

FRASER

INSTITUTE

2021

Canada's Faltering Business Dynamism and Lagging Innovation

Philip Cross



Canada's Faltering Business Dynamism and Lagging Innovation

by Philip Cross

Contents

Executive Summary / i
Introduction / 1
Lagging Innovation in Canada / 4
Capitalism in Canada / 7
Creative Destruction / 9
Rent-Seeking in the Canadian Economy / 11
Forms of Rent-Seeking in Canada / 16
The Long History of Rent-Seeking in Canada / 23
Rent-Seeking and Canada's Political Structure / 27
Broader Measures of Business Malaise / 30
Conclusion / 35
References / 37
About the author / 45
Acknowledgments / 45
Publishing Information / 46
Supporting the Fraser Institute / 46
About the Fraser Institute / 47
Purpose, Funding, and Independence / 47
Editorial Advisory Board / 48

Executive Summary

Canada displays many of the same symptoms of business malaise evident in European nations. Real GDP growth over the past decade was the slowest since the 1930s, productivity has stalled, and reduced competitiveness has hampered our ability to capitalize on trade deals, all of which have combined to lower our share of global GDP.

Canada's sluggish economic growth in the years before the pandemic reflects a lack of innovation and weak productivity growth that has persisted for decades. The prolonged slump cannot be fully addressed with the current approach of policies targeting specific sectors such as high technology or green energy, or spurring research and development in the hope of boosting one or more of these variables. Worse would be acceding to the endless requests from specific groups, industries, or firms for favours in the name of job creation or higher incomes.

Instead, Canada needs a root-and-branch re-examination of its public policy mix and its commitment to markets, competition, and capitalism, with the goal of creating an environment more conducive to greater business formation and investment. Compared with the United States, Canada possesses fewer of the societal values linked to the innovation and dynamism that drive economic growth over the long term. The lack of values that support innovation and business dynamism also is evident in the reliance of firms on governments to protect them from competition in the marketplace. The resulting weak growth encourages policies targeting the distribution over the creation of incomes, which aggravates the shortfall of growth.

Too many business models in Canada are based on governments using a thicket of regulations, patents, tariffs, occupational licensing rules, restrictions on foreign investment, and price-fixing to shelter firms from competition. These tools to obstruct competition are too easily supplied by governments in Canada's decentralized federation. The outcome has been a significant loss of business dynamism in Canada, resulting in our leading corporations being shunted from the global stage while lower rates of firm entry and exit signal a slowdown in the process of creation and destruction that is fundamental to an innovative, dynamic economy. An economic development model where governments cater to the interests of individual firms and specific industries ultimately is the opposite of one that promotes entrepreneurship and business growth, not least because it undermines the public's faith that incomes are earned and not granted and that capitalism can generate innovations that benefit Canada as a whole.

The success of the United States in maintaining a high rate of innovation demonstrates Canada's lagging performance is not the inevitable result of structural forces that are hard to control. They are more the product of government policies and societal attitudes that are within our control. However, Canada's innovation policy continues to mistakenly focus on inputs of knowledge in the erroneous belief that education, science, research and development, and government subsidies fuel innovation, despite ample evidence that they do not have a significant impact.

Introduction

In its recent review of trends in global business, *The Economist* noted that firms with American headquarters have been able to maintain their place among the global elite in response to the rising challenge from Chinese firms, while Europe has generally failed to keep up. These trends are reflected in global GDP, where the growing share of China has been largely at the expense of European nations and not the United States. Starting in 1978 when it began integrating into the global economy, China's share of GDP rose from 1.7% to 17.4% in 2020.¹ Almost two thirds of this increase came at the expense of the five largest European nations, whose share of GDP fell from 24.0% to 14.5%, while the US share was little changed at 24.7% in 2020 compared to 27.2% in 1978. Canada belongs in the same class as Europe, as its share of global GDP shrank steadily from 2.5% in 1978 to 1.9% in 2020, while its leading firms are no longer world class.

Moreover, Canada has fallen behind for many of the same reasons as Europe. While the US has “a culture that exalts entrepreneurs” and its “politics supports creative destruction,” Europe suffers from “corporate malaise” (*Economist*, 2021a, 2021b). This malaise exhibits chronic slow growth, poorly functioning markets for key industries, fewer start-ups, high internal barriers to trade, a fractured domestic European market, and onerous regulations, all of which create “a less favourable business environment” (*Economist*, 2021a). Every one of these handicaps applies to Canada as much as to Europe. The result has been a retreat of Canadian firms from the ranks of global leaders. The *Financial Times*'s list of the world's 100 leading companies had only one Canadian firm in 2020 (Shopify), a testament to what one analyst has called “Canada's vanishing corporate titans” (Kirby, 2021). Smaller countries like Denmark, Sweden, Spain, and South Korea all have at least two companies on this list. *Fortune*'s 100 fastest growing companies in terms of revenue and profits shows a similar trend. In 2009, six Canadian companies made the list, but that number fell to zero in 2015 and 2015, one in 2016, and only two in 2018 (Globerman and Emes, 2019: 14)

The Nobel-winning economist Edmund Phelps and his colleagues confirmed that Europe has fallen behind the United States in innovation and growth. Their diagnosis of what ails Europe applies equally to Canada, including “the rise of corporatism and its set of stifling regulations that make it more costly to operate businesses, consumer protections, licensing requirements, and the protection of long-lived patents” (Zoega, 2020: 108). The

1. The data on current dollar GDP in US dollars are from the World Bank, 2020. The five largest European countries are France, Germany, Italy, Spain, and the United Kingdom; they account for over two thirds of the GDP produced in the European Union and the United Kingdom.

outcome is that these rules and regulations serve the special interests of producers rather than the interests of consumers, the reverse of what is best for Canadians. Underlying these changes is a shift in values “in which protection of the vested interests is prioritized over innovation and risk-taking. The corporatists do not approve of uncertainty and disorder, something that is ingrained in a dynamic, innovative economy. Instead, what is valued is a steady rise in consumption and leisure brought out about by gradual gains in efficiency” (Zoega, 2020: 108).

Canada's economy is increasingly riddled with institutional characteristics and processes that hinder the creative destruction that is fundamental to the growth of innovation, productivity, and incomes. Rent-seeking has a long history in Canada, encouraged by central Canada's dominance of the federal government and our highly decentralized political structure where weak provincial and local governments enact policies that favour the entrenched interests of producers over consumers. Canada's first economic blueprint was the National Policy of tariff protection for manufacturers, mostly in Central Canada. Tentative moves to open portions of the economy to free trade in the 1980s and 1990s were rewarded with increased productivity and higher incomes. After free trade with the United States began, manufacturing productivity in Canada rose by “a spectacular 1.0% per year” (Trefler, 2001: 2) However, large portions of the economy remained fully or partially shielded from foreign competition, notably telecommunications, banking, broadcasting and other cultural industries, and large parts of transportation and agriculture, often after invoking the canard that their existence somehow is fundamental to Canada's identity and sovereignty. Worse, even as tariffs came down, other barriers were raised to protect established interests—including occupational licensing requirements, intellectual property protections (such as patents), regulations, and restrictions on foreign takeovers. The result has been a persistent and pronounced slowdown of business entry and exits—symptomatic of faltering creation and destruction—less innovation, negligible productivity growth, and anaemic increases in real GDP and incomes.

This publication examines Canada's declining business dynamism and incentives to innovate. The consequence of this has been the onset of a form of malaise in the business sector as reflected in chronic slow growth, fewer business start-ups, and dwindling business investment. Pervasive rent-seeking in Canadian society not only lowers economic growth but also encourages a harmful focus on zero-sum income redistribution that further dampens income creation. The only solution is to enable and promote more competition and a renewed commitment to those values that support innovation and ultimately capitalism in the long term.²

2. The relationship between innovation and capitalism is so deep that Deidre McCloskey suggests using the term “innovism” in place of “capitalism” (McCloskey, 2010: 76).

Cultivating the values that stimulate and reward innovation would lead to the opposite of governments favouring particular firms and coddling special-interest groups, practices that are not pro-business but anathema to well functioning capitalism. This is partly because indulging rent-seeking encourages business to ask for more protection and hand-outs, which further undermines trust that businesspeople earn their incomes fairly. The jealousy and envy that this nurtures among the public is then used to justify increasing taxes on high incomes and corporations, which further depresses growth. The only truly pro-business policies are those that foster competitive markets and produce a more level playing field for all firms through reducing regulatory controls, cutting taxes, removing tariffs, reining in occupational licensing rules, encouraging start-ups, and boosting business investment. Such widespread reforms can only happen in a country that shares values that support business dynamism and private-sector innovation. Canada today is a long way from being such a nation.

Lagging Innovation in Canada

Economic growth in Canada has been decelerating for decades. It now trails the growth of our major trading partners: annual real GDP growth per capita in Canada slowed markedly to 0.35% on average between 1970 and 2013, mostly because Canada's average total-factor productivity growth of 0.16% was the second lowest in the G7 (Bojilov, 2020a: 42–43). Most of this slowdown has its origin in lagging innovation. While international comparisons after 2013 are not yet available, we know Canada's record on total-factor productivity remained abysmal, with essentially no growth between 2009 and 2019 despite having the advantage of not being hampered by the banking crisis that hamstrung the United States and many countries in Europe.

Furthermore, Canada imports two thirds of the innovation taking place in its economy, implying homegrown innovation grew by a cumulative 0.11% from 1970 to 2012, the worst performance of any G7 nation (Bojilov, 2020b: 73). Homegrown innovation is defined as “innovation generated by a given economy on its own” as opposed to innovations originating abroad and imported into the economy (Bojilov, 2020a: 49). Most of the decline in homegrown innovation happened after 1990, with a drop of 1.11% in the 1990s followed by a recovery of only 0.36% in the 2000s. While productivity in manufacturing did rise “spectacularly” in the decade after free trade with the United States was adopted, the broader slump in innovation may reflect that business investment in Canada lagged substantially, rising only 15% in volume between 1988 and 1996 compared to a gain of a 74% in the United States (Trefler, 2001: 28). However, the failure of productivity in Canada to respond better to the adoption of major policy initiatives such as free trade, inflation targets, and the Goods and Services Tax remains a puzzle for economists. Don Drummond first drew attention in 2011 to the puzzle that “despite most of the public policy agenda that was put forward to improve productivity being implemented, productivity growth in this country since 2000 has actually deteriorated” (Drummond, 2011: 3). He speculated the problem originated in the behaviour of firms at the micro level. This is a good example of what Thomas Sowell meant when he observed that, when “intellectuals have theories that do not fit the real world ... they conclude that it is the real world which is wrong and needs changing (quoted in Riley, 2021: 196). For example, the move to free trade internationally was offset by exempting large sectors of Canada's economy and by erecting other barriers such as requirements for occupational licensing and restraints on interprovincial trade. This paper argues that Canada's weak record on innovation and productivity has more to do with the words than the actions of politicians and the willingness of governments to accommodate rent-seeking.

While innovation originating in Canada fell after 1990, homegrown innovation in some other countries soared: notably, the United States had cumulative gains of over 6% per decade and the United Kingdom was not far behind at 4% (Bojilov, 2020b: 71). Canada's poor performance in homegrown innovation after 1990 puts it in a group with France, Germany, and Italy, all of which posted net declines between 1990 and 2010. With homegrown innovation drying up in Europe and Canada in recent decades, the United States remained the global engine of innovation. While the information technology (IT) industry led US innovation, IT has not driven innovation in other industries. In retail, for example, it was Walmart's model of low costs and prices that revolutionized the landscape.

Values are important to the ability to innovate

The main finding of Phelps and his colleagues “is that people from all walks of life, not just scientists and lab technicians, possess inborn powers to conceive ‘new things’, whether or not scientists have opened up new possibilities ... The whole nation might be on fire with new ideas” (Phelps, 2020a: 5). The values most conducive to innovation include “trust, the willingness to take the initiative, the desire to achieve on the job, teaching children to be independent, and the acceptance of competition” (Zoega, 2020: 105). Others had written about the importance of values long before they were recently quantified. For example, in her *Bourgeois* trilogy, Deidre McCloskey argued that growth took off in eighteenth-century Europe as a result of two ideas: first “the ideas in the heads of entrepreneurs for the betterments themselves (the electric motor, the airplane, the stock market); and the ideas in the society at large *about* the businesspeople and their betterments” (McCloskey, 2016: xvi). Max Weber long ago argued that protestant values were foundational to capitalism.

Policy making in Canada continues to focus on inputs of knowledge and not cultural values in a futile attempt to boost innovation. Canadian policy makers clearly have fallen under the spell of what is called scientism—“the belief that scientists, equipped with the tools of science, more effectively advance the flowering of new products and methods than do the diffuse and poorly directed initiatives taken in a free enterprise economy” (Phelps, 2013: 142). Canada excels at many of the presumed inputs into innovation, such as R&D, funding for science and universities, and generous government subsidies for innovation. The problem is that, while more education, science, and research are beneficial, “these elements are not to be confused with innovation policy” (Breznitz, 2021: 63). The damning result “is that since 2007, the more the Canadian government has invested taxpayers' money in trying to spur innovation, the less Canadian private businesses have done so. Canada easily wins the wooden-spoon award for the worst innovation policy among all the developed economies” (Breznitz, 2021: 62). Government attempts to boost innovation have not paid off because Canadian society does not subscribe to enough of the values that incubate and champion innovation, preferring instead to protect incumbent firms and retard the reallocation of capital and labour from declining to expanding industries.

The traditional view in economics that innovation can be controlled by government calibration of its presumed inputs (such as spending on research and development) is giving way to a broader view of the social and cultural context in which innovation flourishes (Cross, 2020). Innovation is associated with cultural values such as independence, self-expression, the willingness to compete, and an inclination to take the initiative, showing that “values and beliefs matter, including the values and resulting attitudes instilled in children and society’s attitudes toward innovators, which dictate whether they are admired or envied, and whether the creative individuals receive support from their communities or attempts are made at repressing them, to name a few examples” (Zoega, 2020: 107). Recent hikes in Canada to taxes on both corporations and high-income earners suggests we are more disposed to envy than to admire success and that we do not encourage creative people and firms. While business leaders in the United States such as the late Steve Jobs, Bill Gates, and Warren Buffett are often-admired figures, it is hard to name any Canadian business leaders who have such iconic status.

Canada’s abysmal track record on innovation reflects a lack of those cultural values that encourage innovation. Canada fared poorly in surveys of the values that support innovation, especially the acceptance of competition and teaching children to be independent (Zoega, 2020: 113). This is why no one today describes Canada as a nation on fire with new ideas. The importance of values to innovation and growth is demonstrated by Alberta, which has achieved superior growth while demonstrating the most pro-innovation values and policies in Canada (Cross, 2021). This paper makes the case that the values shared by most Canadians encourage rent-seeking by firms to shelter themselves from competition rather than competing through innovation.

It is noteworthy that Canadian values remain so different from those of Americans. Despite being situated next to the world’s leader in innovation and having constant exposure to US cultural values that encourage innovation, Canada’s values remain significantly less supportive of innovation. Beyond a lower capacity to innovate, the persistence of differences in Canadian and American values despite Canada’s ready access to American broadcasting and social media implies that our cultural industries wrongly diagnosed in a self-serving manner the threat posed to our sovereignty by constant exposure to US messages. As the *Globe and Mail’s* TV critic John Doyle wrote in 2017 about the CBC: “it is dangerous for the public broadcaster to think of itself as defining the country and its culture ... it does not define Canada or the culture. Nobody does that. The country is too mercurial, shifting and happily shapeless—it’s an idea with many histories and cultures” (Quoted in Taras and Waddell, 2020: 145). Apparently our cultural industries do not understand how cultural values are determined and propagated, implying they can offer little help in protecting Canadian values.

Capitalism in Canada

The difference between Canadian and American values is reflected in how political leaders communicate with the business community. Many US politicians talk to business in a way that apparently is unthinkable in Canada. McCloskey has long made the case that the manner and the words a society uses to describe its bourgeois are critically important. Former General Electric CEO Jack Welch recounts meeting with then President Trump at the White House, saying: “I’ve been coming to this place since 1980 and I’ve never seen anything like that. They can say what they want about him, but I don’t know if any president has been more prepared to sit in that room and talk business. It was like talking to a peer, not a politician” (Sims, 2019: 131–132). Trump’s actions were not always pro-business, notably his proclivity to raise tariffs or punish individual firms that offended him personally. However, his words and his adoption of key policies such as reforming the corporate income tax and reducing regulations clearly stimulated business investment. Before the pandemic struck in 2020, business investment in the United States had risen by 15.5% in just three years, a faster rate than gains of 23.4% and 22.5% during the eight years of the Bush and Obama administrations.

Other US politicians work hard to create a business-friendly environment without catering to specific firms or industries. Eisenhower exclusively appointed businesspeople to his cabinet (including the President of General Motors as Secretary of Defense) with the exception of his Secretary of Labor who was head of the plumbers’ union, leading *The New Republic* to characterize the cabinet as “eight millionaires and a plumber” (quoted in Leuchtenburg, 2015: 341–342). Pete Sessions, a Republican member of Congress from Texas, recently opened a virtual conference by thanking “everyone in the free enterprise system” (Canada Strong and Free Network, 2021).

It is unimaginable that a politician in Canada today would demonstrate such admiration for business. Many Canadian political leaders seem to want what Piketty called “capitalism without capitalists, or at any rate a state capitalism in which private owners no longer controlled the largest firms” when describing France’s economy (Piketty, 2014: 138). Capitalism without capitalists is, of course, an incongruity. In his history of American capitalism, Jonathan Levy emphasizes the importance of capitalists, because “[i]n a capitalist economy there must not only be capital. There must be capitalists—the owners of capital, who are charged with the critical task of investing their capital when and where they like and thus jump-starting the capitalist economic process” (Levy, 2021: xvi). However, having capitalists implies accepting certain things that seem anathema to the prevailing sentiment among policy elites in Canada today, such as a distribution of

income unequal enough to create incentives to achieve and excel and the freedom to deploy capital investment where it earns the highest return, including resource extraction and pipelines. Canada seems to grudgingly accept entrepreneurs and capitalism while doing everything possible to throw sand in their gears.

While capitalism without capitalists is not possible, socialism is achievable without state ownership of the means of production. Whatley argues that socialism also includes state control over the operations and not just the ownership of an enterprise. Allowing private ownership but dictating or regulating the details of how a business functions is the same as government control. This is exemplified in Canada's health-care system where private ownership of doctor's offices is subject to tight state control of their operations and remuneration since "the state dictates who can enter a clinic; whom doctors can see; who must be referred; what kinds of care must be offered; what notes must be taken; what notes must *never* be taken; data to report; and how to report the data" (Whatley, 2020: 61). This echoes Ludwig von Mises observation that socialist and planned economies "want to maintain private property in name and in law, but in fact, because they subordinate the power of disposing to State orders, want to socialize property, [and thus] are socialist systems in the full sense" (quoted in Whatley, 2020: 256). The complete control governments exercised during the pandemic over when and how most businesses in Canada could open and conduct business showed the full power governments can exert over firms.

Creative Destruction

Creation and destruction are both fundamental to innovation. Every successful innovation destroys a part of some other business, either directly by winning part of its clientele or indirectly by syphoning off customers' purchasing power. As a result, entrenched interests are adept at using processes and institutions to block change and preserve the *status quo*. Government is the institution most often used to preserve established interests since it has at its disposal an extensive array of "regulations, grants, loans, guarantees, taxes, deductions, carve-outs, and patent extensions" (Phelps, 2013: 314). Governments also have the ability to confer special advantages on favoured incumbents to create artificial scarcity and rents and erect barriers to the entry of new firms. Barriers to entry come in many forms, including monopoly rights, occupational licensing requirements, restrictions on the nationality of investors, subsidies to established firms, and privileged access to government contracts (Geloso, 2021: 18).

Creative destruction is vital to the dynamism of capitalism. Conventional measures include the turnover of firms and the entry and exit of firms. Simply assuming that our leading companies will endure and create jobs and incomes in the future is not tenable in today's global economy. In the United States, the turnover of firms among industry leaders has accelerated markedly. John Chambers, then head of Cisco, observed in 2015 that: "[s]ince I became CEO (in 1995), 87% of the companies in the Fortune 500 are off the list" (quoted in Meredith, 2020: 20). The average tenure of a firm in the US S&P 500 declined from 33 years in 1965 to 18 years in 2017 (Meredith, 2020: 20). The list of failing US companies includes Kodak, Blockbuster, Kmart, Xerox, and Sears.

The entry and exit of firms are useful measures of a society's taste for entrepreneurship (Prescott and Ohanian, 2014). The entry of firms reflects both whether people want to start a business and the extent to which government laws, regulations, and tax rates allow them to do so quickly and at low cost. The exit of firms shows the willingness of a society to allow lagging firms to fail, even at the cost of jobs for workers and money for investors. Births and deaths of firms together are important because "change in the economy is driven more by the entry and exit of firms than by the adaptation of individual companies" (Beinhocker, 2006: 333). It is widely acknowledged that small firms, while on average they have lower productivity than large firms, are also the vehicle through which disruptive change and innovation are most likely to occur, which is why they are commonly referred to as "gazelles". Research shows that "old firms improve their own products and new firms introduce new varieties" (Klenow and Li, 2020: 37). Partly this

reflects that innovation is very difficult for large firms and nearly impossible for government bureaucracies. For example, in the United States large established firms contribute only one tenth of overall productivity growth (Klenow and Li, 2020: 1).

Another measure of dynamism is the level of competition incumbent firms face: are they heavily protected by government or is competition from foreign firms or new homegrown businesses encouraged? The importance of regulation in preserving incumbent firms was demonstrated after the United States deregulated its airline industry, partly in response to complaints by startup firms such as Southwest Airlines “that regulators were protecting industry giants rather than consumers” (Bahcall, 2019: 90). Deregulation shook the US airline industry to its foundations, as “between 1978 and 2008, deregulation helped drive 170 airlines out of business or into bankruptcy, including Pan Am and every major US carrier, except for one—American Airlines” (Bahcall, 2019: 69).³ As noted later in this paper, Canada provides extensive protection and/or subsidies for large sectors of its economy, mostly through regulations that limit the entry of foreign companies or impose import quotas. Our least protected industries are mostly export-oriented, the kind of industries that by definition must be able to weather competition in foreign marketplaces.

Instead of nurturing the values conducive to innovation, Canada has been better at erecting and maintaining barriers to insulate incumbents from the need to innovate. The landmark report on innovation from the Council of Canadian Academics (2013) concluded Canada needed more “small catastrophes” to shake the existing establishment of firms and governments and give firms the necessary experience of making decisions when their survival is at stake (2013: 29). Instead, government policy in Canada seems determined to minimize disruptions to the established order, at least outside the resource sector, which mostly has to fend for itself when market conditions sour.

Canada's thicket of regulations, tariffs, foreign investment restrictions, and occupational licensing rules suggests the country has little tolerance for the destructive aspect of creative destruction. As international trade barriers have fallen with the spread of regional trade agreements, rent-seeking shifted from tariffs to an array of other impediments such as occupational licensing rules and regulations that cover even larger parts of the economy than tariffs did, especially services that are more insulated from international trade than goods.

3. Some of the key innovations made by new entrants included the hub and spoke model, flying to secondary airports, and reduced turnaround times (Bahcall, 2019: 90).

Rent-Seeking in the Canadian Economy

Too much entrepreneurial energy in Canada is devoted to acquiring some form of protection from government that allows firms or an entire industry to generate what economists call “rents”. Economic rents are defined as “the return to a factor of production in excess of what would be needed to keep it in the market ... A central feature of rents is that, by themselves, they are statically unproductive. By definition, they are excessive returns to market activity that would have occurred anyway in their absence” (Furman and Orszag, 2015: 2).⁴ For example, if a good can be produced for \$10 but is sold for \$15 because it is protected by a tariff, the rent is \$5, which represents “the economic value of the government-imposed exemption from competition” (Will, 2019: 165).

Not all rents are harmful to the economy. True rents are the reward the marketplace offers as an incentive for being the first mover of true innovation. Rents earned from innovation and not government favours confer on the innovator a natural source of temporary scarcity because “it takes a while for competitors to match what is on offer or leapfrog ahead with something even better” (Lindsey and Teles, 2017: 16). The scarcity is only temporary since its very existence gives others an incentive to imitate or improve on the innovation, which accelerates the diffusion of good ideas and boosts overall productivity.

By comparison, rents that arise from government interventions or other actions “arise from artificial scarcity—in particular, government policies that confer special advantages on favored market participants” (Lindsey and Teles, 2017: 17). These artificial rents attract more resources to these industries than would occur in a truly competitive marketplace, thus misallocating resources and dampening productivity since competitors are thwarted from entering the marketplace and incumbents have less incentive to do better. Countries with barriers to entry and other restrictions on competition have slower growth in both GDP per capita and total factor productivity (Lindsey and Teles, 2017: 26). Less competition results in higher prices, reduced investment, slower productivity growth and fewer incentives for innovation (Philippon, 2019:

4. Furman and Orszag go on to note that, in some instances, rents can be dynamically efficient, such as when “our patent system effectively promises monopoly rents to innovators should they successfully bring a new technology to market. While the legally protected rent is not necessary to encourage a producer to sell, it is designed to encourage the initial innovation that leads to that product in the first place, with benefits to aggregate productivity” (Furman and Orszag, 2015: 2). However, Dean Baker notes that a quadrupling of patent approvals between 1982 and 2010 in the United States did not accompany higher innovation or total factor productivity growth (Baker, 2016: 8).

205). Steve Jobs summarized the dulling effect on incentives to innovate from a lack of competition when asking: “What’s the point of focusing on making the product even better when the only company you can take business from is yourself? (quoted in Gilbert, 2020: 55).

The fundamental problem with artificial rents is that they lower incomes by putting the interests of producers ahead of those of consumers and the wider economy. This is the opposite of what should be the goal of society. Adam Smith made the point that “[c]onsumption is the sole end and purpose of all production and the interest of the producer ought to be attended to only so far as it maybe necessary for promoting that of the consumer” (Smith, 1776/1869, volume II, book IV, ch. 8: 244). Instead, public policy in Canada too often is predicated on the opposite stance, namely, “that the purpose of consumption is production. The onus, in this view, is not on producers to serve consumers, but on consumers to serve producers. If they will not pay producers willingly, they should be made to do so by law” (Coyne, 2021).

Taking the side of producers over consumers does not make governments in Canada pro-business or create an environment conducive to successful capitalism. To begin with, much of the motivation behind government favouritism is the desire for more jobs, in the mistaken belief that schemes to boost employment industry by industry are superior to creating a better overall environment where business can operate freely (Philippon, 2019: 190). Subverting competition raises prices, lowers productivity and living standards, and retards innovation, all of which are enhanced by more competition in the marketplace. The corporatism that has developed and taken root in Europe and Canada is not capitalism; in fact, it turns the public against the business community both because of the perception of cronyism and the suppression of average incomes over the long term.

The possibility of boosting profits through artificial scarcity created or enabled by governments gives firms an incentive to lobby politicians and officials for favours, something economists term “rent-seeking”. George Will characterizes rent-seeking as the endeavour to increase income without innovations that improve the quantity or quality of the product offered to consumers: “It is the attempt to manipulate public power for private advantage—to get government to improve your economic circumstances by conferring a benefit on you or a handicap on your competitors” (Will, 2019: 165–166). Lindsey and Teles elaborated that “‘rent-seeking’ refers to business activity that seeks to increase profits without creating anything of value through distortions to market processes, such as constraints on the entry of new firms” (2017: 17) In summary, “rents are captured when a third party, more often a government, confers a benefit on one party by depriving a second party of access to opportunity” (Will, 2019: 165).

The costs of rent-seeking

Rent-seeking behaviour has several negative consequences over and above the actual capture of rents themselves by one group at the expense of others. Seeking economic rents from government diverts entrepreneurial energy from developing innovative products and processes that enhance long-term economic growth. Interest groups and entrepreneurs concentrate on lobbying government and regulators for favours instead of increasing productivity or advancing innovation. Rather than channeling entrepreneurial energy toward true innovation, “if it’s easier to get rich by winning favors through the policy-making process, that energy will be diverted to negative-sum rent-seeking” (Lindsey and Teles, 2017: 26). As *The Economist* observed about India’s complex web of permits, tariffs, taxes, subsidies, restrictions, and machinations, such an environment “elevates accountants who can minimise costs, rather than entrepreneurs who can create value” (*Economist*, 2020). Accordingly, “a rise in rent-creating policies can lead to a drop-off in productive entrepreneurship”. Rent-seeking is a lazy, parasitic approach to business; it “represents the perverse triumph of political entrepreneurship” rather than the true entrepreneurship that results in new businesses and new products that benefit customers (Lindsey and Teles, 2017: 26, 124).

Rent-seeking from governments often originates in the desire of firms “to keep on their feet, on ground that is usually slipping away from under them” (Schumpeter, quoted in Meredith, 2020: 47). Attempts to preserve or freeze existing structures inevitably undermine the process of creative destruction that Schumpeter argued is at the core of maintaining capitalism’s vitality. Phelps summarized the insidious impact of rent-seeking: “The protection of vested interests chokes off the opportunity that outsiders with new ideas would have to break into the market. All this has further reduced the supply of innovation” (Phelps, 2013: 314).

Besides undermining the incentives for innovation in the business world, rent-seeking corrupts the political process and increases the incentive to ignore the broader public good. The respected economic historian Joel Mokyr warned of “the dangers of the ‘rent-seeking’ society, in which the tax lawyer and the political lobbyist have replaced the inventor and the engineer as the entrepreneur’s main instruments towards higher profits. Political maneuvering is a zero-sum game at best, whereas technological change is a positive-sum game” (Mokyr, 1990: 181). This description of a rent-seeking society applies well to Canada today.

Widespread rent-seeking encourages economic policy to focus on the redistribution of incomes. As Brian Lee Crowley observed, most people will acquiesce to an unequal distribution of income if it is “impersonally determined by grown social institutions that are not the will of anyone (2020: 90). However, when people sense the distribution of

income is orchestrated by government, “it distracts them from focusing on making maximum use of the knowledge they have available ... Instead they focus on getting those in authority to transfer benefits to them” (Crowley, 2020: 90). Cronyism creates a political environment that undermines innovation because “corruption, barriers to competition, cronyism, and other obstacles have blocked people’s sense of having a ‘fair shot’” (Phelps, 2013: 203). As a result, the electorate is more disposed to accept or vote for policies that raise taxes on higher income earners or successful corporations in the belief that these incomes were granted or bought and not earned fairly in the marketplace. In turn, these higher taxes reduce the incentives for entrepreneurs to innovate and grow and for firms to invest and expand in Canada.

Rent-seeking and cronyism encourage the viewpoint that income and wealth are a zero-sum game, where the advance of one segment of society is at the expense of another. A recent poll found that Canadians feel there is more tension between the rich and poor in this country than between any other groups (such as immigrants and native born, different ethnic groups, social classes, political parties, religions, age groups, or genders) (Ibbitson, 2021). The focus on the distribution rather than the creation of wealth reinforces the determination of different groups to use government to advance their own interests rather than developing policies that enrich most Canadians. The broader problem with focusing on redistribution is that, as Arthur Okun famously observed, there is a “‘big trade-off’ between equity and efficiency” in economics, where more of one means less of the other (quoted in Lindsey and Teles, 2017: 4). The obsession of governments in Canada with the distribution of income inevitably means adopting policies that hamper income growth.

Rent seeking has more pernicious effects on the body politic beyond fostering policies that hamper economic growth. Rent-seeking undermines democracy, as the political process is increasingly captured by special interests, which also aggravates the risk of outright corruption. It is not an exaggeration to use the word corruption to describe the worst corrosive effect on politics. As Dani Rodrik wrote in *The Globalization Paradox*, “State-business collaboration is just another name for corruption” (2011: 9).

Political corruption in Canada appears to be rising in recent years. Canada’s ranking in Transparency International’s annual *Corruption Perceptions Index* has declined steadily since 2012, falling out of the world’s top 10 for a number of reasons. Canada has gained “a reputation as an easy place to launder money” especially in the housing market (Ritchie, Eljarrat, Aboud, and Rubin, 2020). In 2018, Canada was downgraded from “moderate” to “limited” in its enforcement of anti-corruption by governments. The recent SNC-Lavalin scandal, in which Canada’s Attorney General was pressured

to interfere in the prosecution of the firm for corrupt practices overseas, shows the malignant effect of mixing special interests and politics. Outright corruption led to the Liberal defeat in the national election of 2006 over the sponsorship scandal based on “a cash-for-contracts scheme ... advertising executives were pressured to kick back millions of dollars in cash donations and free services to the Liberal Party and senior executives in it—an accommodation some of these businessmen were all too happy to make, given the millions more in money-for-nothing profits that they earned through the sponsorship deals” (Ibbitson, 2005: 48).

Forms of Rent-Seeking in Canada

This section examines the various ways governments protect established interests in the marketplace by erecting barriers to trade, mandating occupational licenses, increasing patent protections, and blocking takeovers. In testimony to the House of Commons Finance Committee (Standing Committee on Finance, 2020), I speculated that rent-seeking had become Canada's leading industry. On further reflection, that was overly cautious. Canada's largest industry, using the Standard Industrial Classification system, is manufacturing at 9.5% of GDP. This is dwarfed by all the industries that benefit from government regulation and protection from competition, including supply management, tariffs, insulation from foreign competition and investment (including culture, telecoms, and banking), and occupational licensing. As shown later in this section, regulations and occupational licensing by themselves cover significantly more of the economy than manufacturing or any other industry, amounting to an estimated 10.5% of GDP and 19% of jobs. Adding in other restrictions such as state-owned monopolies and restrictions on foreign investment raises the share of Canada's economy that is sheltered from competition to 30.6% (or 35.1% after removing health and education from GDP) (Geloso, 2021: 21).

Forms of rent-seeking vary in importance from country to country. Firms in the United States are more likely to rely on intellectual property rights; Canadian businesses are more oriented to internal trade barriers and insulation from foreign takeovers. A nation does not have to be a leader in resisting all types of rent-seeking to be a leader in innovation, as the US example demonstrates. All the major forms are reviewed in this section, with an attempt to evaluate their relative importance in Canada.

Trade barriers

Canada touts its trade *bona fides* from belonging to numerous international trade agreements, boasting it is the only country with a trade deal in place with every G7 nation. However, these deals all carve out exemptions from foreign competition for large sectors, including banking, telecommunications, culture, agriculture, and transportation. Most of these exemptions are based on flimsy arguments that these industries are essential to Canada's identity or national security.

Canada's track record on barriers to internal trade and other economic barriers is even worse. A Statistics Canada study found that trade flowed within Canada as if a permanent 6.9% *ad valorem* tariff on trade existed within its borders; applying the same methodology to the United States shows that internal trade in that country moved as if there

were no internal tariffs on trade (Bemrose, Brown, and Tweedle, 2017: 4). The cost of these barriers is significant: an IMF study estimated that eliminating internal barriers to trade would boost Canada's GDP by 3.8% (Alvarez, Krznan, and Tombe, 2019: 24). The federal government in Canada could act decisively to lower internal trade barriers, since federal legislation takes precedence over provincial laws in the event of conflict between the two jurisdictions and it has exclusive control of banks and commerce. Nevertheless, the federal government has been reluctant to reduce inter-provincial trade barriers.⁵

Canada's proclivity to erect barriers between provinces was on full display during the COVID-19 pandemic. While no state in the United States barricaded its border to travel from other states, provinces in Canada routinely shut their borders to non-essential travel from other provinces. Most famously, the Atlantic provinces maintained a "bubble" insulating themselves from Canadian travellers outside of the Atlantic region for much of 2020, although this cooperation degenerated into all-too-typical Canadian squabbling when Nova Scotia closed its border with New Brunswick without any notice in June 2021 (Mercer, 2021). Quebec closed its border with Ontario in the spring of 2020 and again in April 2021, the latter in conjunction with Ontario closing its frontier with Quebec and Manitoba. British Columbia sealed its border with Alberta in the spring of 2021. These are extraordinary steps in the context of a single national government and Constitution.

Canada's reluctance to fully embrace unfettered trade competition in the marketplace may reflect the differential impact competition has on high-performing and lagging firms. Richard Gilbert summarized the research in the field as showing that "[a]n increase in competition makes it more profitable for firms that are close to the industry technological frontier to escape competition by innovating. On the other hand, competition can deter innovation for firms that are far from the frontier by making it more difficult for these firms to profit from catching up to their more advanced rivals" (Gilbert, 2020: 136). Instead of maximizing the performance of its best firms, Canada appears to prefer coddling mediocre firms and seeking to forestall their inevitable demise.

Occupational licensing

Occupational licensing requires the provider of a service to meet certain government-imposed standards of education or training. Occupational licensing's anticompetitive effects include preventing supply from entering the market. Occupational licensing acts as a form of protectionism that restricts domestic rather than foreign supply and is especially effective at limiting competition in services industries, many of which often

5. The federal government was not always so reluctant to interfere with provincial legislation. Donald Savoie recounts that, between 1867 and 1920, Ottawa disallowed 96 provincial laws, mostly in Western provinces dealing with the National Policy of protectionism for manufacturers in central Canada (2019: 63).

are not subject to foreign competition (Lindsey and Teles, 2017: 95). The vagaries of the justifications for many occupational licenses is reflected in their very uneven application and requirements across different jurisdictions. Furman and Orszag also found that occupational licensing inhibited people from moving between states, lowering the efficiency of labour markets.

Historically, occupational licensing was mainly confined to health care and finance to protect the physical and financial health of the public, representing only about 5% of the US workforce in the 1950s⁶ (Furman and Orszag, 2015: 18). However, occupational licensing has spread to everything from hair styling to tattoo parlors. Most of the increase in occupational licensing reflects governments' extending it to new occupations, typically at the behest of organizations representing existing suppliers. A US Council of Economic Advisor's report found that roughly two thirds of the increase in the number of licensed workers in the United States was attributable to growth in the number of licensed occupations, with only one third the result of changes in the occupational composition of the workforce (such as the growth of health care) (Furman and Orszag, 2015: 18).

One of the few studies of occupational licensing in Canada found that 19% of workers in 2018 were subject to some form of licensing, up from 15% in 1999 (Mysicka, Cutler, and Zhang, 2020: 6). However, the study's conservative methodology likely understates the magnitude of licensing. Differing methodologies also mean that comparing Canada's 19% with the US share of 26% that Fulman and Orszag found does not necessarily mean Canada applies occupational licensing less than the United States.

Regulation

George Stigler pioneered the notion that most regulations were not made for the wider public interest, but instead favour the narrow interest of producers. For Stigler, regulation was about “when and why an industry (or other group of like-minded people) is able to use the state for its purposes, or is singled out by the state to be used for alien purposes” (Jones, 2012: 128). Firms seek to increase their profits through regulations that raise barriers to market entry from competitors, suppress product substitutes (such as discouraging the use of margarine in place of butter), or fixing prices. Regulation of product markets reduces business spending on research and development, while barriers to entry and regulation depress both investment and employment (Lindsey and Teles, 2017: 26).

Economy-wide regulation remains a major impediment to both free trade and the entry of new firms in Canada. In 2010, 10.5% of Canada's GDP was regulated; excluding government, the share of businesses subject to government controls rises to 13.2%—note that this is not a

6. Canadian data do not go back so far.

measure of the total cost of complying with government regulations, which is much higher since all firms are affected by some regulations (Cross, 2014). Reducing regulations is the one area where Europe has done better than North America. Data from the OECD shows that Canada (and the United States) lagged the European Union by a substantial margin in reducing product-market regulations between 1998 and 2013, falling far short of the reductions seen in countries such as France, Spain, Germany, and Italy (Philippon, 2019: 144).

Some industries use regulations to deter competition from new entrants that customers would welcome. Financial services in Canada is a good example. Canada's bank customers long for fresh alternatives to the traditional big banks; one recent survey found 75% were unhappy with their bank (Meredith and Darroch, 2017: 171). Nevertheless, the federal government remains committed to the *status quo* in banking in the name of stability rather than allowing new firms to enter and increase competition and choice in the market for banking services. During the 2008/09 financial crisis, the Bank of Canada restricted access to government insurance of mortgages, "making it extremely difficult for non-banks to fund themselves ... The upshot was that two thirds of Canada's non-bank mortgage lenders disappeared between 2007 and 2012". As a result, control of the mortgage market by the six big banks in Canada rose to over 70%, and the "post-crisis regulatory clampdown ... all but killed innovation in Canada's mortgage market" (Meredith and Darroch, 2017: 62, 64).

The lack of competition in financial services affects more than the mortgage market. It also curtails the funding of small businesses and slows overall economic growth. Canada's big banks seldom make a loan at more than 1% or 2% above the prime rate, while the less concentrated US banking system approves loans even 10% above prime if the applicant is willing to pay (Meredith and Darroch, 2017: 72). As important, the concentration in Canada's banking industry limits the perspectives brought to new ideas from entrepreneurs. As Phelps observed: "A country's dynamism also depends on the pluralism of views among financiers. The more opportunity that an idea has to be evaluated by someone who can appreciate it, the less likely it is for a good idea to be passed up for funding" (Phelps, 2013: 38). In turn, a lack of funding is one reason that so many of Canada's most promising start-ups end up being bought by foreign firms rather than staying and growing in Canada (Gallini and Hollis, 2009: 1).

Canada's banking culture and regulatory systems have prioritized stability over innovation.⁷ While Canada boasts about the stability of its banking system, less often noted is

7. Some analysts disagree that the banking system in Canada puts stability above innovation. For example, Laurence Booth argues that the stability originates in diversification across Canada's regions and better regulation. While acknowledging "Canada is very conservative: a trait possessed by regulators, banks themselves and their clients", he maintains this does not prevent innovation (Booth, 2009: 13–14).

that the banking system is prone to what some have called a “rigidity trap” (Meredith and Darroch, 2017: 10). Barriers to entry are becoming more important to established financial firms since so much of credit allocation has become automated, based on algorithms rather than on a manager’s personal assessment of particular circumstances and the character of a business owner or manager. A famous example of the reliance on algorithms was when Ben Bernake, former Chair of the Federal Reserve, was initially refused mortgage refinancing because his mortgage exceeded the allowable limit for Washington in 2014 (Morre and Kasperkevic, 2014). The growth of both regulation and technology-based loan approvals is replacing the “skills, knowledge, and interpersonal competencies” bank managers used to bring to small business lending, ultimately suffocating their ability to serve small business customers (Meredith and Darroch, 2017: 70).

Mergers and takeovers

Governments in Canada regularly intervene to prevent mergers and acquisitions much more often than other OECD countries. Canada had the fourth highest level of restrictions on foreign investment among the 37 nations in the OECD in 2019 (Geloso, 2021: 20). Most frustrating for investors is that governments often issue *ad hoc* rationales outside the Competition Bureau’s formal review mechanisms to block a takeover after it is initiated, adding to the uncertainty of investing in Canada. One recent example is the federal government’s blocking all takeovers of oil-sands companies by firms controlled by foreign governments (after the takeover of Nexen by the Chinese firm CNOOC in 2012). Quebec regularly uses the investment arm of its various government-controlled financial institutions to take a blocking position in Quebec firms facing foreign takeovers, such as when it stopped Lowe’s first attempt to purchase the Rona hardware chain in 2012. Saskatchewan’s virulent objections to BHP Billiton’s purchase of PotashCorp in 2010 led the federal government to reject that takeover. British Columbia has stood in the way of further consolidation in the forest products industry. Blocking takeovers removes the incentive for firms to perform better to avoid being taken over and discourages investors from funding start ups in the hope of a lucrative takeover offer.

Patents and intellectual property

While patents and copyrights can play a positive role in innovation, they are also deployed by firms in the major industrial nations as a barrier to the entry and growth of new firms. The number of patents in Canada has grown rapidly, more than doubling since 1980, as they have in most advanced economies (Greenspon and Rodrigues, 2017: 87). Nevertheless, this is “the exact same period during which leading scholars argue that innovation has slowed down” (Breznitz, 2021: 143). Rapidly growing industries such as entertainment, information technology, and pharmaceuticals especially use patents and copyright to limit competition (although the pharmaceutical industry in Canada has shrunk, partly in response to government purchases of generic drugs to save money).

However, the use of patents to forestall competition is even more prevalent in the United States because of its large technology and pharmaceutical industries, so by itself does not explain Canada's lagging innovation. The new Biden administration has promised to enforce competition more aggressively, especially for the technology industry, but it remains to be seen how effective such actions will be in practice.

Patent thickets are created when old established companies "stockpile patents to use as competitive weapons against smaller upstarts" (Baker, 2016: 9). This pushes innovation from the most promising areas of research into segments of the market "where they are less likely to confront a deep-pocketed competitor" (Baker, 2016: 13). Patent thickets are often used by high-technology firms where

new competitors have to negotiate licenses to technologies controlled by incumbents or incur costs to invent workarounds that do not infringe the incumbents' technologies. Incumbents in some technological areas, such as computers, information technology, and biotech, control the rights to hundreds of patents that cover a product or technological application. These "patent thickets" create a formidable barrier to entry ... Furthermore, firms can allege trade secret theft to deter their employees from leaving to start potentially competitive new enterprises. (Gilbert, 2020: 16)

Patents help explain the high return on capital found in the high-technology industry (Furman and Orszag, 2015: 1). For Gilbert, this suggests "entrepreneurial vigor is lacking in the high-technology economy and the benefits of technological progress have not been shared broadly with the American workforce" (Gilbert, 2020: 30). Another tool to forestall competition in the technology industry is spotting potential rivals in their infancy and buying them out before they become major competitors, such as Facebook's acquisition of Instagram and WhatsApp. Takeovers present a conundrum for regulators, as preventing acquisitions does not guarantee the targeted firm will become a major competitor given the unpredictability of technology and tastes. Further complicating matters is that "the promise of a lucrative buyout is a major stimulus for start-up innovation" (Gilbert, 2020: 35)

The vast majority of patents are never invoked to protect innovation but are used as a tool to harass competitors. Most patents are issued in industries with very little innovation, suggesting the protection of technological creativity is not a prime motive (Mokyr, 1990: 251). More often they are deployed "as a weapon in lawsuits against competitors ... Because litigation involves large costs, an established firm is much better situated to contest a patent than an upstart with few resources. As a result, a patent can be used to force the upstart to share much of the benefits of its technology, even if there is no actual dependence on the patent of the established firm" (Baker, 2016: 9).

The most extreme case is the “patent troll”, a company that exists only to make claims to patent rights, such as the \$612.5 million that NTP extracted from Research in Motion to license the use of a patent for the Blackberry phone. However, most patent suits are brought against companies much smaller than Research in Motion because they have fewer resources to defend themselves and to survive the duration of an injunction preventing them from proceeding until the case is resolved in court (Baker, 2016: 9–12). One survey of corporate executives in the United States put the cost of litigating patent trolls at \$29 billion in 2011 (Baker, 2016: 10).

The most significant recent change in intellectual property (IP) laws in Canada has come from signing free-trade deals, notably with the United States. Lindsey and Teles argue that trade agreements have had the effect of allowing “the United States to export its flawed IP model to countries around the world”, especially for key sectors such as entertainment, information technology, and pharmaceuticals (Lindsey and Teles, 2017: 169). Whatever the source, patents have become an increasing barrier to competition.

The Long History of Rent-Seeking in Canada

The history of rent-seeking and government favouritism extends back to the beginning of Canada's modern economic history. The Hudson's Bay Company was granted a monopoly on the fur trade over an area covering about one third of Canada in 1670, extending its monopoly with a takeover of the North West Company. As Rodrik observed: "The story of the Hudson's Bay Company reveals the close link between power and economic exchange in its naked simplicity. I want to trade with you, so you better play by my rules!" (Rodrik, 2011: 9).

Confederation itself was based on a series of deals that favoured special interests. Frank Underhill described the Confederation project as "government of the people, by lawyers, for big business" (quoted in Kelly, 2018: 233). Other historians compare the US Constitution's stirring appeals to independence, justice, and liberty to how the British North America (BNA) Act "reads like a real estate contract. It is all about interests, expedience, and the desires of the parties to make a deal" (Vipond, Krikorian, and Cameron, 2018: 285). For example, the BNA Act contained clauses that promised both Nova Scotia and British Columbia railroads connecting these provinces to central Canada. Critics of the deal made at the Quebec Conference of 1864 that led to Confederation cited "the shameful trade in public jobs, the desecration of the oath in the double shuffle, the wasting of public money thrown at Grand Trunk, at the Bank of Upper Canada, at Upper Canada's municipal loan, at the ocean-going steamships, at the building in Ottawa" (Harvey, 2018: 225).

Michael Bliss's authoritative history of business in Canada, *Northern Enterprise*, inevitably devoted pages to government support programs and subsidies for firms. The National Policy of tariffs for domestic manufacturers elevated the interests of producers above consumers for over a century. Bliss lists

multitudes of attempts to second-guess or divert market forces. Billions were poured into keeping dying industries and firms alive, and their workers in dead-end jobs, particularly in Quebec and the Maritimes. More billions, in every region of the country, had been poured into schemes for creating flashy new industries, luring this or that manufacturing plant, beefing up disadvantaged areas with infrastructure (industrial parks, railroads, highways, harbours, airports), and otherwise trying to create "winners" that might someday stand on their own. (Bliss, 1987: 572)

Support for high-technology industries has been a bottomless pit of government funding for firms (Bliss, 1987: 571). Aerospace deserves its own chapter, starting with the

Avro Arrow debacle in the 1950s extending right through to the Bombardier bail-out in 2020. None of this includes the tens of billions of the Canadian taxpayers' dollars spent on subsidies and purchases of oil companies under the National Energy Program starting in 1980.

Today, all levels of government continue to offer the large automobile companies endless subsidies to invest in Canada, even after the bail-outs of General Motors and Chrysler from bankruptcy. As one professor observed, grants to the automobile firms to invest in Canada likely do not make any difference to investment decisions:

It is far more likely that GM's or Ford's negotiations with Unifor, or Ontario and Ottawa, happened after the decision to make trucks in Oshawa or electric vehicles in Oakville was made by GM and Ford in Detroit. The decision from headquarters would have been, "okay, we're prepared to make these investments. Now go and see what you can get from government or somehow use this to negotiate with Unifor". (Mordue, 2020)

Senior government officials have observed first hand the dependence of Canadian firms on government favours. The 1982 task-force review of government services and subsidies to business headed by Erik Nielsen after Brian Mulroney assumed power concluded Canadian businesses were "program junkies" because of their addiction to billions of dollars of subsidies from successive governments (quoted in Miljan, 2018: 17). Derek Burney, the chief of staff to Prime Minister Brian Mulroney, wrote (somewhat in jest) that "Americans believe anything worth doing must be worth overdoing. Canadians believe anything worth doing must be worth a government grant! (Burney, 2005: 135).

While there are many examples of rent-seeking in Canada's early history, one should not exaggerate their overall impact. They did not prevent Canada from having high rates of investment and productivity growth that underpinned the creation of world-class firms in transportation, communications, energy, and finance. Canada demonstrated it is more than capable of sustaining high rates of innovation and economic growth. Among the G7 nations, Canada ranked first in the growth of both real GDP per capita and total factor productivity in the twenty years before World War I. Growth remained high between 1950 and 1970, with real GDP per capita rising 0.65% a year, slightly above the post-war average in the United States (Bojilov, 2020a: 42–43).

The US track record shows less rent-seeking behaviour than Canada's (although it is not pristine). Partly this reflects the populist democratic tradition dating back to the Presidency of Andrew Jackson that "demanded the disentanglement of state and market, public and private" (Levy, 2021: 96). This movement of the mid-nineteenth century

“required equality of commercial opportunity and therefore prohibitions on ‘corrupt’ government patronage and favoritism” resulting in “a great release of commercial ‘energy’” (Levy, 2021: 96). Examples of this separation of government and business interests include the end of corporate charters being granted to individual firms by state legislatures and the move to “free banking”, where any individual could charter a bank (Levy, 2021: 124). Canada never experienced such a popular movement against government patronage and control.

Some of this resistance to rent-seeking in the United States was reversed as the twentieth century progressed. Russell Kirk partly blamed the Great Depression on the proliferation of rent-seeking in the 1920s, when “economic policy almost wholly surrendered to special interests” (Kirk, 1953: 455). Roosevelt’s New Deal made things worse, based as it was on an “intellectual critique of unrestricted market competition” (Levy, 2021: 411). For example, the National Recovery Administration encouraged firms to agree to limit production and raise prices, a tactic repeated in the agricultural sector. However, many American business leaders objected to the New Deal’s regulation and higher taxes and cut back on investment, which helped prolong the Depression. One legacy of Roosevelt’s four terms in office was that the “New Deal impulse quickly translated into a lasting liberal politics of adversarial business regulation” (Levy, 2021: 431).

Business organizations in the United States eventually came to acknowledge that influencing government was fundamental to their functioning. Having accepted a more intrusive role for government in dictating business operations and outcomes, many firms decided to use their influence on government to their advantage. For example, the leading 150 US corporations formed the Business Roundtable in 1972 to lobby government, realizing that business executives had to become “personally involved in the government process” because knowledge of that process was becoming “as important as being skilled in knowing how to manufacture a product” (DuPont CEO Irving Shapiro, quoted in Levy, 2021: 571). The National Association of Manufacturers came to the same conclusion: since the late nineteenth century it had been located in New York, but felt obliged to move to Washington in 1972 because “the thing that affects business most today is government” (Appelbaum, 2019: 102).

The US high-technology industry was a notable exception to rent-seeking by major industries in the United States, at least until recently. Leading firms such as Microsoft, Apple, Amazon, Google, and Facebook were content to locate on the West Coast, partly because of the “little interest they showed in lobbying Washington, at least at first. In most cases they had very small or no Washington offices early on, didn’t much plead to the government, mostly wanted to be left alone, and did not request legal restrictions on their competition” (Cowen, 2019: 121–122). Bill Gates wrote that, while building

Microsoft, “I kept my distance from policy makers in Washington, D.C., and around the world, thinking they would only keep us from doing our best work” (Gates, 2021: 183). The success of Microsoft and the US technology industry generally bears him out.⁸ By comparison, Research in Motion’s co-CEO Jim Basillie made regular treks to Ottawa to advise the government on how it could better support innovation. Perhaps distracted by these considerations, Research in Motion missed the opportunity in the market for smart phones that Apple seized with its iPhone. Within a few short years, Research in Motion went from being one of the most successful firms in the world to an also-ran as its stock price plummeted from \$150 a share in 2008 to \$7 in 2020 (Meredith, 2020: 53).

8. It is worth noting that while the US technology industry may engage less in rent-seeking from governments than other industries, it often uses mergers and acquisitions to takeover potential competitors, as discussed earlier in this paper.

Rent-Seeking and Canada's Political Structure

Rent-seeking exists in all societies. The late economist Mancur Olson argued democracies are especially susceptible to excessive influence from special interests, which find it easier to organize and lobby for government actions that narrowly benefit them while the costs are diffused among the broader public, who have little incentive to band together (Olson, 1982: 69). Nevertheless, Canada is particularly prone to rent-seeking, as a result of several political factors.

Most obvious is the greater importance of government in Canada's economy than in the United States, which encourages rent-seeking because transaction costs are lower: sending a lobbyist to the CRTC in Ottawa is more likely to pay off since the Canadian government exerts much larger control of our cultural industries than its American equivalent. Central Canada's domination of the federal government also increases the government's susceptibility to rent-seeking. Canada's national government is not structured to reflect regional interests, unlike governments in the United States and in several European countries (Savoie, 2019: 13). As a result, pandering to the interests of Ontario and Quebec is often enough to secure political power in Ottawa. Much of Canada's economic policy has been designed to cater to the interests of businesses in central Canada (notably the National Policy of tariff protection and the National Energy Program that suppressed energy prices, which were national in name only).

Instead of integrating regional concerns into the national government, Canada accommodates them by devolving more jurisdictional powers to the provinces than is the case in other major nations. Canada has the most decentralized federal structure in the G7. In turn, decentralization opens the door to more influence by special interests. By devolving more powers to sub-federal levels of government, Canada offers less public scrutiny of regulation and favouritism. Rent-seeking flourishes in the shadows of government decision-making, where narrow interest groups have advantages in organizing and wielding influence: "when policies are crafted in obscure or insular settings that discourage monitoring and participation by outsiders, it becomes all the more likely that policy making will be captured by insiders" (Lindsey and Teles, 2017: 128–129).

Compounding the problem of decentralization is the generally lower level of competence of provincial officials in Canada. The most ambitious and talented civil servants

tend to gravitate to Ottawa, which pays more and wields the most power in areas such as fiscal and monetary policy, external affairs, immigration, defence, and justice. As a result, “local legislatures would not have the necessary stature to attract high-quality candidates, since the leading members of each bar would turn to the more interesting employment opportunities offered by the federal government” (Chagnon, 2018: 33). Another recent evaluation came to much the same conclusion: “Structurally and intellectually, the federal public service has had greater autonomy from the government, has been more non-partisan and professional, was able to recruit stronger talent, and dealt with a much more sophisticated level of policy making than the provinces. This is less so today, but no one is rushing to suggest the positions have been reversed” (Rasmussen, 2018: 106). A major problem is simply the small size of most provinces in Canada: Patrick Marier quotes one senior civil servant from Prince Edward Island as saying there were 20 individuals in Quebec City performing the same task as him (2021: 93). The inferior quality of provincial and local officials has made it easier for firms to manipulate them to serve their interests; striking examples include convincing the New Brunswick government to subsidize the Bricklin automobile plant or the government of Newfoundland & Labrador to fund a cucumber plant.⁹ Such flimsy business cases would not have passed internal review by the federal Department of Finance.

Besides its history of decentralization, Canada’s inclination to rent-seeking may be encouraged by our being more risk adverse than the United States, to judge by our preference for bonds over stocks, our conservative banking system, and our reluctance to invest in venture capital.¹⁰ Canada needs to learn that risk aversion is not a viable strategy in an economy where change is unrelenting. In the words of Facebook CEO Mark Zuckerberg, “the biggest risk is not taking any risk ... In a world that is changing really quickly, the only strategy that is guaranteed to fail is not taking risks” (quoted in Meredith, 2020: 25). Rather than avoiding risk, Canadians need to learn to adapt to change; Charles Darwin observed that “it is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is most adaptable to change” (quoted in Meredith, 2020: 53).

The corrective to rent-seeking is simple: more competition, since “competition destroys rents and is therefore the enemy of rent seekers” (Philippon, 2019: 23). Reducing the

9. More egregious examples include Ontario Premier Bob Rae naively proclaiming that adopting mandatory bike-helmet safety laws would help alleviate the severe 1990–1992 recession that ravaged Ontario’s manufacturing industry; or Dalton McGuinty’s argument that paying high rates for renewable energy somehow would create sustainable jobs manufacturing solar and wind power during the 2008/09 financial crisis.

10. Per-capita venture-capital funding in Canada is less than half that in the US (Tingle and Pandes, 2021: 3).

supply of government actions that serve—directly or indirectly—to limit competition would encourage firms to spend less effort demanding such protection. As noted, rent-seeking is not in the DNA of some industries, such as technology in the United States or oil and gas, mining, and grain and livestock production in Canada.¹¹ A person or firm possessing a true entrepreneurial spirit would shun rent-seeking on the grounds that it contradicts the very reason for going into business, which is to be rewarded for serving customers well.

11. Mansell and Percy attribute this to Alberta's strong entrepreneurial drive "rooted in rural-conservative values characterized by rugged individualism, risk taking, entrepreneurial awareness, and an appreciation of adversity" (Mansell and Percy, 1990: 57).

Broader Measures of Business Malaise

Government restraints on competition such as regulation, occupational licensing, and intellectual-property protection have been on the rise in recent decades. It is difficult to quantify the role of rent-seeking in the steady decline of Canada's GDP and the slow-down of its productivity growth, since this deceleration also reflects other factors such as the ageing of the labour force. However, several economy-wide measures point to a malaise in Canada's business community: these include falling rates of entry and exit, problems in scaling-up small firms, an increase in Tobin's q , slumping business investment, and a declining responsiveness of exports to free-trade deals.

Entry and exit

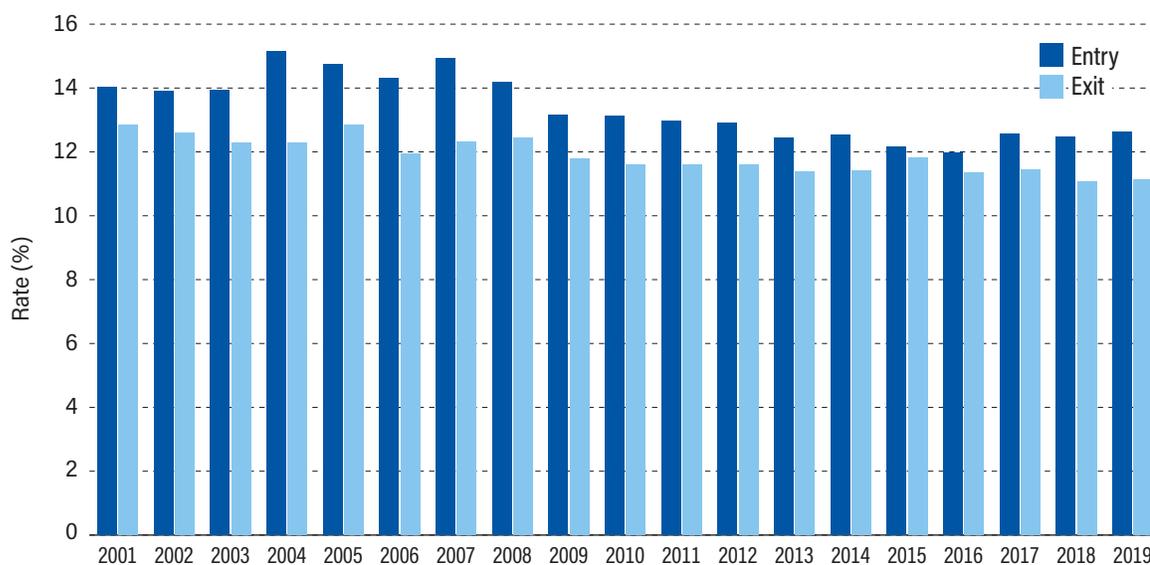
There clearly has been a loss of dynamism in Canada's business sector. One indicator of lower creative destruction is declining rates of firm entry and exit, something that has occurred in all major industries. Statistics Canada reported that the rate of entry as a percentage of the population of active firms fell nearly in half from 24.5% in the early 1980s to 13.1% in 2012 (Macdonald, 2014: 1). Since 2012, the entry rate fell to a low of 12.0% in 2016 before edging up to 12.6% in 2019 (Statistics Canada, 2020). Statistics Canada called entry "an important aspect of economic dynamism because entry can be viewed as a form of experimentation which introduces new ideas, business models and technologies into the marketplace" (Macdonald, 2014: 1). Meanwhile, the exit rate fell from 16.5% in the early 1980s to 11.6% in 2012, then continued to slide to a record low of 11.1% in 2019 (**figure 1**).¹² Firm turnover is important for raising productivity. Trefler found that the productivity-enhancing feature of free trade with the United States operated more through "favourable plant turnover (entry and exit) and rising technical efficiency" than scale effects from access to a larger market (Trefler, 2001: 2).

In the United States, research also shows a loss of business dynamism, but less so than in Canada. The United States posted a smaller drop in both the entry and exit rates since the 1980s, with the entry rate falling from 15% to about 9% (Philippon, 2019: 81). The decline in the United States is mostly the result of changes in firm composition, not characteristics of the labour force, such as an ageing or more educated population (Furman and Orszag, 2015: 15–17). Economists have also found that in the United States new entries have declined in line with increasing regulation, especially for small firms that cannot afford expensive lobbying (Philippon, 2019: 95).

12. It is noteworthy that the exit rate fell for manufacturing from 9.4% in 2003 to 8.3% in 2008, at a time when the rising exchange rate was widely assumed to be fostering a Dutch-disease destruction of Canadian manufacturers.

The drop in Canada's entry rate is reflected in the declining number of firms listed on the Toronto Stock Exchange. Since 2005, the number of operating companies has fallen 48% from 1,515 in 2005 to 789 in 2019. The number of initial public offerings fell even more, from an annual average of 41 between 1993 and 2000 to 14 between 2001 and 2019 (Tingle and Pandes, 2021: 5, 6).

Figure 1: Estimates of the rate (%) of business entry and exit in Canada, 2001–2019



Notes: [1] Entry and exit are defined based on calendar years. Entries are enterprises with no employment in the previous year and with positive employment for the first time in the listed quarter of the current year. Exits are enterprises with no employment in the future year and with employment for the last time in the listed quarter of the current year. Exits in the last two years are projected using data on business closings and entries. A closing is a business with employment in the current quarter and no employment in the future quarter. [2] The entry (exit) rate is obtained by dividing the number of entries (exits) by the average total number of enterprises in the previous and current quarters. [3] The private sector covers all industrial sectors except educational services, health care and social assistance, and public administration. Source: Statistics Canada (2020), table 33-10-0165-01.

Grow or sell-off?

It is worth noting that economists rely too much on firm entry, as if it were the only measure of business dynamism. As important as launching a new business is whether the business grows and flourishes. By international standards, it is still relatively easy to launch a firm in Canada even if the number of people choosing to do so has declined in recent years. A bigger problem for Canada is scaling up these new firms to larger businesses. The fastest way to create jobs is not launching many start-ups, but having a few “gazelles” that grow rapidly into medium and large companies. As noted earlier, financing is difficult for firms in Canada. As well, an IRPP study concluded that Canadians “are less inclined to scale up and commercialize their new products and processes. Instead, they sell their intellectual property (IP) to foreign entities” (Gallini and Hollis, 2019: 1). This proclivity to sell-off to foreign buyers could be partly motivated by lower taxes and higher pay, especially for technology firms based in the United States.

Tobin's q

Another proxy of the growing impact of rent-seeking is Tobin's q , which compares stock-market values with the replacement value of tangible assets. When stock-market values rise, usually firms invest more, raising the value of their tangible assets—which over time would stabilize the value of q . In the United States, there has been an increase of about 20% in the value of Tobin's q since 1970. Many analysts have been quick to seize on the rise in the value of Tobin's q as the result of the growing role and value of intangible assets such as brand names and intellectual capital. However, Lindsey and Teles point out that “another source of intangible assets is government-created barriers to entry or special subsidies ... a warning sign of an increase in rent-seeking” (Lindsey and Teles, 2017: 20). Philippon's view is that the increase in Tobin's q “supports that the US has experienced decreasing domestic competition” (Philippon, 2019: 71).

Tobin's q has behaved differently in Canada.¹³ The long-term increase since 1990 (when data for Canada begin) has been less pronounced than in the United States. Instead, what is more remarkable in Canada is that Tobin's q has remained high over the last three decades. A high level of Tobin's q suggests that firms are consistently earning more in profits than their level of investment would be expected to generate. Another way of interpreting a high value of q is that firms are not fully exploiting investment opportunities. Both interpretations are consistent with an economy that is rife with rent-seeking behaviour, in which stock-market values are inflated by high returns and investment is lower than expected because, while firms with access to the rent-generating favours provided by government will often make investments, other firms will invest less in Canada. Whatever the explanation, the persistently high value of Tobin's q in Canada reflects a business sector that is not performing as well as would be expected, for whatever reasons.

Business investment

Business investment is a key barometer of business confidence. Irving Kristol articulated the relationship between the two: “Business confidence—as represented by the willingness to invest in new plant and equipment—is not a psychological phenomenon but an economic one”. He went on to write that, just as politicians should be judged on what they do and not what they say, business confidence should be measured by actual investment outlays, adding that “Keynesian economists have always had a poor opinion of businessmen, whom they represent as temperamental children, to be paternalistically ‘managed’ ...

13. There are several ways of calculating the replacement value of tangible assets. The least complicated is to use the book value of firm assets, which is readily available from Statistics Canada and is the method used in this paper. However, since other methods of calculating Tobin's q could yield different values (such as those presented in François and Lloyd-Ellis, 2004), the results presented here should be treated as not necessarily definitive but more indicative of the long-term trend.

What governs business confidence are the prospects for profitable investment. That and nothing else—not what the president says, not what executives say, not what anyone else says” (quoted in Schiller, 2019: xvi).

Since its most recent peak in 2014, business investment in Canada has fallen 16.8%, including a 7.0% decline after the pandemic began (reflecting the net result of a 13.1% drop in 2020 and a partial 6.9% rebound in investment intentions for 2021). Nor can all the weakness be attributed to low oil prices, as seven of the 15 major industry groups in the business sector saw investment decline between 2014 and 2021 (Statistics Canada, 2021b). It is revealing to compare the weakness of business investment in Canada during the pandemic with its buoyancy in other nations. Economists at Morgan Stanley predict global capital spending will rise 21% between the onset of the pandemic and the end of 2022 (*Economist*, 2021c).

The reluctance of firms to invest in Canada is understandable in view of the broad sweep of public policies affecting the economic and competitive landscape. On top of the historic surge of government outlays during the pandemic, governments in Canada will have to spend significantly more after the pandemic on pensions and long-term care for the elderly, health care (especially catching up on care delayed during the pandemic that has created a backlog of surgeries and undiagnosed illnesses), child care, and possibly even pharmaceutical care. In addition, Canada's government has made public commitments to increase our military spending to meet NATO commitments. Altogether, these increases could easily add five percentage points to the share of GDP going to federal and provincial government spending. At the same time, taxes are rising, on top of higher contributions to the expanded Canada Pension Plan that are just beginning to ramp up this year. The federal government is eyeing further tax hikes on corporations and possibly the wealthy as it begins to grapple with the long-term fiscal consequences of its record deficits incurred during the pandemic. In the absence of significantly higher income growth, the expansion of government spending and inevitably higher taxation implies less income will remain for the private sector. Faced with such a prospect, firms naturally are investing less.

Exports are less responsive to free trade

The malaise in Canada's business sector is reflected in its decreasing ability to take advantage of free-trade deals. Free-trade agreements have been one of Canada's few initiatives to create more competition. Tellingly, however, the response of exports to the opportunities offered by free-trade deals has slowed over time with each new trade agreement. The initial Free Trade Agreement with the United States almost immediately was reflected in a boom in exports. Exports to the United States soared 30.1% in the four years between the fourth quarter of 1988 and the fourth quarter of 1992, despite

the shock of a recession and slow recovery in the United States.¹⁴ It is also worth noting that the entry rate of new firms into manufacturing in Canada rose from 12.4% in 1989 to 15.8% in 1997 as entrepreneurs rushed to take advantage of free trade with the United States and a falling exchange rate—the only period of increase in the last three decades (Macdonald, 2014: 4).

By comparison, the Comprehensive Economic and Trade Agreement (CETA) with the European Union that was provisionally applied starting in 2017 saw exports to the European Union fall 34% in the four years between the first quarter of 2017 and the first quarter of 2021.¹⁵ For the Trans-Pacific Partnership (TPP), which took effect at the turn of the year entering 2019, exports posted a net gain of 6.6% in the two years ending in the first quarter of 2021.¹⁶ The pandemic does not appear to explain much of the sub-par performance of exports to the European Union and Asia since Canada's exports to both regions rose in 2020, especially those to Asia where economies were less subject to shutdowns than many countries in North America and Europe. The broader lesson is that signing free-trade deals is not enough to succeed, if firms do not have the innovative capacity to take advantage of the opportunities.

Concern about Canada's declining competitiveness in export markets is not new. The Bank of Canada regularly expressed disappointment in its *Monetary Policy Reports* with the failure of Canadian exports to respond more to the devaluation of the dollar after oil prices crashed late in 2014. By 2018, its research concluded that Canada's share of non-energy imports by the United States fell from 16% in 2002 to 10% in 2017 as a result of limits on our ability to export and not because of a loss of capacity (Brouillette, Dorich, D'Souza, Gagnon, and Godbout, 2018: 3).

14. Exports to the United States are on a customs basis from the Canadian International Merchandise Trade Database (Statistics Canada Catalogue 65F0013X), which has exports to the United States going back to the 1980s.

15. Exports to the European Union are from Statistics Canada, 2021a, Table 12-10-0011-01 (balance of payments basis, not seasonally adjusted).

16. The data for Australia, Japan, Mexico, and Singapore are on a balance of payments basis from Statistics Canada, 2021a, Table 12-10-0011-01. Exports for Chile, Peru, Malaysia, Brunei, and Vietnam are on a customs basis from the Canadian International Merchandise Trade Database (Statistics Canada Catalogue 65F0013X). Only data for Canada's 16 largest trading partners are converted from a customs basis to the more accurate balance of payments basis.

Conclusion

Over a decade of slow growth and the receding presence of Canadian firms on the global stage is giving rise to a sense that Canada's economic problems are structural and perhaps even irreversible. The pessimism is reminiscent of President Carter's famous articulation of a "malaise" gripping US society in the late 1970s. To borrow Strauss and Howe's characterization of societies in their "unravelling" phase, Canadians "can now *feel*, but collectively can no longer *do*" (1997: 103: italics in the original). Canada has become a nation where debate about removing statues of historical figures garners more attention than our lack of productivity growth and broad stagnation in living standards. The result is the risk Canada becomes the equivalent of Switzerland in Orson Welles famous speech (playing Harry Lime) in the movie *The Third Man*: "In Switzerland, they had brotherly love, they had 500 years of democracy and peace—and what did that produce? The cuckoo clock" (quoted in Bahcall, 2019: 81).

The cumulative effect of more and more government interventions through spending, taxation, and regulation of the private economy is worsening an environment where firms are nervous about the future level of taxation, which heightens their incentive to avoid investing here or to invest more in other countries. Lost among the cries for increased government spending on selected low-income groups or higher taxes on high incomes is a discussion of how to improve Canada's productivity and competitiveness. Our faltering competitiveness is evident in how differently Canada's exports responded to free trade with the United States in 1989 and recent deals with the European Union and the Pacific Rim.

Nevertheless, the opportunity remains to remake and enlarge Canada's economy. New technologies such as "the Internet, mobile apps, cloud computing, artificial intelligence, blockchain, robots, 3D printers, and social media" are bringing sweeping changes to industries such as transportation, accommodation, health care, education, finance, and professional services (Meredith, 2020: 22). More importantly, attitudes to business also can change, as occurred when the Reagan and Thatcher revolutions boosted entrepreneurial energy with a renewed commitment to capitalism and market forces in the United States and the United Kingdom. Another example of radical change was the liberalization of trade and regulation in India in the 1990s, which accompanied "a more nebulous but perhaps equally important shift in the attitude of the bureaucracy and the political system toward the business sector: the idea that business was a legitimate pursuit of honest people, something that could even be 'cool'" (Banerjee and Duflo, 2019: 58).

Convincing Canadians of the need for a marked shift in the importance they attach to innovation and entrepreneurship will be difficult because it goes against the grain of some basic Canadian values, notably an aversion to risk and a deference to authority. Moreover, decades of governments catering to the interests of specific firms or industries has created entrenched interests that will fight hard to protect the status quo. Nevertheless, when confronted with unavoidable choices in the past, such as free trade in the 1980s or the government debt crisis in the 1990s, Canadians showed they can be galvanized to take risks and make necessary sacrifices. A deeper problem is the very structure of Canada's political system, where the dominance of central Canada in the national government and extensive decentralization to the provinces encourage rent-seeking. Changing Canadian values is likely easier than changing its Constitution.

As daunting as Canada's challenges are in raising our game on productivity and innovation, there are reasons to believe a turnaround is possible in a relatively short period. Canada's past achievements in innovation and building firms that succeeded on the global stage shows that the values that support markets and business dynamism exist in our history and traditions. The fact that government actions have created many artificial rents in Canada's economy also means that governments are in a position to dismantle them quickly. Canada needs such a renewal as we emerge from the economic and psychological toll taken by the pandemic.

References

- Alvarez, Jorge, Ivo Krznan, and Trevor Tombe (2019). *Internal Trade in Canada: Case for Liberalization*. IMF Working Paper 158.
- Appelbaum, Binyamin (2019). *The Economists' Hour: False Prophets, Free Markets, and the Fracture of Society*. Little, Brown.
- Bahcall, Safi (2019). *Loonshots: How to Nurture the Crazy Ideas that Win Wars, Cure Diseases, and Transform Industries*. St. Martin's Press.
- Baker, Dean (2016). *Rents and Inefficiency in the Patent and Copyright System: Is There a Better Route?* Working Paper (August). Center for Economic and Policy Research.
- Banerjee, Abhijit V., and Esther Duflo (2019). *Good Economics for Hard Times*. PublicAffairs.
- Beinhoker, Eric D. (2006), *The Origin of Wealth: Evolution, Complexity, and the Radical Remaking of Economics*. Harvard Business School Press.
- Bemrose, Robby K., W. Mark Brown, and Jesse Tweedle (2017). *Going the Distance: Estimating the Effect of Provincial Borders on Trade when Geography Matters*. Statistics Canada Catalogue no 11F0019M No. 394.
- Bliss, Michael (1987). *Northern Enterprise: Five Centuries of Canadian Business*. McClelland & Stewart.
- Bojilov, Raicho (2020a). Innovation: The Source of Rapid Growth. In Edmund Phelps, Raicho Bojilov, Hian Teck Hoon and Gylfi Zoega, eds., *Dynamism: The Values that Drive Innovation, Job Satisfaction, and Economic Growth* (Harvard University Press): 31–47.
- Bojilov, Raicho (2020b). Indigenous Innovation during the IT Revolution: We Never Had It So Good? In Edmund Phelps, Raicho Bojilov, Hian Teck Hoon and Gylfi Zoega, eds., *Dynamism: The Values that Drive Innovation, Job Satisfaction, and Economic Growth* (Harvard University Press): 68–85.

Booth, Laurence (2009). The Secret of Canadian Banking: Common Sense? *World Economics* 10, 3 (July-September): 1–18.

Boothman, Barry E.C. (2020). *Corporate Cataclysm: Abitibi Power & Paper and the Collapse of the Newsprint Industry, 1912–1946*. University of Toronto Press.

Breznitz, Dan (2021). *Innovation in Real Places: Strategies for Prosperity in an Unforgiving World*. Oxford University Press.

Brouillette, Dany, José Dorich, Chris D'Souza, Adrienne Gagnon, and Claudia Godbout (2018). *What Is Restraining Non-Energy Export Growth?* Analytical Note 2018-25. Bank of Canada. <<https://www.bankofcanada.ca/2018/08/staff-analytical-note-2018-25/>>, as of September 23, 2021.

Burney, Derek (2005). *Getting It Done: A Memoir*. McGill-Queen's University Press.

Canada Strong and Free Network (2021). *Canada's Toxic Ban on Plastics*. Exchange call with the Coalition of Concerned Manufacturers and Businesses of Canada and the US-Based Property Rights Alliance (March 23). <<https://canadastrongandfree.network/activities/canadas-toxic-ban-on-plastics/>>, as of August 19, 2021.

Chagnon, Rachel (2018). The Fathers of Confederation and the BNA Act: Constitutional Visions and Models. In Eugénie Brouillet, Alain-G. Gagnon, and Guy Laforest, eds., *The Quebec Conference of 1864: Understanding the Emergence of the Canadian Federation* (McGill-Queen's University Press): 29–48.

Council of Canadian Academics (2013). *Paradox Lost: Explaining Canada's Research Strength and Innovation Weakness*. <https://cca-reports.ca/wp-content/uploads/2018/10/paradoxlost_en.pdf>, as of September 21, 2021.

Cowen, Tyler (2019). *Big Business: A Love Letter to an American Anti-Hero*. St. Martin's Press.

Coyne, Andrew (2021). It's time to put consumers first: How about we start with the Rogers-Shaw deal? *Globe and Mail* (March 18). <<https://www.theglobeandmail.com/opinion/article-its-time-to-put-consumers-first-how-about-we-start-with-the-rogers/>>, as of August 18, 2021.

Cross, Philip (2014). *Estimating the True Size of Government: Adjusting for Regulation*. Macdonald-Laurier Institute (May).

Cross, Philip (2020). *An Entrepreneurial Canada? Understanding Canada's Lack of Innovation and How We Can Fix It*. Macdonald-Laurier Institute.

Cross, Philip (2021). *Alberta's Future: The Role of Entrepreneurship and Innovation*. School of Public Policy (June), University of Calgary.

Crowley, Brian Lee (2020). *Gardeners Vs. Designers: Understanding the Great Fault Line in Canadian Politics*. Sutherland House.

Drummond, Don (2011). Confessions of a Serial Productivity Researcher. *International Productivity Monitor* 22 (Fall): 3–10.

The Economist (2020). A Crunch Year Ahead for Indian Business. *The World in 2020*.

The Economist (2021a). Corporate Europe: The Land that Ambition Forgot (June 5).

The Economist (2021b). Geopolitics and Business (June 5).

The Economist (2021c). The Coming CAPEX Carnival (May 29).

François, Patrick, and Huw Lloyd-Ellis (2004). *Investment Cycles and Tobin's Q*. Department of Economics, Queen's University. <<http://qed.econ.queensu.ca/pub/faculty/lloyd-ellis/papers/invyc.pdf>>, as of August 18, 2021.

Furman, Jason, and Peter Orszag (2015). A Firm-Level Perspective on the Role of Rents in the Rise in Inequality. Presentation at “A Just Society” Centennial Event in Honor of Joseph Stiglitz, Columbia University, October 16, 2015.

Gallini, Nancy, and Aidan Hollis (2019). *To Sell or Scale Up: Canada's Patent Strategy in a Knowledge Economy*. IRPP Study No 72 (August). Institute for Research on Public Policy. <<https://irpp.org/wp-content/uploads/2019/08/To-Sell-Or-Scale-Up-Canadas-Patent-Strategy-in-a-Knowledge-Economy.pdf>>, as of August 18, 2021.

Gates, Bill (2021.) *How to Avoid a Climate Disaster: The Solutions We Have and the Breakthroughs We Need*. Allen Lane.

Geloso, Vincent (2021). Barriers to Entry and Productivity Growth. In Steven Globerman, ed., *Achieving the Four-Day Work Week: Essays on Improving Productivity Growth in Canada* (Fraser Institute): 17–25.

Gilbert, Richard J. (2020). *Innovation Matters: Competition Policy for the High-Technology Economy*. MIT Press.

Globerman, Steven, and Joel Emes (2019). *Innovation in Canada: An Assessment of Recent Experience*. Fraser Institute. <<https://www.fraserinstitute.org/studies/innovation-in-canada-an-assessment-of-recent-experience>>, as of August 18, 2021.

Greenspon, Jacob, and Erika Rodrigues (2017). *Are Trends in Patenting Reflective of Innovative Activity in Canada?* Centre for the Study of Living Standards Research Report 2017-02.

Harvey, Louis-Georges (2018). Confederation and Corruption: The Republican Critique of the Quebec Resolutions. In Eugénie Brouillet, Alain-G. Gagnon, and Guy Laforest, eds., *The Quebec Conference of 1864: Understanding the Emergence of the Canadian Federation* (McGill-Queen's University Press): 220–232.

Ibbitson, John (2005). *The Polite Revolution: Perfecting the Canadian Dream*. McClelland & Stewart.

Ibbitson, John (2021). The divisiveness in Canada lurks beneath the surface, data show. *Globe and Mail* (July 1).

Jones, Daniel Stedman (2012). *Masters of the Universe: Hayek, Friedman, and the Birth of Neoliberal Politics*. Princeton University Press.

Kelly, Stéphane (2018). The Economic Arguments of the Quebec Opponents of Confederation. In Eugénie Brouillet, Alain-G. Gagnon, and Guy Laforest, eds., *The Quebec Conference of 1864: Understanding the Emergence of the Canadian Federation* (McGill-Queen's University Press): 233–251.

Kirby, Jason (2015). Planes, Trains and Smartphones. *Maclean's* (March 2): 38.

Kirby, Jason (2021). Business investment is key. *Ottawa Citizen* (January 5).

Kirk, Russell (1953). *The Conservative Mind: From Burke to Eliot*. Gateway Editions.

Klenow, Peter J., and Huiyu Li (2020). *Innovative Growth Accounting*. NBER Working Paper 27015. National Bureau of Economic Research.

Leuchtenburg, William E. (2015). *The American President: From Teddy Roosevelt to Bill Clinton*. Oxford University Press.

- Levy, Jonathan (2021). *Ages of American Capitalism: A History of the United States*. Random House.
- Lindsey, Brink, and Steven M. Teles (2017). *The Captured Economy*. Oxford University Press.
- Macdonald, Ryan (2014). *Business Entry and Exit Rates in Canada: A 30-year Perspective*. Statistics Canada Catalogue no. 11-626-X.
- Mansell, Robert L., and Michael B. Percy (1990). *Strength in Adversity: A Study of the Alberta Economy*. University of Alberta Press.
- McCloskey, Deidre N. (2006). *Bourgeois Virtues: Ethics for an Age of Commerce*. University of Chicago Press.
- McCloskey, Deidre N. (2010). *Bourgeois Dignity: Why Economics Can't Explain the Modern World*. University of Chicago Press.
- McCloskey, Deidre N. (2016). *Bourgeois Equality: How Ideas, Not Capital or Institutions, Enriched the World*. University of Chicago Press.
- Mercer, Greg (2021). Protests erupt as Nova Scotia excludes New Brunswick from border re-openings. *Globe and Mail* (June 24).
- Meredith, Patricia (2020). *Better Boardrooms: Repairing Corporate Governance for the 21st Century*. University of Toronto Press.
- Meredith, Patricia, and James L. Darroch (2017). *Stumbling Giants: Transforming Canada's Banks for the Information Age*. University of Toronto Press.
- Miljan, Lydia (2018). *Public Policy in Canada: An Introduction* (Seventh edition). Oxford University Press.
- Mokyr, Joel (1990). *The Lever of Riches: Technological Creativity and Economic Progress*. Oxford University Press.
- Marier, Patrik (2021). *The Four Lenses of Population Aging: Planning for the Future in Canada's Provinces*. University of Toronto Press.
- Mordue, Greig (2020). Ontario's automotive reindustrialization? Not so fast. *Globe and Mail* (December 29).

Moore, Heidi, and Java Kasperkevic (2014). Ben Bernanke ran the Federal Reserve and can't get a new mortgage. Can you? *The Guardian* (October 7). <<https://www.theguardian.com/money/us-money-blog/2014/oct/06/if-ben-bernanke-cant-refinance-his-mortgage-what-hope-for-the-rest-of-us>>, as of September 21, 2021.

Mysicka, Robert, Lucas Cutler, and Tingting Zhang (2020). *Licence to Capture: The Cost Consequences to Consumers of Occupational Regulation in Canada*. C.D. Howe Commentary No. 575 (July).

Olson, Mancur (1982). *The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities*. Yale University Press.

Phelps, Edmund (2013). *Mass Flourishing: How Grassroots Innovation Created Jobs, Challenge, and Change*. Princeton University Press.

Phelps, Edmund (2020a). Introduction: A Theory of Innovation, Flourishing, and Growth. In Edmund Phelps, Raicho Bojilov, Hian Teck Hoon, and Gylfi Zoega, eds., *Dynamism: The Values that Drive Innovation, Job Satisfaction, and Economic Growth* (Harvard University Press): 1–19.

Phelps, Edmund (2020b). Epilogue. In Edmund Phelps, Raicho Bojilov, Hian Teck Hoon, and Gylfi Zoega, eds., *Dynamism: The Values that Drive Innovation, Job Satisfaction, and Economic Growth* (Harvard University Press): 201–206.

Phelps, Edmund, Raicho Bojilov, Hian Teck Hoon, and Gylfi Zoega (2020). *Dynamism: The Values that Drive Innovation, Job Satisfaction, and Economic Growth*. Harvard University Press.

Philippon, Thomas (2019). *The Great Reversal: How America Gave Up on Free Markets*. Belknap Press.

Piketty, Thomas (2014). *Capital in the Twenty-First Century*. Arthur Goldhammer, trans. Belknap Press.

Prescott, Edward C., and Lee E. Ohanian (2014). Behind the Productivity Plunge: Fewer Startups. *Wall Street Journal* (June 26).

Rasmussen, Ken (2018). Public Policy in the Provinces: More Powering; Less Puzzling. In Laurent Dobuzinskis and Michael Howlett, eds., *Policy Analysis in Canada* (Policy Press): 99–120.

Ritchie, Lawrence E., Stéphane Eljarrat, Malcolm Aboud, and Chelsea Rubin (2020). *Canada Drops from Top 10 Least Corrupt Countries in Transparency International Annual Corruption Perceptions Index*. Risk Management and Crisis Response Blog (March 12), Osler. <<https://www.osler.com/en/blogs/risk/march-2020/canada-drops-from-top-10-least-corrupt-countries-in-transparency-international-annual-corruption-per>>, as of August 19, 2021.

Riley, Jason L. (2021). *Maverick: A Biography of Thomas Sowell*. Basic Books.

Rodrik, Dani (2011). *The Globalization Paradox: Democracy and the Future of the World Economy*. W.W. Norton.

Savoie, Donald (2019). *Democracy in Canada: The Disintegration of Our Institutions*. McGill-Queen's University Press.

Schiller, Robert (2019). *Narrative Economics: How Stories Go Viral and Drive Major Economic Events*. Princeton University Press.

Sims, Cliff (2019). *Team of Vipers: My 500 Extraordinary Days in the Trump White House*. Thomas Dunne Books.

Smith, Adam (1776/1869). *An Inquiry into the Nature and Causes of the Wealth of Nations*. Oxford at the Clarendon Press.

Standing Committee on Finance [FINA], House of Commons, Parliament of Canada (2020). *Corporate Subsidies*. Meeting 14 (March 12). <<https://www.ourcommons.ca/Committees/en/FINA/StudyActivity?studyActivityId=10793704>>, as of August 20, 2021.

Statistics Canada (2020). Table 33-10-0165-01. Quarterly estimates of business entry and exit. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3310016501>>, as of August 18, 2021.

Statistics Canada (2021a). Table 12-10-0011-01. International merchandise trade for all countries and by Principal Trading Partners, monthly (x 1,000,000). <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1210001101>>, as of August 24, 2021.

Statistics Canada (2021b). Table 34-10-0036-01. Capital and repair expenditures, non-residential tangible assets by industry (x 1,000,000). <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3410003601>>, as of August 18, 2021.

Strauss, William, and Neil Howe (1997). *The Fourth Turning: An American Prophecy*. Broadway Books.

Taras, David, and Christopher Waddell (2020). *The End of the CBC?* University of Toronto Press.

Trefler, Daniel (2001). *The Long and Short of the Canada-U.S. Free Trade Agreement*. NBER Working Paper 8293. National Bureau of Economic Research.

Tingle, Bryce C., and J. Ari Pandes (2021). *Reversing the Decline of Canadian Public Markets*. SPP Publications 14, 13 (April). School of Public Policy, University of Calgary.

Vipond, Robert C., Jacqueline D. Krikorian, and David R. Cameron (2018). The Quebec Resolutions and the Ideas Left Behind. In Eugénie Brouillet, Alain-G. Gagnon, and Guy Laforest, eds., *The Quebec Conference of 1864: Understanding the Emergence of the Canadian Federation* (McGill-Queen's University Press): 282–298.

Whatley, Shawn (2020). *When Politics Comes before Patients: Why and How Canadian Medicare Is Failing*. Optimum Publishing.

Will, George F. (2019). *The Conservative Sensibility*. Hachette Books.

World Bank (2020). *GDP (current US\$)*. <<https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>>, as of August 24, 2021.

Zoega, Gylfi (2020). The Force of Values. In Edmund Phelps, Raicho Bojilov, Hian Teck Hoon, and Gylfi Zoega, eds., *Dynamism: The Values that Drive Innovation, Job Satisfaction, and Economic Growth* (Harvard University Press): 105–122.

About the author

Philip Cross spent 36 years at Statistics Canada, the last few years as its Chief Economic Analyst. He wrote Statistics Canada's monthly assessment of the economy for years, as well as many feature articles for the *Canadian Economic Observer*. After leaving Statistics Canada, he worked for the Macdonald-Laurier Institute. He has been widely quoted over the years, and now writes a weekly column for the *National Post* and other papers..



Acknowledgments

The author thanks the reviewers for excellent comments. As the researcher has worked independently, the views and conclusions expressed in this paper do not necessarily reflect those of the Board of Directors of the Fraser Institute, the staff, or supporters.

Publishing Information

Distribution

These publications are available from <<http://www.fraserinstitute.org>> in Portable Document Format (PDF) and can be read with Adobe Acrobat® or Adobe Reader®. The most recent version is available free of charge from Adobe Systems Inc. at <<http://get.adobe.com/reader/>>. Readers having trouble viewing or printing our PDF files using applications from other manufacturers (e.g., Apple's Preview) should use Reader® or Acrobat®.

Ordering publications

To order printed publications from the Fraser Institute, please contact us via e-mail: sales@fraserinstitute.org; telephone: 604.688.0221, ext. 580 or, toll free, 1.800.665.3558, ext. 580; or fax: 604.688.8539.

Media

For media enquiries, please contact our communications department via e-mail: communications@fraserinstitute.org; telephone: 604.714.4582.

Copyright

Copyright © 2021 by the Fraser Institute. All rights reserved. No part of this publication may be reproduced in any manner whatsoever without written permission except in the case of brief passages quoted in critical articles and reviews.

Date of issue

2021

ISBN

978-0-88975-666-3

Citation

Philip Cross (2021). *Canada's Declining Business Dynamism and Lagging Innovation*. Fraser Institute. <<http://www.fraserinstitute.org>>.

Supporting the Fraser Institute

To learn how to support the Fraser Institute, please contact us via post: Development Department, Fraser Institute, Fourth Floor, 1770 Burrard Street, Vancouver, British Columbia, V6J 3G7, Canada; telephone: toll-free to 1.800.665.3558, ext. 548; e-mail: development@fraserinstitute.org; or visit our webpage: <<http://www.fraserinstitute.org/support-us/overview.aspx>>.

About the Fraser Institute

Our mission is to improve the quality of life for Canadians, their families and future generations by studying, measuring and broadly communicating the effects of government policies, entrepreneurship and choice on their well-being.

Notre mission consiste à améliorer la qualité de vie des Canadiens et des générations à venir en étudiant, en mesurant et en diffusant les effets des politiques gouvernementales, de l'entrepreneuriat et des choix sur leur bien-être.

Purpose, Funding, and Independence

The Fraser Institute provides a useful public service. We report objective information about the economic and social effects of current public policies, and we offer evidence-based research and education about policy options that can improve the quality of life.

The Institute is a non-profit organization. Our activities are funded by charitable donations, unrestricted grants, ticket sales, and sponsorships from events, the licensing of products for public distribution, and the sale of publications.

All research is subject to rigorous review by external experts, and is conducted and published separately from the Institute's Board of Directors and its donors.

The opinions expressed by authors are their own, and do not necessarily reflect those of the Institute, its Board of Directors, its donors and supporters, or its staff. This publication in no way implies that the Fraser Institute, its directors, or staff are in favour of, or oppose the passage of, any bill; or that they support or oppose any particular political party or candidate.

As a healthy part of public discussion among fellow citizens who desire to improve the lives of people through better public policy, the Institute welcomes evidence-focused scrutiny of the research we publish, including verification of data sources, replication of analytical methods, and intelligent debate about the practical effects of policy recommendations.

Peer review—validating the accuracy of our research

The Fraser Institute maintains a rigorous peer review process for its research. New research, major research projects, and substantively modified research conducted by the Fraser Institute are reviewed by experts with a recognized expertise in the topic area being addressed. Whenever possible, external review is a blind process. Updates to previously reviewed research or new editions of previously reviewed research are not reviewed unless the update includes substantive or material changes in the methodology.

The review process is overseen by the directors of the Institute's research departments who are responsible for ensuring all research published by the Institute passes through the appropriate peer review. If a dispute about the recommendations of the reviewers should arise during the Institute's peer review process, the Institute has an Editorial Advisory Board, a panel of scholars from Canada, the United States, and Europe to whom it can turn for help in resolving the dispute.

Editorial Advisory Board

Members

Prof. Terry L. Anderson
 Prof. Robert Barro
 Prof. Jean-Pierre Centi
 Prof. John Chant
 Prof. Bev Dahlby
 Prof. Erwin Diewert
 Prof. Stephen Easton
 Prof. J.C. Herbert Emery
 Prof. Jack L. Granatstein

Prof. Herbert G. Grubel
 Prof. James Gwartney
 Prof. Ronald W. Jones
 Dr. Jerry Jordan
 Prof. Ross McKittrick
 Prof. Michael Parkin
 Prof. Friedrich Schneider
 Prof. Lawrence B. Smith
 Dr. Vito Tanzi

Past members

Prof. Armen Alchian*
 Prof. Michael Bliss*
 Prof. James M. Buchanan* †
 Prof. Friedrich A. Hayek* †
 Prof. H.G. Johnson*

Prof. F.G. Pennance*
 Prof. George Stigler* †
 Sir Alan Walters*
 Prof. Edwin G. West*

* deceased; † Nobel Laureate