Canadian STUDENT REVIEW

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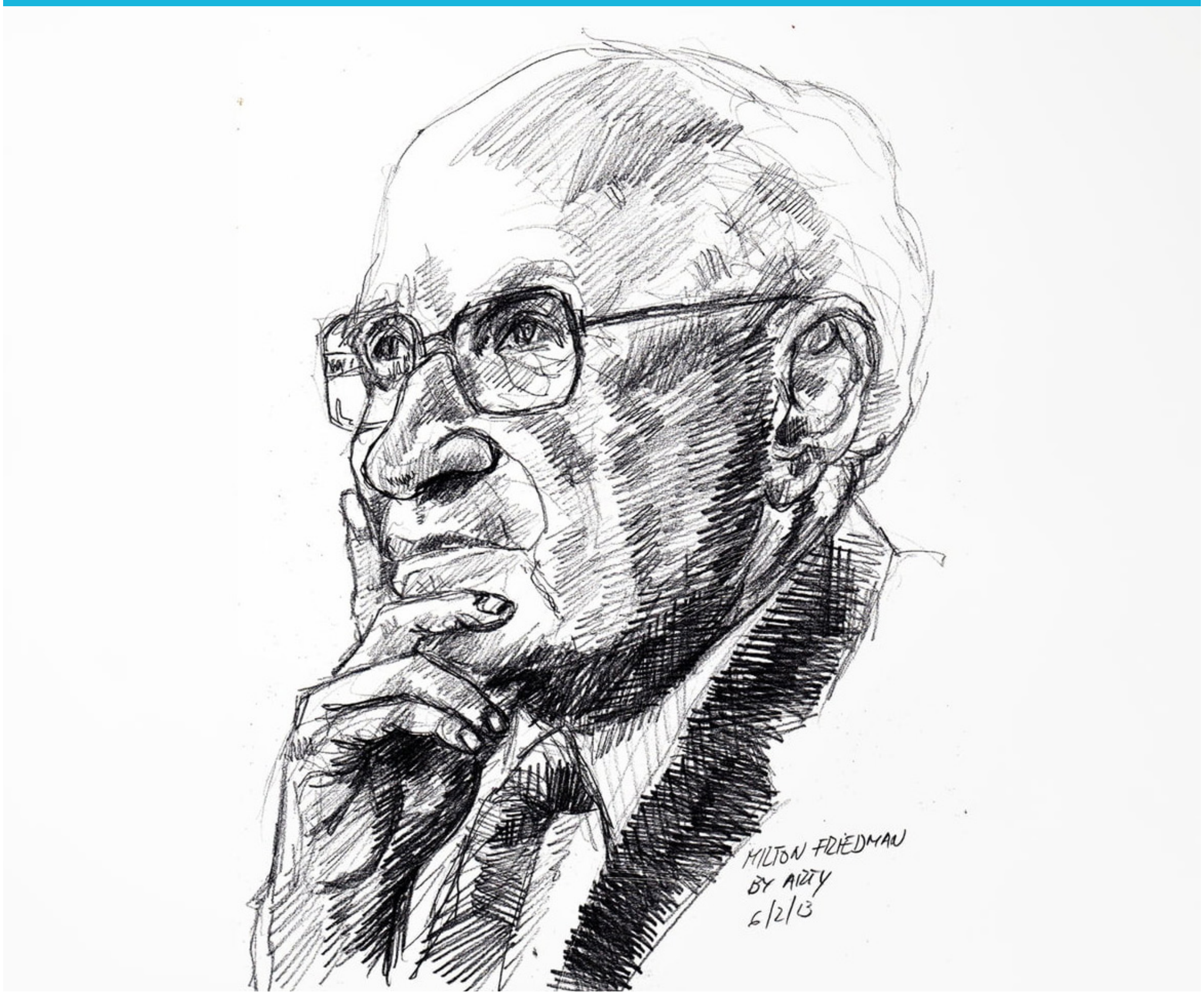
2023 ESSAY CONTEST WINNERS

WHAT WOULD OUR ESSENTIAL SCHOLARS SAY ABOUT THE WORLD TODAY?



Essay Contest Winner
Canada's Road to Serfdom

Quote Wall
Steve Forbes

Podcast
Adam Smith - Through Sympathy There is Progress

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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.

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WELCOME

Dear Readers:

Fall is in the air! The leaves are changing and it's time to cozy up with a pumpkin spice beverage of your choice—as well as this fall issue of the *Canadian Student Review.*

In this edition, we highlight the winners of the 2023 Student Essay Contest. We received several hundred submissions in which students turned to the ideas of our Essential Scholars to help them analyze and understand some of the more difficult problems facing our world today. Joseph McKinnon discusses the challenge of transitioning to a low-carbon economy while maintaining innovation, Yaser Elfahli explores policy responses to a global banking crisis using Milton Friedman's theories, Louis Mercier addresses the challenges facing Montreal's downtown core now that many employees are working remotely, Joseph Cressatti analyzes the Rogers-Shaw merger in Canada's telecom industry through F.A. Hayek's lens, Ethan Yang examines Canada's shift away from capitalism towards socialism, and Saqib Syed explores the economic impact of AI and its effect on innovation by drawing on Joseph Schumpeter's creative destruction theory.

In addition to these student essays, we have also recommended a podcast that assesses Adam Smith's concept of sympathy, and included a salient quote from Steve Forbes. We've wrapped up the issue with two of our favorite Explore Public Policy Issues webinar series recordings that focus on our Essential Scholars.

If you or someone you know wishes to contribute content to the *Canadian Student Review*, please have them contact Ryan Hill directly at Ryan.Hill@fraserinstitute.org.

Best,

Ryan

CREATIVE DESTRUCTION AND CANADA'S GREEN ENERGY TRANSITION: WHY POLICY MANDATES HURT INNOVATION

JOSEPH MCKINNON

The rise of the automobile in the early 20th century, which led to the displacement of the horse and buggy as the dominant means of transportation, is often cited as a prime example of Joseph Schumpeter's idea of *creative destruction*. The idea that innovation will disrupt a major aspect of the existing economy has also been used to describe the international push towards an unprecedented economic and social transition, where a low-carbon economy will displace many of our current technologies and systems. This approach towards "economic greening," which emphasizes the advancement of sustainable energy and the reduction of fossil fuel use, is progressive as it looks toward achieving new social and economic goals. However, progress and innovation are not synonymous. As illustrated by Canada's "Net-Zero Emissions by 2050" initiative and by the many agreements to come out of the United Nations climate change conferences, there are distinct governmental and intergovernmental directives to promote and mandate aspects of this energy transition. Schumpeter's model of capitalistic innovation is essential to understanding economic transitions, but Canada's current suite of net-zero policies is creating a situation where destruction is preceding creation, as policy mandates destroy aspects of industry before there is any overwhelming economic pressure that would result in this naturally. When it comes to Canada's sustainable energy transition, are governing institutions putting the buggy before the horse?

The innovative quality of a new method or commodity is measured by how well it is propagated and sustained in the economy. Novelty in and of itself does not equal innovation; it is the change in some aspect of productivity that defines the typical notion of innovation. As Schumpeter illustrates throughout his works, innovation is an "evolutionary process" (1943: 82), where novelty interacts with the existing elements of the economy to produce new forms of production, and this process "is the outstanding fact in the economic history of capitalist society" (1939: 82). Schumpeter describes innovation as an effect of revolution, whereby the pressure of "competition which commands a decisive cost or quality advantage" establishes new variations of production which "sets and keeps the capitalist engine in motion"

THE IDEA THAT INNOVATION WILL DISRUPT A MAJOR ASPECT OF THE EXISTING ECONOMY HAS ALSO BEEN USED TO DESCRIBE THE INTERNATIONAL PUSH TOWARDS AN UNPRECEDENTED ECONOMIC AND SOCIAL TRANSITION

[1] *As of June 5th, 2022.*

(1943: 83-85). It is through the process of creative destruction that this system is sustained since novelty, when favoured by the capitalist system, disrupts the current market and makes some aspects of the economy obsolete, displacing the old with the new. Market failures, government mandates, and imperfect information create many obvious exceptions to this rule, but this does not undermine the driving principle and the obvious effect that it has had on the history of society.

In contrast to this process, policymakers are increasingly relying on policy mandates to ensure that the government's low-carbon targets will be met. Among the many prescriptive measures of Canada's net-zero plan, the federal government has developed an emissions cap for the oil and gas sector (Canada, 2022), a clean fuel mandate (Environment and Climate Change Canada, 2023a), and a zero-emission vehicle sales requirement (Transport Canada, 2022), all of which will be in effect by 2030. This approach is not unique to Canada. Many developed nations have pursued similar policy strategies, but what is interesting is how these policies interact with the existing structures of innovation within these capitalist societies. Schumpeter illustrates that disruption within existing sectors of the economy is a natural effect of the innovative process, but this occurs through the creation of alternatives that have real and visible advantages in cost and quality, allowing novelty to displace the incumbent industry through market pressure. When the process of creative destruction is inverted, policymakers create inefficiencies and inaccuracies as they attempt to facilitate innovation following mandated industry destruction.

Fundamentally, the driving force behind the current energy transition and aspiration for sustainable innovation is based on a set of preferences and value judgments that quantify the impacts of climate change in economic terms. Like many nations that signed the Paris Agreement, Canada has developed a system of approaches to its energy policy that are designed to uphold the goal of the planet not exceeding 1.5°C of warming. This target structures the justifications for the national approach to climate change. To achieve this goal within complex economies pricing mechanisms are used; the two main ones being the imposed carbon price and the estimated social cost of carbon (SCC). The carbon price is implemented to modify the actual price of a good after accounting for the carbon emissions, and the SCC is developed to represent the total cost incurred by society from the damages created by one extra ton of carbon dioxide emissions (Stern and Stiglitz, 2021: 1-3). In principle, by internalizing the negative impact of greenhouse gas (GHG) emissions through policies like carbon taxes, the actual cost of climate change can be integrated into the market mechanisms that drive innovation for, as Schumpeter illustrates, if output is produced at a lower price, and if input costs are unchanged, then innovation has occurred (1939: 85). Therefore, having an integrated cost structure for emissions modifies the price relationship between incumbent and new industries, which enables consumers, producers, and our governing institutions to actualize the innovative potential that was obscured by this externality.

According to empirical research, the effect of the impact of carbon pricing on innovation for low carbon technologies and energy solutions has been mixed (Lilliestam et al., 2021; van den Bergh and Savin, 2021). Studies suggest that solely accounting for the externalities of fossil fuels has not been effective at promoting green innovation (Popp, 2019: 18). Information gaps affect the efficiency of market processes, so the shortcomings of carbon pricing across many jurisdictions could result from the uncertainty in some of these fundamental aspects of climate policy, like optimal warming and the difference between the SCC and carbon price. William Nordhaus, who was awarded a Nobel prize for his work in climate change economics, has stated that when accounting for both the SCC and the cost of deep carbon reduction, "the cost-benefit optimum rises to over 3°C" (2018: 452), far greater than the Paris target. This means that the total cost of the global effort to ensure the planet not exceeding 1.5°C warming may lead to a greater net expense then that of a higher temperature when accounting for the benefits received form avoided emissions. And when it comes to the SCC, the most recent evaluation puts the Canadian estimate at $294/tonne in 2030, similar to the US SCC after currency correction, but substantially higher than the $170/tonne targeted carbon price for 2030. These discrepancies are based on the fact that the SCC is evaluated on the likelihood of specific climate impacts and adaptability to compensate for climatic change. Thus, "studies indicate that the SCC is highly uncertain" due to these unknowns (Nordhaus, 2018: 454). Because these misalignments weaken the relationship between the two prices, the obscured assessments for cost and risk may lead to unclear market incentives, thus dampening the impact of carbon pricing on innovation.

Overall, there appears to be a weak relationship between carbon pricing and low carbon innovation. This may be due to unclear information and policy inefficiency, but like any economic choice, it may also result from conscious trade-offs. Consumers and producers appear at a superficial level to understand the cost of GHG emissions and the risks of climate change, but if alternatives to fossil fuels appear costly, unavailable, or uncertain society will accept the burden of the SCC as the additional cost of using the products and services we are accustomed to. Polling suggests that a clear majority of Canadians believe that not acting on climate change would be a failure (McLeod Macey, 2020) and yet a majority are also unwilling to pay greater carbon price (Sébastien, 2022). While there is some consumer pressure on companies to embrace more progressive environmental and social goals (Simpson, 2021), marginal changes within production may only be "mere additions to the existing... industry" rather than true innovation (Schumpeter, 1939: 91). Part of the federal government's approach to correcting this innovation gap has been to establish restrictive mandates on industry practices to increase innovative pressure, but such mandates undermine the fundamental principle given for the justification of carbon pricing—that it provides an efficient incentive integrated into the natural market process to allow for reasonable consumer choice.

There is a place for the government in the innovative process. Canada's CANDU nuclear reactor design was a very successful government-led project. It disrupted the global energy market and supplanted more carbon-intensive energy sources where it was adopted (Natural Resources Canada, 2022). Today our governing institutions have taken an active role in investing in the emerging hydrogen industry and the adoption of small modular reactors, both of which could be vital to long-lasting decarbonization. But there is no guarantee that these emerging technologies will be sufficient alternatives to replace the incumbent energy supply by the critical target dates set out in Canada's net-zero plan. For that reason, the prescribed destruction of some essential aspects of the economy for the sake of carbon reduction could deeply undermine the process of creative destruction. If the SCC and the carbon tax could effectively internalize the cost of GHG emissions, then allowing informed consumer choice to work over a naturally emerging time frame is key for the kind of innovation required for a truly sustainable low-carbon transition.

Schumpeter explained that capitalism is a "method of economic change," and thus a low carbon transition can be facilitated by the innovative creative destruction process. However, central to this destructive aspect is that it be first compelled by the internal pressure of the creation and adoption of what is "new" (Schumpeter, 1943: 83). The shift from the horse and buggy to the automobile is a perfect example of creative destruction: the automobile was increasingly adopted as it captivated consumer preference by providing a superior means of transportation, leading the horse and buggy to fade away. In contrast, our current suite of net zero policies disregards some fundamental aspects of the innovative process. Hence, it is incorrect to use the historic transition away from the horse and buggy to justify today's forced obsolescence. And while it is important to address the hidden costs of fossil fuels to ensure that there is appropriate pressure on incumbent industry to innovate, restrictive policy mandates undermine efficient SCC integration and broadly ignore the process of creative destruction. ◆

Joe McKinnon is a recent graduate of Carleton University, where he completed his Master's degree in Public Policy. He is currently a consultant at Hill + Knowlton Strategies and remains keenly interested in environmental economics and energy policy.

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MILTON FRIEDMAN'S PERSPECTIVE ON THE 2023 GLOBAL BANKING CRISIS

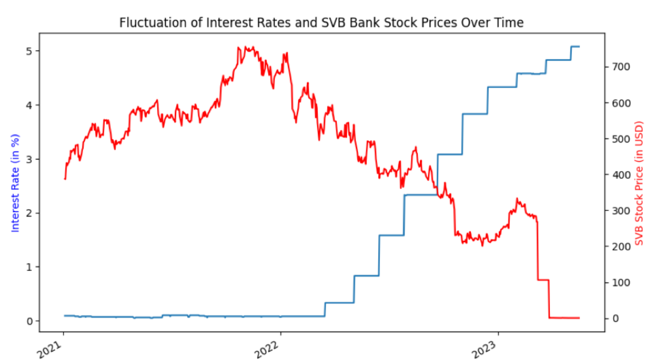
YASER ELFAHLI

The 20th century economic landscape was significantly shaped by the theories of Milton Friedman, a Nobel laureate known for his staunch advocacy of free markets and minimal government intervention. In the face of the 2023 global banking crisis, how would Friedman's economic theories and principles apply? This essay delves into Friedman's views on monetary policy, government intervention, and financial market regulation to construct a hypothetical response to the ongoing crisis.

As the world grapples with the challenges posed by the 2023 global banking crisis, it becomes imperative to explore how Friedman's economic theories and principles can provide invaluable insights. By incorporating his perspectives on monetary policy, limited government intervention, and market-based solutions, policymakers can navigate the complexities of the crisis, better understand the potential risks and benefits associated with different policy approaches, and ultimately forge a comprehensive response that balances stability, economic freedom, and long-term sustainability.

In March 2023, the global banking industry experienced a shock following the collapse of three mid-sized U.S. banks. The underpinning reasons included significant exposure to the erratic cryptocurrency market and losses from Treasury bonds that depreciated as a result of surging market interest rates (Ozili, 2023). The collapse had a domino effect, shaking the financial world and prompting urgent regulatory intervention. Figure 1 outlines the rise in the Federal Funds Effective Rate and plummeting SVB bank stock prices, illustrating the crisis's magnitude.

Figure 2: Trends in U.S. Money Supply (M2) and Inflation Rate (CPI) Over Time



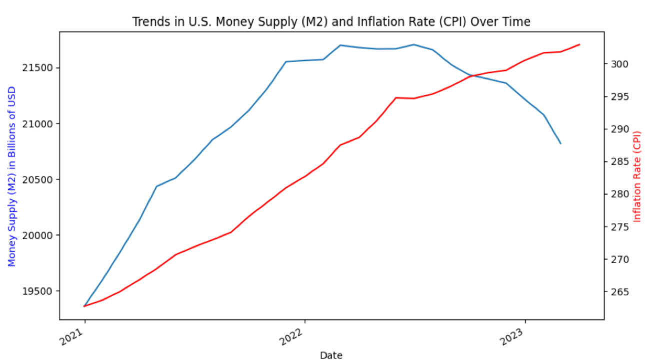
Sources: See Appendix 1 and 2.

Friedman, a prominent figure in the Chicago School of Economics, would likely offer a critical analysis of the events leading to the crisis and the consequent government interventions. His economic views, deeply rooted in free-market principles and limited government intervention (Friedman, 1968; Friedman, 1982), offer a distinctive lens through which to evaluate the crisis.

One cornerstone of Friedman's economic theories is his restatement of the quantity theory of money (Friedman, 1956), in which he asserts that inflation is directly proportional to changes in the money supply. If alive during this crisis, Friedman would likely voice concerns about the government's overreliance on aggressive monetary expansion as a remedy, arguing it could lead to uncontrolled inflation. His stance on monetary policy and its connection to inflation was often highlighted in his work, suggesting a potential discordance with aggressive expansionary policies often used in crisis management (Friedman, 1982).

This concern is visually captured in Figure 2, which outlines the relationship between the money supply and the inflation rate over time.

Figure 2: Trends in U.S. Money Supply (M2) and Inflation Rate (CPI) Over Time



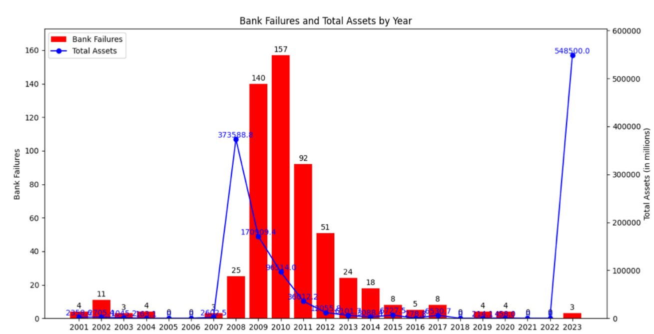
Sources: See Appendix 1 and 2.

Figure 2 clearly illustrates the potential pitfalls of unchecked money printing. It shows that an escalation in the money supply inevitably leads to a concurrent rise in the inflation rate, thereby reinforcing Friedman's stance that inflation is invariably linked to monetary factors (Friedman, 1968; Friedman, 1982).

Friedman also had definite views on financial market behaviour and government intervention. He was a firm advocate for market consequences, and would likely critique the banks for making risky investments. In his view, these institutions should be responsible for their actions. He might argue that although government intervention may prevent short-term disaster, it could inadvertently establish a moral hazard (Friedman and Schwartz, 1971). If governments bail out overly risk-taking banks, they could unintentionally encourage a future recurrence of similar risky behavior, as banks might operate under the assumption that they would always be rescued from their financial missteps.

Figure 3 provides a historical overview of financial crises. It shows the relationship between bank failures and the banks' corresponding total assets, illustrating the scale and economic impact of these crises. Notably, the data points corresponding to the 2008 and 2023 crises warrant special attention due to their significant impact on global financial stability.

Figure 3: Bank Failures and Total Assets by Year



Sources: See Appendix 1 and 2.

Figure 3 reveals that the current 2023 banking crisis is the second significant bank failure of the 21st century with the highest recorded total assets affected, which raises concerns about the potential consequences of government intervention. Critics such as Friedman could argue that such intervention might cultivate moral hazard as banks could view government assistance as a safety net and continue to engage in risky behaviour in the expectation of future rescues (Friedman, 1982).

Some argue that immediate government intervention is crucial to prevent a banking catastrophe. However, Friedman's economic philosophy would likely have led him to propose potential policies to address the 2023 banking crisis or suggest adaptations to existing policies. Considering his emphasis on limited government intervention and rule-based monetary policy (Friedman, 1953; Friedman and Schwartz, 1971), there are a few possibilities to explore.

First, Friedman would advocate for a commitment to price stability as the primary objective of monetary policy (Friedman, 1982). He would emphasize the importance of maintaining a low and stable inflation rate through a disciplined approach to money supply growth (Friedman, 1968). This would involve setting clear targets for inflation and ensuring that monetary policy actions are consistent with achieving those targets.

Then, as a specific policy measure, Friedman would likely propose a gradual reduction in government intervention in the banking sector. He would argue for deregulation and increased competition, allowing market forces to determine the viability of financial institutions (Friedman and Schwartz, 1971). This approach would encourage efficient allocation of resources, discourage moral hazard, and reduce the likelihood of taxpayer-funded bailouts.

Additionally, Friedman would emphasize the need for transparency and accountability in financial markets. He would support measures to enhance market participants' access to relevant information and ensure accurate and timely reporting of financial data. By promoting transparency, Friedman believed that markets could function more effectively, reducing the risk of information asymmetry and speculative excesses (Friedman, 1953).

Another policy avenue Friedman might explore relates to the role of central banks as lenders of last resort. While acknowledging the necessity of such a function during crises, he would caution against excessive discretion in providing emergency liquidity (Friedman, 1982). Friedman would likely advocate for clear and predefined rules governing central bank interventions, ensuring they are carried out judiciously and without distorting market mechanisms (Friedman and Schwartz, 1971).

Furthermore, Friedman's perspective would likely lead him to question the effectiveness of fiscal stimulus measures during the banking crisis. He would caution against excessive government spending and deficits, highlighting the potential long-term negative consequences, such as inflationary pressures and debt burdens (Friedman, 1982). Instead, he might propose policies that prioritize reducing government spending and promoting private sector-led investment and entrepreneurship as the key drivers of economic recovery.

In conclusion, Friedman's economic theories offer a framework for considering potential policies and adaptations to address the 2023 banking crisis. By emphasizing price stability, limited government intervention, transparency, and market-driven solutions, his insights can inform discussions on how to create a more stable and resilient financial system. Incorporating Friedman's ideas into policy deliberations can help steer decision-makers toward implementing measures that will encourage sustainable economic growth while minimizing the risks of future crises (Friedman, 1968; Friedman, 1982; Friedman and Schwartz, 1971). ◆

Yasser Elfahli is currently pursuing a graduate degree in Applied Economics at the University of Ottawa. His primary research interests lie in monetary policy and empirical industrial organization. Yasser is keen on exploring the potential of data analysis and machine learning to enhance understanding and predictions in these fields. In the future, he envisions pioneering innovative approaches in economic analysis by integrating advanced computational techniques.

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APPENDIX 1 : DATASETS

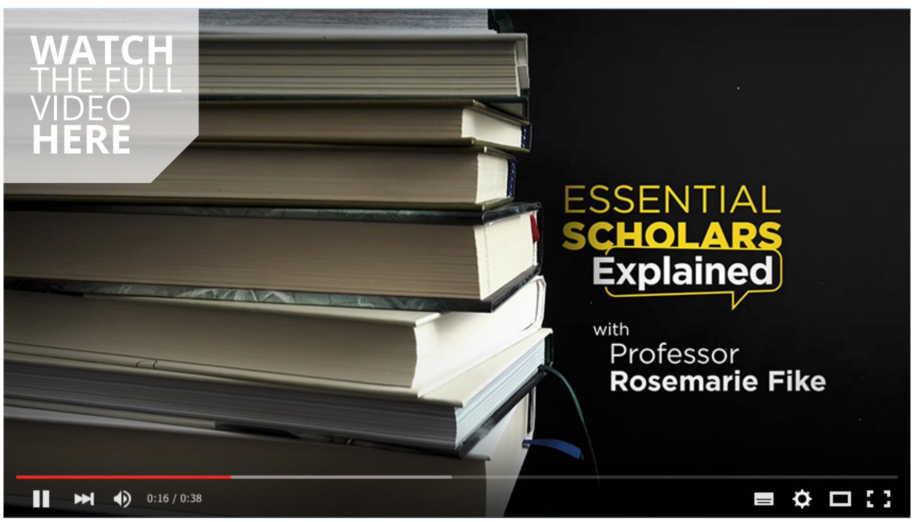
Name	Description	Source
DFF	Federal Funds Effective Rate	Federal Reserve Economic Data
SIVBQ	SVB Financial Group Stock Price	Yahoo Finance
CPIAUCSL	Consumer price index (1984=100)	Federal Reserve Economic Data
M2SL	Money supply (M2 level)	Federal Reserve Economic Data
bank_failures	Number of bank failures	Federal Deposit Insurance Corporation (FDIC)
total_assets	Total assets (in millions)	Federal Deposit Insurance Corporation (FDIC)

APPENDIX 2: PYTHON CODE/GRAPHS

PODCAST

[ADAM SMITH—THROUGH SYMPATHY THERE IS PROGRESS]

JAMES R. OTTESON, PROFESSOR OF BUSINESS ETHICS AT THE UNIVERSITY OF NOTRE DAME AND CO-AUTHOR OF *THE ESSENTIAL ADAM SMITH*, JOINS HOST ROSEMARIE FIKE TO DISCUSS SMITH'S CONCEPT OF SYMPATHY, AND HOW PAYING ATTENTION TO THE FEEDBACK OUR BEHAVIOURS ELICIT FROM OTHERS IS WHAT ENABLES PROGRESS AND CHANGE WITHIN SOCIETY.



HOW THE UNWILLINGNESS TO LET BUSINESSES FAIL HINDERED COVID RECOVERY

LOUIS MERCIER

Every week in Montreal a new article highlights the poor state of the downtown city core. Offices are under-utilized and small businesses struggle to stay open during regular hours as there are no "regular" hours anymore. The relative absence of workers, driven by the teleworking trend, is seen as the potential cause of a long-term slump and the destruction of a dynamic and innovative economy in the downtown core. Business leaders are calling for the return of workers to the office on a full-time basis. At the same time, large and small corporations are implementing hybrid models that allow their teams to work from home 2 to 3 days per week. This is a contradictory if not hypocritical stance that has been caused, apparently, by pandemic-driven changes to the labour market. On the one hand, some believe that the physical presence of the workforce is critical to the long-term viability of Montréal's city center. On the other, most business leaders are concerned with the protection of their brand as employers and feel they need to maintain teleworking as a part of their offering. Consequently, Montreal finds itself at an impasse. To break the stalemate, there is a need for change, and what better way to bring about change than through innovation and entrepreneurship? Joseph Schumpeter's theory of creative destruction offers a vision of how this change can occur. It states that "The fundamental impulse... incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one. This process of Creative Destruction is the essential fact about capitalism" (Schumpeter, 1943/2016: 79-80). Schumpeter's theories will provide enough insight to understand what lead the federal government to create barriers to innovation, what the result of those barriers is for downtown Montreal, and which actions can bring solutions to energize businesses in the city.

Pressure from lobbyists led the federal government to create an economy-wide barrier to entry that clashes with Schumpeter's theory of creative destruction. In the first year of the pandemic, a new record was set for "efforts to influence," as lobbyists tried to shape the COVID relief measures the government was putting in place (Thompson, 2021, May 14). This push from private actors, including many corporations, to secure their position is a normal part of the process of creative destruction.

As Schumpeter states, “Such struggles for a share in profits are less important than the struggles to conserve the stream of profit itself… there is always an innovating sphere warring with an ‘old’ sphere, which sometimes tries to secure prohibition of the new ways of doing things” (Schumpeter, 1939/2007: 105-106). As such, the measures that businesses take to secure their position are a natural part of the competitive process. What is not natural is the government picking a side in this war between the “old” and the “new.” By offering widespread subsidies for pre-existing businesses, the government created a competitive environment that worked against innovators. Businesses that had an active payroll as of March 15, 2020, were able to benefit from subsidies no matter how little their revenues dropped. (Canada, 2022). These policies made it harder for businesses to be created because of an unfair advantage provided to established businesses. COVID brought a lack of employment opportunities and security, which are amongst the best motivators for entrepreneurial action (Accion Opportunity Fund, 2023). In trying to safeguard the economy in the short term, government intervention brought forth negative long-term consequences, which we are starting to see today.

Federal policies aimed at maintaining economic activity, like the Canada Emergency Rent Subsidy (CERS) were unable to prevent the consequences of COVID-19 on downtown Montreal. They only postponed these impacts and, in turn, slowed the recovery process. The delayed consequences that these measures brought forth can be seen in the office vacancy rate in downtown Montreal. Between 2018 and 2021, prior to the pandemic, the office vacancy rate increased by 1 percentage point from 11 percent (Maravita and Zakem, 2018) to 12 percent (Timolien, 2021. But as of the first quarter of 2023, the office vacancy rate has climbed 5.4 percent to 17.4 percent (Srouji, 2023). These numbers show that in downtown Montreal, many office renters relied on government subsidies to keep their business running until the program ended in May 2022 (Canada, 2022). As soon as the government money stopped coming in, many businesses were unable to continue operating. In fact, according to Statistics Canada, “During the fourth quarter of 2021, one-third of businesses reported that the absence of government support programs over the next 12 months would have a medium-to-high impact on their survival” (Statistics Canada, 2022). Ultimately, this proved true: when the subsidies stopped, the office vacancy rate exploded because the organic process of creative destruction had been diverted. Supporting this point is Schumpeter’s view on these types of government interventions and their hostility to his definition of competition, “the competition from the new commodity, the new technology, the new source of supply, the new type of organization… which strikes not at the margins of the profits and the outputs of the existing firms but at their foundations and their very lives” (Schumpeter, 1943/2016: 81). In accordance with this definition, in Schumpeter’s state of perfect competition any business that failed to innovate enough to break even during the pandemic should have been left to their own devices. During the pandemic, the business insolvency rate was lower than its pre pandemic level (Lin and Hoffarth, 2023). The use of public funds to subsidize the failure of some has, in turn, created a barrier to both entry and exit which has thwarted the very recovery the government should have been working towards.

Montreal already has an existing, rich innovation ecosystem. The government could have oriented its efforts towards key areas in ways that could have been as simple as offering tax cuts or exemptions geared toward specific sectors. With over 1,300 startups and attracting the second-highest amount of venture capital in Canada (Startup Montréal, 2023), Montreal has positioned itself as a city that values innovation and entrepreneurship. As such, funneling talent, expertise, and capital towards fixing specific issues, including finding new and efficient uses for the empty office space in downtown Montreal, would allow the process of creative destruction to take effect and result in new effective combinations of resources that would reshape the economy. Deploying tax cuts is the best way for governments to guide efforts where they are needed. This is an idea that is supported by Schumpeter's assertions on taxation. He states: "If this profit were taxed away, that element of the economic process would be lacking which at present is by far the most important individual motive for work toward industrial progress. Even if taxation merely reduced this profit substantially, industrial development would progress considerably more slowly" (Schumpeter, 1991: 114). By extrapolation, it is possible to conclude that a reduction in taxation would result in increased development. The improved potential for profitability would bring in capital investment which, for Schumpeter, is the first indicator of the potential for growth (Schumpeter, 1943/2017). This would then bring more workers downtown to consume and support the providers of consumer goods and services, which would, in turn, expand growth to more sectors of the economy.

Capitalism, then, requires entrepreneurs and innovators. They are the keys to finding the solutions for energizing downtown Montreal. Consequently, governments should avoid enacting programs that keep failing businesses afloat as doing so impedes the creation of new, innovative businesses that will take their place. Putting up barriers to entrepreneurship results in missed opportunities for future growth and development. Furthermore, governments should reduce taxes for new businesses in key sectors, as doing so would bolster capital investments in these sectors and support innovation. These ideas are not new. Montreal's support of its innovation ecosystem is a manifestation of the importance of Schumpeter's economic theory, specifically the notion of creative destruction and its benefits in economic development. This might be the case, but that does not mean that market forces are going to comply with the need for innovation. Compared to the beginning of 2022, this year has seen an 82 percent drop in venture capital investments (Mandel, 2023, May 5). Without more incentive to invest, capital investments will continue to decrease, bringing us further away from the change that downtown Montreal desperately needs. Inaction is not a solution. ◆

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A PHONE CALL FROM SERFDOM: EXAMINING CANADA'S TELECOM INDUSTRY THROUGH A HAYEKIAN LENS

JOSEPH CRESSATTI

In March 2023, the Canadian government approved the largest takeover in Canadian telecommunications history: Rogers purchased Shaw Communications for approximately $20 billion (Berkow, 2023). Given that Canadians pay inordinately high prices for their telecommunications products, there has been considerable skepticism about the federal industry minister's claim that this unprecedented merger will introduce competition to the industry and "lead to lower prices" for Canadians (Champagne, 2023). While pundits have provided a bevy of opinions, the works of F.A. Hayek offer more clarity. It is my contention that Hayek would have an abundance of harsh criticism for the firms and officials involved. Succinctly, Hayek would hold that the "planning" of Canada's telecoms industry is responsible for the high prices paid by consumers and the oligopolistic structure of its market—with the Rogers-Shaw merger being a terminally flawed remedy. This essay outlines Hayek's general ideas, with special emphasis on his views of monopolies, before providing a Hayekian critique of the Rogers-Shaw deal and the Canadian telecom industry more broadly.

The primary thesis of F.A. Hayek's most famous book, *The Road to Serfdom*, is that a socialist economy—one in which private enterprise is abolished and replaced by central planning—is inferior to a free market economy (Hayek, 1944/2007: 83). The centrally planned economy's inferiority is twofold. First, the inability of any planner, no matter how powerful, to adequately process the information necessary to match everyone's needs with the scarce resources available makes it inefficient and liable to fail (p. 95). Second, the control over the economy that planners would need to attempt such an effort necessarily requires restricting individual freedoms, sending citizens down "the road to serfdom" as their liberties are stripped away at the whim of bureaucrats (Boudreaux, 2014: 2).

Despite this overarching thesis, Hayek is not the laissez-faire jingoist his detractors unfairly portray him as being. Instead, his works impart a more nuanced view that permits several areas for government intervention. Recognizing the limitations of the free market, Hayek allows for state action in areas where competition proves

CANADIANS PAY AMONG THE HIGHEST PRICES FOR THEIR WIRELESS PRODUCTS ACROSS A VARIETY OF SERVICE LEVELS

[1] *As of June 5th, 2022.*

unsuitable: the provision of public goods, the prevention of public harms, and the establishment of a legal framework, among others (Hayek, 1944/2007: 87). Most important for this essay is Hayek's limited and sometimes equivocated permission for government intervention against monopolies. While not inherently opposed to large and dominant firms *per se*, Hayek notes that these monopolistic firms often either collude with central planners or act in ways equivalent to them. Hayek roughly groups monopolists' problematic behaviours into two categories. First is a "monopolist's capacity to withhold services on which people are dependent," which manifests in their ability to charge extortionate prices (Paul, 2005: 178). The second concern is "instances in which a monopolist can prevent competition by others" (pp. 178-179). Here, Hayek is not concerned with Schumpeterian monopolies brought about by technological advancement, but rather those "attained through collusive agreement and promoted by public policies"—i.e., those protected or planned by the state (Hayek, 1944/2007: 92-93). This point holds true for oligopolies, as Hayek observes that "the growth of oligopolies and cartels has since 1878 been systematically fostered by deliberate policy" (p. 93). Like central planners, protected oligopolists limit consumer choice and stymie innovation as they collect their rents in an uncompetitive market. As such, it may be necessary for the government to intervene to prevent a permanent and detrimental monopoly.

This theoretical approach can be used to ascertain whether the Canadian telecom industry is monopolistic or oligopolistic, as well as if it needs intervention. A look solely at competitive dynamics supports an oligopolistic diagnosis: Bell, Telus, and Rogers each control about 30 percent of the industry, with the remaining 10 percent left for regional and small competitors (McGrath, 2022: 8). Even worse, as figure 1 demonstrates, a lack of geographically comprehensive wireless coverage means that much of Canada faces a duopoly (Rewheel, 2019: 4). It should be noted, however, that competitive dynamics alone are insufficient in determining the need for government intervention. The U.S., for example, has significantly lower prices despite also being dominated by a few large firms—Verizon, T-Mobile, and AT&T comprise approximately 60 percent of the wireless industry (Irigoyen, 2023: 8). While still less concentrated than in Canada, the U.S. industry's dominant firms yet lesser prices demonstrate that the behaviour of said firms, among other factors, play an important role in determining price.

As such, it is imperative to determine whether Canada's oligopolists exhibit the aforementioned problematic behaviours. The first behaviour, the ability to charge excessive prices on necessities, is certainly present. Canadians pay among the highest prices for their wireless products across a variety of service levels (Rewheel, 2022: 3). For example, the minimum price for a 1,000-minute, 100-gigabyte plan is 14 times more expensive in Canada than in France (Rewheel, 2022: 3). While some might argue that telecoms are not a necessity of life and thus the prices cannot be excessive, Hayek's writings hold otherwise. In *Law, Legislation, and Liberty*, he uses a ball bearing as an example of an essential product, suggesting that the modern technologies that society has grown dependent on are included in the definition of essential (Paul, 2005: 198).

The presence of the second harm, unnatural prevention of competition, is evidenced by Canada's telecom industry having the second highest barriers to entry among OECD nations (figure 2). While some barriers are natural (i.e. Canada's vast geography), public policies that hinder the ability of smaller firms to compete are not. The 20 percent limitation on foreign investment in significant Canadian telecom firms, for example, deprives small firms of the capital needed to become competitive (Geloso, 2019). More poignantly, in the two years prior to the CRTC's 2021 decision not to lower wholesale internet rates—an outcome favoured by the major firms—lobbyists for Bell, Rogers, Telus, and Shaw had over six hundred meetings with the federal government (Dobby, 2021). By contrast, small ISPs had forty-nine meetings in the same period (Dobby, 2021). The ability of oligopolists to overwhelmingly influence policymakers over the objections of competitors fits squarely with Hayek's second concern. Given all the evidence of a problematic oligopoly, government intervention to prevent the further concentration of market power may prove useful. How the government did intervene in the Rogers-Shaw merger, however, deserves scrutiny.

After two years of negotiations between Rogers and the federal government, the approximately $20 billion Rogers-Shaw merger was approved with conditions. The most notable of these stipulations is the mandated sale of Freedom Mobile's wireless spectrum licenses to Videotron, a Quebec-based regional competitor, in the hopes that it will lower prices by making Videotron more competitive (Champagne, 2023). Additionally, Videotron is unable to sell the licenses for a decade, must offer plans 20 percent cheaper than other major providers, expand its network, and provide a data bonus to existing customers (Champagne, 2023). For Rogers, the stipulations include a mandate to create jobs in Western Canada and invest several billion in various technologies and infrastructures (Champagne, 2023).

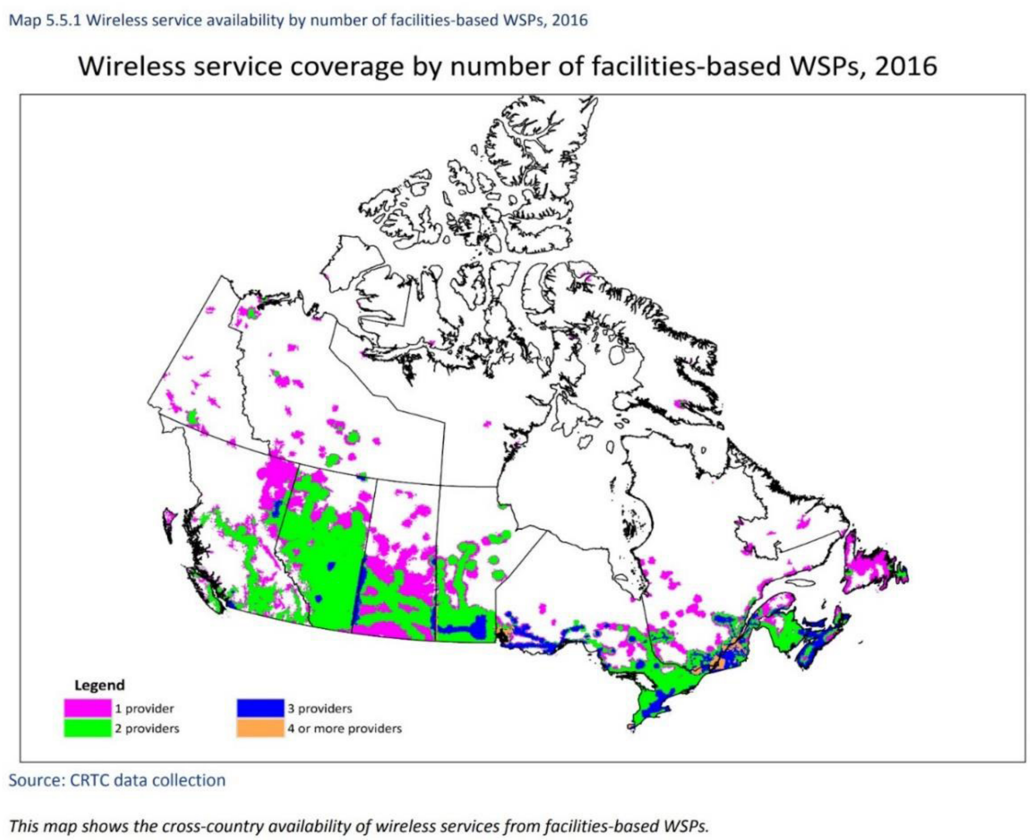
The first Hayekian criticism is the means by which the intervention occurred: a negotiation between a firm and government resulting in a "deal." Consistent throughout Hayek's works is an emphasis on the "Rule of Law." In this case, "the 'Rule of Law' means law that does not aim at particular persons but only the general case" (Paul, 2005: 200). This deal clearly violates the standard as the intervention is case-specific and is thus inherently non-neutral. If, for example, an American telecom company were to have merged with Shaw instead, would it have been offered the same terms? Rather than encouraging competition within known legal boundaries, the action gives an incentive to firms to ingratiate themselves to the state and its regulators in the hopes of securing preferable deals in the future.

Beyond this violation of neutrality, Hayek would have found issue with the stipulations ensconced in the deal: mandated investments in technology, job creation quotas, and even a price ceiling for one of the parties. While intended to reassure Canadians of the deal's validity as an invigorator of competition, the stipulations are counterintuitive and could end up raising prices or impairing competition. The price ceiling imposed on Videotron is the starkest example of this. By limiting the ability of the supposedly empowered "fourth national player" to price its products according to market signals, the stipulations limit its ability to compete viably. Should technological advances necessitate capital investment or should market conditions push the price ceiling into unprofitability, Videotron would be prevented from raising prices to competitive levels. By determining the price levels at which firms can produce, the government engages in the "planning" that Hayek so harshly condemns. Mandating job creation in the West and a new headquarters in Calgary similarly constitutes central economic planning. Again, Hayek's thoughts on this redistributive planning are clear: "measures to enforce 'distributive or social' justice' and to centrally plan economic activity… violate the equal treatment stricture of the rule of law" (Paul, 2005: 172). Why should a firm be compelled to hire employees in a region if they could do so more profitably elsewhere? Further, the oligopolistic market leaves little to prevent the oligopolist from passing these additional costs on to consumers.

The final and most damning critique of the deal is the limited evidence that it will actually induce competition. As previously mentioned, Bell, Telus, and Rogers each control about 30 percent of the industry (McGrath, 2022: 8). While Videotron does become a more national firm thanks to the foothold it will gain in Western Canada thanks to the deal, this merely reshuffles the remaining 10 percent of the industry rather than dismantling the oligopoly. Even if Shaw's entire market share were transferred to Videotron, it would still be dwarfed by the oligopolists. Further, the deal expands Rogers' holdings in all non-mobile carrier aspects of the industry (i.e., cable and internet). Essentially, the deal trades away the industry's fourth and fifth largest firms for a firm that is less than the sum of its component parts, while also providing an existing oligopolist with greater resources in numerous key product areas.

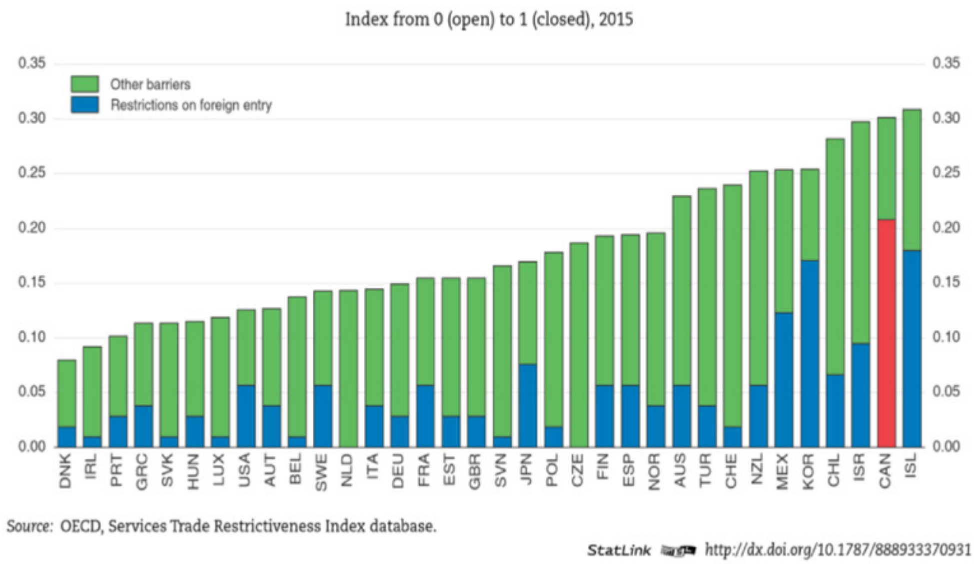
F.A. Hayek's works provide a nuanced but clear framework for critiquing the Rogers-Shaw merger. Having established the existence of an unnatural oligopoly, Hayek permits government intervention to create competition. Yet the actual intervention in the Rogers-Shaw case would have left Hayek perturbed: both the deal in principle and the stipulations placed on participants run contrary to what Hayek espoused—to say nothing of its ineffectiveness in altering the industry's competitive dynamics. Ultimately, Hayek would have been aghast at what planning by oligopolists and bureaucrats has begotten in the Canadian telecom industry. ◆

Figure 1: Wireless Service Coverage by Number of Facilities-Based WSPs, 2016



Source: Rewheel Research, 2019: 4.

Figure 2: Foreign Entry Restrictions in Telecommunications Are High in Canada



Source: OECD, 2016: 45.

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PEOPLE ARE THE CREATORS OF PROSPERITY. WITHOUT HUMAN INGENUITY AND INNOVATION, WE WOULD STILL BE LIVING IN CAVES AND HAVE A LIFE EXPECTANCY OF 25 YEARS. MORE PEOPLE—IN AN ENVIRONMENT OF FREEDOM AND FREE MARKETS—MEANS MORE PROSPERITY

— STEVE FORBES

CANADA'S ROAD TO SERFDOM

ETHAN YANG

"When the course of civilization takes an unexpected turn," Friedrich Hayek (1944) writes in *The Road to Serfdom*, "we find ourselves threatened by evils associated with past ages of barbarism" (p. 10). As Canada faces an uncertain and unenviable economic future, the prevailing consensus has increasingly turned against the economic system to which nations the world over—Canada included—owe their wealth and success: capitalism. Capitalism is unpredictable and unreliable, unreasonable and unjust; to ensure prosperity, some argue, we must turn to the guiding hand of the state. Indeed, socialism has garnered tremendous support in Canada (Clemens and Globerman, 2023).

The "vast majority" of Canadians reject the authoritarianism that has marked other socialist regimes in favour of democracy (Angus Reid Institute, 2022). Indeed, we hold dear the ideals of liberty—personal liberty, that is; some among us argue that economic liberty is but a thin veil for greed. However, according to Hayek, when we sacrifice the dynamism of capitalism for the order and security of the state, we not only lose prosperity but also liberty—economic and personal.

Canada has flouted these warnings. The past few years have witnessed an extraordinary expansion of government intervention in the private sector (Clemens et al., 2023). Already, this unprecedented enlargement of economic authority has led to an increasing boldness on the part of governments to interfere with societal affairs as well. Under the pretext of protecting Canada's entertainment industry, Bill C-11 has struck at the heart of democracy itself: freedom of expression (Pardy, 2021).

Now, Canada stands at a precipice, and in the chasm beneath lies a new age of barbarism. We witness a government expanding at the expense of free markets and free expression, fueled by the sentiments of a generation far removed from the ideological horrors of the 20th century. These circumstances are, to the great consternation of students of history, mirrored in Hayek's examination of the links between economic control and totalitarianism. If we fail to heed Hayek's warnings, and if history repeats itself as it so often does, Canada may very well be on the road to serfdom.

Socialism's rise in popularity is, at least in part, driven by a desire for continued economic security amid stagnation. According to a survey report by Clemens and Globerman (2023), 50% of Canadian youth, aged 18 to 24, believe socialism to be the ideal economic system. Indeed, this diminishing confidence in capitalism corresponds with stagnating productivity. Canada's real GDP per capita grew by a paltry 0.8% per year over the last decade, Canada's "lowest rate of growth since the 1930s" (Cross, 2023). But the traditional definition of socialism—state ownership of the means of production—holds little water today; the majority of respondents—around 65%—define socialism as the government providing more social services or a minimum income (Clemens and Globerman, 2023). Economic security is a key priority for every household. Therefore, in this current period of economic stagnation, calls for more transfer payments are logical, albeit only at a short-sighted, microeconomic level. But for those who have paid attention to Hayek, Canadians are calling for the wrong kind of security.

Hayek identifies two types of economic security. The first is a guarantee against "severe physical privation, the certainty of a given minimum of sustenance for all" (p. 124). During the wartime rationing of 1944, Hayek nevertheless declared that "in a society that has reached the general level of wealth which ours has attained… there can be no doubt that some minimum of food, shelter, and clothing… can be assured to everybody" (p. 124). Eight decades later, this still rings true. But this is not generally the security that most Canadians demand; indeed, poverty researcher Christopher Sarlo tentatively notes an "apparent decline in poverty rates to an all-time low" (2023: 53).

Rather, Canadians seem to be calling for Hayek's second type of economic security, which, unlike the first, is not a guarantee from deprivation, although it most certainly achieves this. Instead, this form of economic security is a guarantee for a "relative position which one person or group enjoys compared with others" (p. 124). It is, in effect, a blank cheque for a standard of living pegged at that of others, regardless of whether their employment—or lack thereof—warrants the same degree of income. Clemens and Globerman (2023) unsurprisingly found an inverse relationship between the popularity of a tax and the degree to which respondents assumed they would have to pay for it. When asked how to pay for socialism—transfer payments—an overwhelming 72 percent of respondents supported a wealth tax on the top 10 percent of high-income citizens; however, a 20% value-added tax with exemptions for lower-income citizens—far likelier to adequately support the genuinely deprived—was supported by 16% (Clemens and Globerman, 2023).

Our stagnating economy subverts expectations of growth, and in response, Canadians demand greater economic security. Income must adhere to these erroneous expectations regardless of market conditions, and the state—through redistribution—must pay for the difference. In addition to resource misallocation—the market being the surest determinant of societal benefit—such a policy also leads to the "abolition of all freedom in the choice of one's employment" (Hayek, p. 128). When politics, not productivity, determines who prospers and who pays, one's choice of employment "must be made for him by those who control the distribution of the available income" (Hayek, p. 129). "Those who would give up essential liberty to purchase a little temporary safety," declares Benjamin Franklin, "deserve neither." Likewise, if Canadians choose security at the expense of liberty, we may find both to be quite temporary indeed (Hayek: 137).

Rising support for government intervention and redistribution demonstrates that Canadians are—as Hayek put it—no longer willing to "leave anything to the simple power of organic growth" (p. 187; Clemens and Globerman, 2023). These sentiments are largely reflected in recent Canadian economic policy, which increasingly eschews market-friendly reforms in favour of debt-financed transfer payments and subsidies (Robson and Mawakina, 2022). For example, in the World Bank's Ease of Doing Business ranking, Canada fell from 4th place in 2006 to 22nd place in 2018 (Deloitte, 2023). Also in 2018, Canada was among the worst-performing OECD members in terms of its regulatory burden.

(OECD, 2018). Restraining Canada's expansive regulatory state appears not to be a priority for policymakers: according to Statistics Canada (2022), Canadian businesses faced the same degree of regulatory burden in 2022 as they did in 2014. Unsurprisingly, Canada has found it difficult to encourage business investment.

Robson and Mawakina (2022) found that Canada has the lowest ratio of business investment to workers compared to other high-income economies, ahead of only New Zealand. Canada's response to this situation has thus far been confused and misguided, if not outright counterproductive. For example, Canada's 2022 federal budget "leaned toward more transfer payments and direct federal consumption spending" and government borrowing required to finance these policies has crowded out private investment (Robson and Mawakina, 2022, p.3, 18). All in all, Canada's economic policy has been "completely inconsistent with a predictable, investment-friendly approach" (Robson and Mawakina, 2022, p. 18)

According to Hayek, "the increasing veneration for the state, the admiration of power, and bigness for bigness' sake" has blinded Canadian lawmakers from honest self-appraisal of Canadian economic policy. Rather than unleashing the "simple power of organic growth" through regulatory reform, consistent fiscal policy, and reduced deficits, recent efforts to encourage business investment seem reliant on the expansive spending power—or more accurately, borrowing power—of the state (p. 187). This piecemeal yet unwieldy approach recently saw the Canadian government spend several billion dollars to subsidize the construction of a Volkswagen "gigafactory" in Ontario (Austen, 2023). Overall, this is a vicious cycle in which the Canadian government seems entirely complicit: state intervention through regulations, taxes, or spending (and the subsequent crowding out) decreases growth and competitiveness, which is then used to justify further state intervention.

Hayek argues that economic liberty declines in tandem with liberty at large; already, declines in the latter are becoming apparent in Canada. Introduced in the House of Commons in 2022, the Online Streaming Act, or Bill C-11, empowers the state to manipulate the "discoverability" of internet content (Karadeglija, 2022). Since then, the extent of the Act's powers has been obscured by a flurry of confusion; even after becoming law in 2023, Bill C-11's "broad language means it's unclear what it will do in practice" (Raycraft, 2023). Regardless, the mere uncertainty over whether Bill C-11 may suppress content "because its message offended government policy" is enough cause for concern (Pardy, 2021). The control of knowledge is a key aspect of restraining liberty, according to Hayek: "If all the sources of current information are effectively under one single control... even the most intelligent and independent people cannot entirely escape" (p. 158). Bill C-11 may accomplish just that.

From socialism's tremendous rise in popularity to a vicious economic cycle hemorrhaging prosperity to a brazen attack on free expression, many aspects of Canada's present situation are disturbing. But what is more disturbing is that Hayek would not find our circumstances unprecedented, for these are the very circumstances that Hayek warns against in The Road to Serfdom. During the 20th century's ruinous early half Hayek personally witnessed the rise of illiberal ideologies, an economic tragedy, and the impotence of planning. He had also witnessed liberty's downfall to the all-powerful state, from Germany to Italy to Russia. And therein lies the value of The Road to Serfdom. "If in the first attempt to create a world of free men we have failed," Hayek writes, "we must try again" (p. 246). Now equipped with history's lessons, let us ensure that our latest attempt does not stray from the road to liberty. ◆

Ethan Yang is a Vancouver high school student currently entering his senior year. Ethan aims to develop his passion for law and political science through further study and at the Canadian Youth Policy Association, where he hopes to advocate for a responsible vision of policy in tomorrow's Canada.

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AN AI-GENERATED PATH OF CREATIVE DESTRUCTION: JOSEPH SCHUMPETER CAN EXPLAIN

SAQIB SYED

When Marc Andreessen said that "software is eating the world," he understood it would proliferate into our daily lives, but what if there was a predator beyond the average software? Artificial Intelligence (AI) is not only capable of interpreting and powering software, it can even create software. Suddenly gaining relevance as a ubiquitous topic of discussion as if overnight, AI has taken the world by storm and is seemingly advancing at an accelerated rate, similar to how the now-primitive internet did. The mere mention of the incredible productivity advances in the workplace promulgated by technology would surely be a divisor amongst coworkers. There are those excited by the latest technological advancement on the one side, and those fearful of a deviation from the status quo that will take society further down the rabbit hole of a technology-ridden existence on the other. Still others are uncertain and disconcerted by sudden changes, struggling to wrap their heads around the economic changes that artificial intelligence brings and what it means for them. However, to assume that AI is only a destructive predator would be to shut a book at its midpoint.

Accomplished economist Joseph Schumpeter has wisdom to impart that is very applicable to the rapid rise of AI and its impacts. From a close reading of his 1942 book, Capitalism, Socialism and Democracy (henceforth CSD), one can infer that he would likely say that AI is carving its own path of creative destruction. He describes creative destruction as a process "that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one" (CSD: 83). AI is in the process of being innovated to improve functionality and, as seen in the past, while this process does indeed destroy aspects of the economy (an impact which most people will fixate on), it will also create new aspects of the economic structure, ultimately changing the economy to allow society to advance through innovation.

It is no secret that AI has a destructive side. It will cause job loss, divert investment away from other sectors, and even devalue certain levels of education, leaving people like software engineers in a difficult position. Investment banking company Goldman Sachs "estimates 300 million jobs could be lost or diminished by this fast-growing technology" (Kelly, 2023). The World Economic Forum agrees. Their 2020 report notes that AI can "replace a large proportion of existing human jobs" (Kelly, 2023). That creative destruction "is the essential fact about capitalism" (CSD: 83) supports these predictions by linking to Adam Smith's ideas. Capitalism is predicated upon Smith's "invisible hand" idea, which describes how self-interest in the form of a search for profits drives the economy's direction. Since AI can perform some tasks faster than any human possibly can and often with greater accuracy, it significantly increases productivity. It follows that businesses will use AI to lower their labour costs. However, that decision will come at the expense of current workers who will lose their jobs.

As AI is going to be fundamental to the technological advancement of society, countries are racing to make investments to improve their AI to surpass or keep up with others, causing a significant shift in the flow of money. In 2022, private businesses invested $47.4 billion in AI in the US, $13.4 billion in China, and $4.4 billion in the UK (Diaz, 2023). These enormous sums of money explicitly targeting AI indicate the direction in which economies are heading. Instead of investing in other sectors or in other aspects of technology, that investment is now being directed to AI, contributing to a growth rate not seen in any other area. To say that software engineers are being wholly replaced would be overkill. However, there will likely be a "decrease in the number of developers and engineers needed to create a piece of software" (Cohen, 2023). Software engineering degrees have always been seen as the holy grail of job security due to high demand consistently resulting in job openings, and Silicon Valley was an engineer's Garden of Eden. However, with many people holding these degrees, many will find themselves left out of the sector as AI reduces the number of workers required. Companies are already preparing for this; AI contributed to 4,000 job losses in May (McDade, 2023). As Schumpeter predicted more generally, AI has undeniable effects that will destroy the old economic structure.

Contrary to popular belief, the story is not all doom and gloom for AI also creates jobs and increases economic prosperity. The World Economic Forum stated in 2020 that AI will create more jobs than it destroys. It predicted that by 2025, 97 million jobs will grow in demand while the demand for 85 million others will decrease (Kande and Sonmez, 2020). The predicted net growth in the job market perfectly exemplifies the idea of creative destruction. AI is more of a disruption than a destruction to the economy and job market. The economy is changing naturally, so AI should not instill fear. AI's ability to increase workplace automation translates to a massive increase in productivity and efficiency, similar to when the internet became widespread. Goldman Sachs reports that generative AI could raise global GDP by 7 percent, or $7 trillion, and increase productivity by 1.5 percent over 10 years (Goldman Sachs, 2023). As countries worldwide implement AI, the overall productivity and success of the global economy will increase. That said, the rapid advancement of AI is likely to further economic inequality as many countries do not have the expertise or technology to even create AI, let alone implement it in their economy.

The increased economic prosperity and bolstered job market that creative destruction will bring will translate into advancements in society, such as the creation of new services for people, the improvement of existing services, and information availability. The hottest topic in recent memory has been ChatGPT by OpenAI, which introduced people to a new world of technology with which they had never directly interacted. People can now have a conversation with a chatbot that is capable of learning, and it also employs generative AI, meaning it can produce works such as essays, poems, and stories that are high quality and can even mimic a person's style. ChatGPT set the record for the fastest-growing user base, with estimates showing it had 100 million monthly active users just two months after launch (Hu, 2023). People are frequently using this new service and, if its adoption unfolds according to Schumpeter's views on entrepreneurship, profits will guide entrepreneurial activity. The profits generated from AI will give incentives for further innovation. “Innovation is the successful introduction and adoption of a new product or process in the commercial marketplace” (Sobel and Clemens, 2020: 11).

AI has been a success, as is being shown by its increasingly widespread use. For example, social media apps such as Snapchat have added an AI chatbot with which users can interact. Therefore, AI is fueling competition between companies as other social media apps may seek to implement AI too, so as not to fall behind. AI also leads to innovation in data management and information. “Artificial intelligence uses a vast amount of data to identify patterns in people’s search behaviors… users will have a more customizable experience” (Uzialko, 2023). AI can more efficiently handle information and use it accordingly, though of course privacy must always be protected. Ultimately, the creative destruction of AI not only shifts the economy’s structure and increases jobs overall, but helps advance society.

The application of Joseph Schumpeter’s theory of creative destruction offers a comprehensive explanation for the impacts of AI. Schumpeter has shown that there is no need to fear AI as a destructive force tearing down the economy. Creative destruction is a constant force that has always led to advancement through innovation while creating new jobs to coincide with, and possibly outweigh, any job loss. Overall, this makes AI a disruptor because it changes the economic structure. It is not a destructor. The distinction is crucial. The global economy is advancing into a new age, and we will be ready to adapt to it as humans have done time and time again. ◆

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Lydia Miljan

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