8047. www.osc.gov.on.ca/en/SecuritiesLaw_20110722_51-102-f6_amd-exec-comp.htm.
- OSC. 2013a. *Notice of Statement of Priorities for Financial Year to End March 31, 2014*. Ontario Securities Commission. http://www.osc.gov.on.ca/en/SecuritiesLaw_sn_20130627_11-768_sop-fiscal-2013-2014.htm.
- OSC 2013b. *Update on CSA Consultation Paper 25-401 Potential Regulatory of Proxy Advisory Firms*. CSA Notice 25-301. September 19. https://www.osc.gov.on.ca/en/SecuritiesLaw_csa_20130919_25-301_update-25-401.htm.

- OSC. 2014. *Notice of Appeal—Amendments to Part IV of the TSX Company Manual 37* OSCB 1769.
- OSC. 2015. *Amendments to NI 51-102 Continuous Disclosure Obligations*. 38 OSCB 5121. http://www.osc.gov.on.ca/en/SecuritiesLaw_ni_20150604_51-102_amd-disclosure-obligations.htm.
- Orhan, Muriel and Don Scott. 2001. "Why women enter into entrepreneurship: an explanatory model." *Women in Management Review* 16 no. 5: 232-247.
- Pandes, J. Ari and Michael J. Robinson. 2013. "The Canadian Junior IPO Market and the Capital Pool Company Program." In *Handbook of Research on IPOs*, eds. Mario Levis and Silvio Vismara, 124-140. London: Edward Elgar.
- Pargendler, Mariana. 2016. "The Corporate Governance Obsession." *Journal of Corporation Law* 42, no. 2: 359-402.
- Peng, Lin and Ailsa Roell. 2008. "Executive Pay and Shareholder Litigation." *Review of Finance* 12, no. 1: 141-184.
- Phillips, Gordon M., and Giorgio Sertsios. 2017. "Financing and New Product Decisions of Private and Publicly Traded Firms." *Review of Financial Studies* 30, no. 2: 1744-1789.
- Piketty, Thomas. 2014. *Capital in the Twenty-First Century*. Cambridge, Mass.: Belknap Press of Harvard University Press.
- Plumtree, Marlene, and Teri Lombardi Yohn. 2010. "An Analysis of the Underlying Causes Attributed to Restatements." *Accounting Horizons* 24, no. 1.
- Power Corporation of Canada. 2012. "Canadian Securities Administrators Consultation Paper 25-401 Potential Regulation of Proxy Advisory Firms." Comment letter to OSC. Power Corporation of Canada. https://www.osc.gov.on.ca/documents/en/Securities-Category2-Comments/com_20120919_25-401_lemays2.pdf.
- PriceWaterhouseCooper ("PWC"). 2016. "The Swinging Pendulum: Board Governance in the Age of Shareholder Empowerment." October. <http://www.insurance.ca.gov/diversity/41-ISDGBD/GBDEExternal/upload/PwC-BoardGovernance2016-2.pdf>.
- PriceWaterhouseCooper. 2018. *The MoneyTree Report—Q4 2017*. Available from https://www.pwc.com/us/en/moneytree-report/assets/MoneyTree_Report_Q4_2017_FINAL_1_10_18.pdf.
- Rajan, Raghuram G., and Luigi Zingales. 2003. "The Great Reversals: The Politics of Financial Development in the Twentieth Century." *Journal of Financial Economics* 69, no. 1: 5-50.
- Responsible Investment Association. October 2018. *2018 Responsible Investment Trends Report*. Responsible Investment Association. <https://www.riacanada.ca/content/uploads/2018/10/2018-RI-Trends-Report-FINAL-WEB-1.pdf>.
- Ritter, Jay. 2011. "Equilibrium in the IPO Market." *Annual Review of Financial Economics* 3, no. 1: 347-374.

- Ritter, Jay R. 2012. "Re-energizing the IPO Market." In *Restructuring to Speed Economic Recovery*, eds. Martin Bailey, Richard Herring, and Yuta Seki, 123-148. Washington, D.C.: Brookings Press, 2013.
- Ritter, Jay R. 2016. "Initial Public Offerings: Updated Statistics." Accessed October 13, 2020. rrington.ufl.edu/ritter/files/2019/01/IPOs2018Statistics_Dec.pdf.
- Ritter, Jay R. 2018. "Initial Public Offerings: Updated Statistics." Accessed October 13, 2020. <https://perma.cc/9VBR-PL6F>.
- Roe, Mark. 1991. "A Political Theory of American Corporate Finance." *Columbia Law Review* 91, no. 1: 10-67.
- Rose, Paul. 2007. "The Corporate Governance Industry." *Journal of Corporate Law* 32, no. 4: 887-926.
- Saghi-Zedek, Nadia, Amine Tarazi and Barry Thierno. 2015. "Excess Control Rights, Financial Crisis and Bank Profitability and Risk." *Journal of Banking and Finance* 55: 361-379.
- Salterio, Steve and Joan Conrod. 2009. "Corporate Governance: Platitudes, Principles or Best Practices." Queen's Centre for Corporate Governance Technical Report. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1490131
- Sanchez-Ballesta, Juan P. and Emma Garcia-Meca. 2007. "A Meta-Analytic Vision of the Effect of Ownership Structure on Firm Performance." *Corporate Governance* 15, no. 5: 879-893.
- Scott-Kennel, Joanna. 2013. "Selling to Foreign MNEs: End of the Road or Beginning of the Journey for Firms from Small Advanced Economies?" *International Studies of Management & Organization* 43, no. 1: 52-80. DOI: 10.2753/IMOO020-8825430103.
- Shurfelt, Tim and Christina Pellegrini. 2017. "The Incredible Shrinking Stock Market." *The Globe and Mail*. May 5. <https://www.theglobeandmail.com/report-on-business/invisible-ipos-whats-to-blame-for-the-exodus-from-publicmarkets/article34910200/>.
- Sibbold, Stephen P. 2009. "Assessing Canada's Regulatory Response to the Sarbanes-Oxley Act of 2002: Lessons for Canadian Policy Makers." *Alberta Law Review* 46, no. 3: 769-797.
- Silcoff, Sean and Iain Marlow. 2012. "Canada's Vanishing Tech Sector." *The Globe and Mail*. July 7. <https://www.theglobeandmail.com/report-on-business/economy/canada-competes/canadas-vanishing-tech-sector/article4396596/>.
- Smith, Michael P. 1996. "Shareholder Activism by Institutional Investors: Evidence from CalPERS." *Journal of Finance* 51, no. 1: 227-252.
- Somerville, Heather. 2018. "SoftBank is now Uber's Largest Shareholder as Deal Closes." Reuters. January 18. <https://www.reuters.com/article/us-uber-softbank-tender/softbank-is-now-ubers-largest-shareholder-as-deal-closes-idUSKBN1F72WL>.

- Spencer Stuart. 2014. *Spencer Stuart Board Index*. <https://www.spencerstuart.com/-/media/pdf%20files/research%20and%20insight%20pdfs/ssbi2014web14nov2014.pdf>.
- Spencer Stuart. 2019. *2019 Spencer Stuart Board Index*. https://www.spencerstuart.com/-/media/2019/ssbi-2019/us_board_index_2019.pdf.
- Spindler, James C. 2009. "Endogenous Compensation in a Firm with Disclosure and Moral Hazard." USC Gould School of Law Working Paper No. C09-20. <https://gould.usc.edu/faculty/centers/class/working-papers/cleo/2009/>.
- Spurring Job Growth Through Capital Formation While Protecting Investors—Part II: Hearing on H.R. 112-482 Day 2, Before the Committee on Banking, Housing, and Urban Affairs United States Senate*, 112 Cong. 8,39 (2012) (statement of Jay R. Ritter, Cordell Professor of Finance, University of Florida). ("Ritter Testimony"). <https://www.govinfo.gov/content/pkg/CHRG-112shrg75178/pdf/CHRG-112shrg75178.pdf>.
- St-Amant, Pierre and David Tessier. 2018. "Firm Dynamics and Multifactor Productivity: An Empirical Exploration." Bank of Canada Staff Working Paper 2018-15.
- Statistics Canada. 2019. *Population by Year, by Province and Territory*. Accessed April 4, 2019. <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo02a-eng.htm>.
- Stiglitz, Joseph E. 2012. *The Price of Inequality*. New York: WW Norton and Company.
- Stout, Lynn A. 2005. "Takeovers in the Ivory Tower: How Academics Are Learning Martin Lipton May Be Right." *The Business Lawyer* 60, no. 4: 1435-1454.
- Strine, Leo E. 2017. "Who Bleeds When the Wolves Bite? A Flesh-and-Blood Perspective on Hedge Fund Activism and Our Strange Corporate Governance System." *Yale Law Journal* 126, no. 6: 1870-1971. https://www.yalelawjournal.org/pdf/i.1870.Strine.1970_cfq35f6x.pdf.
- Teubal, Morris and Gil Avnimelech. 2003. "Foreign Acquisitions and R&D Leverage in High Tech Industries of Peripheral Economies: Lessons and Policy Issues from the Israeli Experiences." *International Journal of Technology Management* 26, no. 2/3/4: 362-385 DOI: 10.1504/IJTM.2003.003387.
- The Economist. 1999. "Drowning in Oil." *The Economist*. March 6. Accessed October 13, 2020. <https://www.economist.com/leaders/1999/03/04/drowning-in-oil>.
- Thomas, Randall S., Alan R. Palmiter and James F. Cotter. 2012. "Dodd-Frank's Say on Pay: Will it Lead to a Greater Role for Shareholders in Corporate Governance?" *Cornell Law Review* 97, no. 5: 1213-166. <http://cornell.lawreviewnetwork.com/files/2013/02/Thomas-et-al-final2.pdf>.
- Tingle, Bryce C. 2014. "Bad Company? The Assumptions Behind Proxy Advisors' Voting Recommendations." *Dalhousie Law Journal* 37, no. 2: 709-748.
- Tingle, Bryce C. 2016. "The Agency Cost Case for Regulating Proxy Advisory Firms." *University of British Columbia Law Review* 49, no. 1: 756-787.

- Tingle, Bryce C. 2017a. "Framed! The Failure of Traditional Agency Cost Explanations for Executive Pay Practices." *Alberta Law Review* 54, no. 4: 899-928.
- Tingle, Bryce C. 2017b. "How Good are Our 'Best Practices' When It Comes to Executive Compensation? A Review of Forty Years of Skyrocketing Pay, Regulation, and the Forces of Good Governance." *Saskatchewan Law Review* 80, no. 2: 387-420.
- Tingle, Bryce C. 2017c. "What Do We Really Know About Corporate Governance? A Review of the Empirical Research Since 2000." *Canadian Business Law Journal* 59, no. 3: 292-331.
- Tingle, Bryce C. 2018. "What Is Corporate Governance? Can We Measure It? Can Investment Fiduciaries Rely on It?" *Queen's Law Journal* 43, no. 2: 223-261.
- Tingle, Bryce C. 2018. *Start-up and Growth Companies in Canada: A Guide to Legal and Business Practice*, 3rd ed., New York, New York: LexisNexis.
- Tingle, Bryce C. 2020a. "Two Stories About Shareholders." (Forthcoming).
- Tingle, Bryce C. 2020b. "Expressive Voting and Irrational Outcomes in Corporate Elections." (Forthcoming).
- Tingle, Bryce C., Ari Pandes, and Michael J. Robinson. 2013. "The IPO Market in Canada: What a Comparison with the United States Tells Us About a Global Problem." *Canadian Business Law Journal* 54, no. 3: 321-367.
- TMX Group. 2019. *TSX Company Manual*. Accessed June 19, 2019. http://tmx.com/plinet.com/en/tsx_manual.html.
- SEC. 2018. *Public Statement: Statement Regarding Staff Proxy Advisory Letters*. September 13. <https://www.sec.gov/news/public-statement/statement-regarding-staff-proxy-advisory-letters>.
- SEC. 2019a. *SEC Proposes Rules Amendments to Improve Accuracy and Transparency of Proxy Voting Advice*. Release No. 2019-231.
- SEC. 2019b. *SEC Clarifies Investment Advisers' Proxy Voting Responsibilities and Application of Proxy Rules to Voting Advice*. Release No. 2019-158.
- SEC 2020. *Comments on Proposed Rule: Amendments to Exemptions from the Proxy Rules for Proxy Voting Advice*. Release No. 34-87457. <https://www.sec.gov/comments/s7-22-19/s72219.htm>
- US SIF Foundation. 2014. "Report on US Sustainable, Responsible and Impact Investing Trends." 10th ed. https://www.ussif.org/files/Publications/SIF_Trends_14.F.ES.pdf.
- Vanderpol, Sean, and Edward J. Waitzer. 2012. "Addressing the Tension between Directors' Duties and Shareholder Rights—A Tale of Two Regimes." *Osgoode Hall Law Journal* 50, no. 1: 177-210.

- Wadhwa, Vivek, Krisztina Holly, Rag Aggarwal and Alex Salkever. 2009. "Anatomy of an Entrepreneur: Family Background and Motivation." *Kauffman Foundation Small Research Projects Research*. <https://ssrn.com/abstract=1431263> or <http://dx.doi.org/10.2139/ssrn.1431263>.
- Webb, Adam. 2017. "Does Releasing School District Employee Salary Information for a Newspaper's 'Sunshine List' Violate Privacy Legislation?" *Education Law Journal* 26, no. 2: 229-233.
- Weild, David and Edward Kim. 2009. "A Wake-Up Call for America." Grant Thornton LLP. <http://cmapartners.com/wp-content/uploads/2011/05/A-wake-up-call-for-America.pdf>.
- Weild, David and Edward Kim. 2010. "Market Structure is Causing the IPO Crisis—And More." U.S. Securities and Exchange Commission, Grant Thornton Capital Market Series. <https://www.sec.gov/comments/265-26/265-26-19.pdf>.
- Weild, David, Edward Kim, and Lisa Newport. 2012. "The Trouble with Small Tick Sizes: Larger Tick Sizes Will Bring Back Capital Formation, Jobs and Investor Confidence." U.S. Securities and Exchange Commission, Grant Thornton Capital Markets Series. <https://www.sec.gov/info/smallbus/acsec/acsec-backgroundmaterials-090712-weild-article.pdf>.
- Wells, Harwell. 2012. "U.S. Executive Compensation in Historical Perspective." In *Research Handbook on Executive Pay*, eds. Randall S. Thompson and Jennifer G. Hill, 41-57. Northampton, Mass.: Edward Elgar.
- Zhang, Ying. 2012. "Three Essays on Financial Restatements." PhD thesis. Concordia University. Unpublished.
- Zhu, Caroline. 2013. "The Preventative Effect of Hedge Fund Activism." SSRN. <https://ssrn.com/abstract=2369533>.
- Zingales, Luigi. 2007. "Is the U.S. Capital Market Losing its Competitive Edge?" European Corporate Governance Institute Finance Working Paper No. 192/2007. https://ecgi.global/sites/default/files/working_papers/documents/SSRN-id1028701.pdf.

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