

2021 ESSAY CONTEST WINNERS THE IDEAS OF JOSEPH SCHUMPETER: EXPLORING THE CONCEPT OF CREATIVE DESTRUCTION



FALL 2021





Winning Essay Contest Submissions **Explore Public Policy Issues Webinar Recordings:** Stefanie Haeffele and Michael Munger **Blog Post:** Federal Debt Accumulation Will Disproportionately Burden Younger Canadians



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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.



# IOT TO CODE 18

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## WELCOME





Dear Readers:

We hope that you've had a wonderful semester so far, and are enjoying all of the colors, tastes, and smells of this fall season.

In this edition of the *Canadian Student Review*, we highlight the winners of the 2021 Essay Contest. We received several hundred submissions that discussed the ideas of Joseph Schumpeter and explored the connections between creative destruction, opportunity, and entrepreneurship. We're also including a thoughtprovoking quote from John Stuart Mill, two exciting blog posts, and two more recordings from the Explore Public Policy Issues webinar series for your enjoyment.

We have also included two wonderful short articles that explore the future of work and debt for young Canadians. Finally, we've included two of our most recent *Explore Public Policy* Issues webinar series recordings for your enjoyment.

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

Regards,

Daniela and Ryan

## THE IDEAS OF JOSEPH SCHUMPETER: EXPLORING THE CONCEPT OF CREATIVE DESTRUCTION LEAH POWELL

The COVID-19 pandemic has highlighted the importance of adaptability, innovation, and agility as the underpinnings of a successful business strategy in a quickly changing world. Businesses that react quickly to change can move their products and services to where the consumer is going, not where they have been in the past. As hockey legend Wayne Gretzky famously said, it is critical to "Skate where the puck is going to be, not where it has been." Joseph Schumpeter, a great economic thinker of the 20th century, said in his book, Capitalism, Socialism and Democracy, that "Capitalism is by nature a form or method of economic change and not only never is but never can be stationary" (1942: 82). Not only do businesses need to innovate, but timing and speed are important factors in the equation successful businesses have a pipeline of innovation and embrace change as an organization, sometimes "destroying" product lines, uncompetitive companies, and previous ways of thinking in the process. This is what Joseph Schumpeter called "creative destruction," and organizations that operate with it in mind are ultimately more likely to succeed.

Blockbuster, a video rental service popular from the late 1980s to early 2000s, fell to its demise after it failed to adapt and compete with competitors like Netflix, who innovated at much faster rates (Ash, 2020). At its peak, Blockbuster had 65 million registered customers and owned 9,000 stores, employing just under 85,000 people worldwide (Harress, 2015). However, as technology advanced, Blockbuster adjusted slowly; it chose to add music and video game rentals to its current model instead of better adapting to the changing demand (Ash, 2020). In 1997, Reed Hastings and Marc Randolph founded Netflix as a DVD-bymail rental service. By removing the infamous "late fees" and ensuring 2-day shipping on videos, many Blockbuster customers turned to Netflix for their video entertainment as it was more convenient, less costly, and a superior alternative to the brick-and-mortar store (Harress, 2015). The Netflix model quickly gained public acceptance, reaching 400,000 paid subscribers in 2001. Three years later, Blockbuster attempted to rebrand itself by removing its late fees and adding a mailing service, but it was too late—Netflix had already amassed 3 million customers and were years ahead of Blockbuster (US Securities and Exchange Commission, 2002; Ash, 2020). As the technology continued to develop, streaming websites like YouTube entered the marketplace. Netflix saw consumer adoption of

streaming technology as an opportunity to pivot from mail order (and the costs associated with that) to streaming movies and television shows for instantaneous viewing. Other businesses have emulated this

#### SUCCESSFUL BUSINESSES HAVE A PIPELINE OF INNOVATION AND EMBRACE CHANGE AS AN ORGANIZATION

strategy. These agile businesses include Disney, Apple, and Amazon, through their creation of Disney+, Apple TV+, and Amazon Prime, respectively. If Disney had not introduced a competitive streaming service by creating Disney+, it might have missed the opportunity to develop a business that was valued at about \$108 billion just two months into its launch (Pound, 2020). If none of the companies mentioned above had mimicked Netflix's strategy, Netflix would not have improved either. Competition pushes companies to embrace creative destruction by innovating and improving so they can expand their reach and exploit their competitive advantages.

Beyond an individual organization's success, the path to macroeconomic growth also comes through innovation. By fostering competition, which encourages innovation, Schumpeter argued that capitalism allows for the cycle of creative destruction to prosper. A free-market economy enables businesses to innovate and create opportunities for themselves with minimal government regulation holding them back. Schumpeter agreed with Adam Smith's concept of the "Invisible Hand," which observed that if everyone is free to serve themselves, the market adjusts and serves others. Essentially, what pushes entrepreneurs to market new combinations of resources is the pursuit of profit and success (Sobel and Clemens 10). In his book The Economics of Sociology and Capitalism, Schumpeter noted that profit "is the premium which capitalism attaches to innovation [...] 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" (1991: 113-114). This is why, Schumpeter argued, government policies that reduce the rewards of entrepreneurship ultimately harm economic growth and prosperity. Though Schumpeter held the unique view that capitalism will lead to socialism in the future,

he supported capitalism as a means of economic growth, emphasizing that it encouraged competition, and in turn, increased innovation and productivity (1991: 113–114).

In an economy where all entrepreneurs are free to pursue their ideas and interests, there will be many failures and also some extraordinary successes. A company that repeatedly ranks as one of the most innovative is Apple, which has grown tremendously since its first product, the 1976 Apple I computer (Johnson et al., 2012). One of the primary reasons for Apple's success is its dynamic culture and constantly changing business plan. Once known as a computer business, Apple has expanded to design and sell all types of digital communication devices and software, and their new advances spark excitement among consumers as demonstrated through their sales growth within new product categories (Viswanathan, 2019). Innovation has become part of their brand. Even during periods when the company struggled, it continued to be innovative and, by the early 2000s, established itself as a technological trailblazer. When pushing for innovation, it is essential to recognize that while not every trend will take off, a successful business has a pipeline of innovation-a steady flow of actionable ideas—and is ready to respond to a variety of anticipated and unanticipated changes in consumer behaviour (Lal et al., 2012). In Schumpeter's view, business failure has a positive impact on the economy;



it provides information to other entrepreneurs about what does not work in the market and frees up those resources to be used elsewhere. Therefore, innovation, and the positive and negative outcomes of individuals working to innovate, is essential to economic growth.

Looking back through the history of economic growth and development in the Western world over the past 100 years, it is clear that Schumpeter's theory of creative destruction was correct. History is littered with the remains of companies, large and small, that failed to innovate and suffered tremendous losses as a result. In recent years, even centuries-old industries that believed themselves to be secure have experienced pressure to innovate. Car companies are trending towards electric power systems, and transportation companies are beginning to experiment with autonomous driving, which, if successful, would revolutionize human mobility (Dans, 2021). Other industries, like the food service industry, have been forced to change quickly after the COVID-19 pandemic shut down restaurants and storefronts worldwide (National Restaurant Association, 2021). However, the pandemic has proven that even in the worst of situations, with creative thinking, innovation, and quick adaptability, businesses can not just survive but thrive through adversity.

Leah Powell will enter Williams College in Western Massachusetts in the Fall of 2022. Her interests centre around innovation and entrepreneurship, and she plans to major in Economics to learn more about how businesses adapt in order to grow in a continuously changing world.



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## EXPLORING SCHUMPETER'S CONCEPT OF CREATIVE DESTRUCTION: NO PAIN, NO GAIN ELENA DIMITROV

Joseph Schumpeter was among the most influential economists of the 20th century. He is best known for *Capitalism, Socialism and Democracy* (1942) which coined the term "creative destruction" to describe the entrepreneurial process by which new innovations replace outdated ways of doing things (Schumpeter, 1942). During his time at Harvard, Schumpeter spent more time in the business school studying entrepreneurship than in the economics department (Bradley, 2012).

In 2021, Schumpeter's work helps us understand the role that entrepreneurial innovation will play in the world's economic recovery. The COVID-19 pandemic increased consumer demand for some things (hand sanitizer, toilet paper, desire for human connection) but not others (airplane flights, restaurant meals, big spectator sporting events). Inevitably, many businesses have foregone losses from temporary closures or have been eliminated entirely - some due to new innovations that have flourished in their place. The dominant narrative is that the downfall of traditional industries and businesses is bad; media personalities express concern that automation will replace factory workers' jobs and that online shopping will destroy brick and mortar businesses. Using Schumpeter's concept of creative destruction and the 20th century camera industry as a case study, I will show how creative destruction is conversely a signal of economic progress and a necessary step in the postpandemic recovery.

#### Creative destruction as an evolutionary process

As a proponent of dynamic market capitalism, Schumpeter questioned the view that economic forces are static (Bradley, 2012). His work is valuable in understanding today's dynamic business environment, which is more Schumpeterian than ever. Schumpeter showed great interest in understanding business cycles (Sobel and Clemens, 2020). He described economic prosperity as the period during which innovations are diffused and recession as the period during which innovations are assimilated as copycats enter innovating sectors (Libertarianism, 2008). Creative destruction is a prerequisite to the expansion phase during which economies progress.

As explained in *Capitalism, Socialism and Democracy*, "In dealing with capitalism we are dealing with an evolutionary process" (Schumpeter, 1942). Just as pandemics arise every few decades as part of a natural cycle to control the human population, creative destruction is an evolutionary process that replaces old ways of doing business with new innovations. For an economy to expand, it must endure recession. For society to progress, old ways of doing things must die off and be replaced by new processes.

Creative destruction is a natural phenomenon that Schumpeter described as being "like the beat of the heart" (Sobel and Clemens, 2020). What Schumpeter called "the perennial gale of creative destruction" highlights that entrepreneurship is a continuous force, an ever-present threat that propels the economy forward (Schumpeter, 1942). Technological inventions and innovations are the tools that enable economic progress. They take many forms: New products or services, new sources of supply, new organizational structures (Schumpeter, 1942) or cost efficiencies in bringing products to market (Ebeling, 2016). Traditional forms of price or quality competition do not matter as much as competition from innovation, which is the real driver of economic progress (Schumpeter, 1942).

#### The role of the entrepreneur in economic progress

Entrepreneurs are agents of change, playing a crucial role in economic progress (Ebeling, 2016) by translating inventions into innovation (Schumpeter, 1934). Their job is to disrupt routines. The entrepreneur seeks not only to solve problems, but to examine existing ways of doing things and make them better. Schumpeter argues that the entrepreneur is passion-driven rather than profit-driven (Schumpeter, 1991: 413). In-house R&D departments of large firms can also act as innovating entrepreneurs, reinforcing the need to innovate to remain competitive in today's business environment (Libertarianism, 2008). Schumpeter's

work elevates the role of entrepreneurs, rendering them almost heroic. Business schools have recently begun to follow this trend, increasingly offering courses in entrepreneurship.

Today, to be an entrepreneur is easier than ever and increasingly celebrated. The pandemic further accelerated this trend. People who lost their jobs or were forced to work from home learned to do more with less, and the "new normal" of contactless, virtual transactions incited start-ups to think creatively. New business applications in the US increased by 73 percent between 2020 and 2021, indicating that entrepreneurs are creating opportunities out of the crisis (Koop, 2021). The Internet is the prime example of an innovation that has replaced old ways of doing things and created all-new professions, such as web development and digital marketing. Tech entrepreneurship is no longer limited to Silicon Valley and has moved to other parts of the world, including Asia and the Middle East (Rose, 2014).

One important consideration that Schumpeter's work does not discuss is the potential barrier of access



to education. Education can be a prerequisite for entrepreneurship in today's advanced technological environment, giving advantage to the wealthy and educated (Libertarianism, 2008).

#### The paradox

For change to occur, the entrepreneur must break the routine of existing ways of doing business (Ebeling, 2016). When an entrepreneur disrupts an existing industry rather than pursuing a new-market approach, workers, businesses, and eventually whole industries will inevitably suffer losses and possible extinction (Liberto, 2021). This creates a paradox – while some may lose in the short term, their loss is necessary to unlock greater wealth, productivity, and a higher standard of living. No firm lasts forever (Bradley, 2012). Creative destruction weeds out inefficient organizations. If that were not the case, companies would waste money paying unproductive workers or producing an inferior product.

Sawyers, masons, and miners were among the top thirty American occupations in 1900. A century later, they no longer rank among the top thirty; they have been replaced by medical technicians, engineers, computer scientists, and others. (Alm and Cox, n.d.)

The societies that will progress are those that embrace entrepreneurial capitalism despite the destruction of established businesses. Entrepreneurs only have the incentive to innovate if they can reap the rewards from it. Trying to preserve obsolete industries and protect the jobs of workers being replaced will only lead to economic stagnation (Alm and Cox, n.d.). Those resistant to change will find it impossible to progress. In some cases, their resistance may have to be countered by a reduction in regulatory interventions or antitrust threats to make room for innovation (Thierer, 2017).

#### **Case study**

The camera industry offers an interesting example of creative destruction. Throughout the 20th century, the camera industry was dominated by manufacturers Kodak and Nikon. In 1976, Kodak held 85 percent of the US camera market (Bourne, 2019). Its presence was so dominant that beautiful scenery was referred to as "a Kodak moment" (Bourne, 2019). As technological innovation in mobile devices advanced, driven by Apple's iPhone, digital cameras that provided equal or better picture quality made traditional cameras obsolete. Kodak tried to respond by reinventing itself as a manufacturer of printers, but ultimately failed (Neate, 2012). Jobs were lost and sales stagnated as one-time market leaders were unable to compete with the new digital cameras (Bourne, 2019). Kodak eventually filed for bankruptcy in 2012 (De La Merced, 2012). Digital photography offered many radical improvements to traditional cameras because it is instantaneous, the technology is easier to operate, and it offers cost-savings when considering the numerous uses of mobile devices.

There are dozens of other real-life examples of creative destruction from across the centuries. Fossil fuels creatively destroyed renewable energy sources such as water and wind as the primary energy source (Bradley, 2012). Agricultural machinery replaced farming by hand (Schumpeter, 1942). Ride-sharing apps Uber and Lyft overtook traditional taxi services. Online shopping channels such as Amazon and Alibaba replaced brick and mortar retail stores. Telemedicine provides an alternative to in-person doctor's visits, including virtual psychotherapy services, which helps make therapy accessible to a greater number of people. Airbnb won market share over hotels, the subscription model of music streaming (Spotify, Apple Music) creatively destroyed iTunes, and Netflix led to the demise of Blockbuster. The Internet is the invention behind many of these innovations, and each one created new jobs while destroying others.

#### Last thoughts

Economic progress is sometimes unpleasant. However, Schumpeter would be an advocate of this recycling and renovation process. This is not to say that Schumpeter's work should be taken at face value, as many things have changed since his time of writing. The economist himself would disapprove if people were to blindly trust his words: "When I see those who espouse my cause, I begin to wonder about the validity of my position" (Bradley, 2012). Nevertheless, Schumpeter's work can help us better understand today's rapidly changing business environment.

One day, digital cameras too will be replaced by the next radical innovation. Not even today's tech giants such as Apple, Google, and Amazon have protected monopolies that will last forever. Although the news is overflowing with concerns about business foreclosures, we can be assured this is only a signal of economic progress. While some closures have been due to government-imposed lockdowns, others have been driven by new innovations replacing the old. COVID-19 is a bump in the road, but as global economies begin to recover, many of the innovations it brought will be permanent. This will ultimately accelerate the rate of economic progress. Innovation, and not just in the form of a vaccine, will get us out of the pandemic.

Elena Dimitrov is an HBA student at Ivey Business School, having completed two years in the Honours Specialization in Finance program at Western University. Her passion lies at the intersection of finance and sustainability. Long-term, she hopes to help organizations unlock business growth while building sustainable value.



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### DID COVID-19 DESTROY JOBS? MAHITA REDDY GOGIREDDY

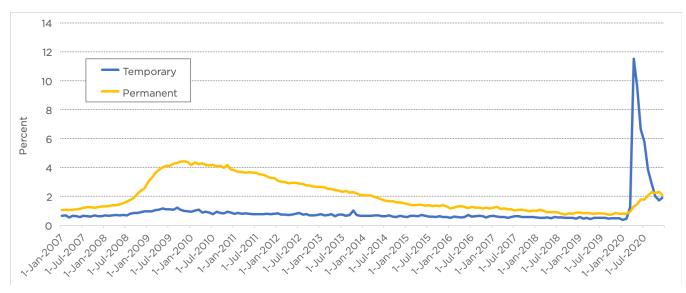
The role of entrepreneurs as portrayed by Joseph Schumpeter in his 1934 book, The Theory of Economic Development, is mainly one of innovation. Innovation is often realized when an entrepreneur combines various resources, then reacts to and anticipates a customer's needs in order to create something more valuable than an existing product or system. Profits act as incentives for entrepreneurs, who become part of a competitive market. The "break the old and build the new" process, which they embrace and which is also famously called "creative destruction," leads to society's long-run economic prosperity.

This essay explores the implications of Schumpeter's idea of creative destruction under the haunting shadow of the COVID-19 pandemic. It is easy to blame the pandemic as the cause for job losses, but as this essay will argue, the pandemic has brought about a

change that society would have likely experienced anyway. COVID-19 has just sped up the process.

There is an often unrecognized, positive side to the pandemic. In a speech he gave to the Economic Club in New York on Feb. 10, 2021, US Federal Reserve Chair Jerome Powell focused strongly on the US labour market. He noted dramatic layoffs in the US during the pandemic, both permanent and temporary (Figure 1). It looked like COVID-19 was the culprit. But actually, the sharp jobless spike is the economy's way of recognizing that the fundamental shift brought about by creative destruction has been going on for some time.



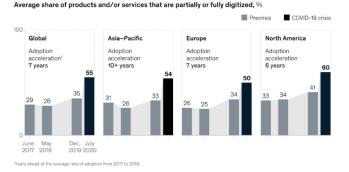


Source: Powell, 2021

What is this fundamental shift? Sobel and Clemens (2020) highlight the economic necessity for getting rid of substandard combinations of resources while at the same time indirectly hinting to other competitors what those bad combinations are. Long before the pandemic, the world had already embarked on the Fourth Industrial Revolution – an era of robotics, artificial intelligence, quantum computing, genetic engineering, and many other far-reaching technologies. These new advancements interact with the job market in many ways, some of which have been observed over the past couple of years and some of which are yet to be explored.

Since the pandemic, many fundamental shifts have occurred—examples of creative destruction in action. One of them is highlighted by a survey conducted in August 2020 which revealed that many companies plan on permanently getting rid of nearly 30 percent of their office space by switching to partial remote work and reallocating resources accordingly (McKinsey & Co., 2021). Further, with limited face-to-face interaction, customer service in many sectors like banking, health care, and retail has gone virtual with the help of conversational AI bots, and this practice is likely to be permanent because of its cost-effectiveness (Drenik, 2021). Figure 2 shows that the organizations that have been able to survive the uninvited effects of COVID-19 are those that embraced digital initiatives faster, filling their gaps in technology by experimenting and innovating. These cases illustrate the ongoing change in the nature of work that has been sped up due to COVID-19.

## Figure 2: Increase in speed in creating digital offerings across regions



Source: McKinsey & Co., 2020.

A recent Automatic Data Processing (ADP) report reinforces this observation. The report talks about the current supply changes in the job market—changes resulting from the shift in the nature of work that are causing a mismatch in skillsets. As a result of the pandemic, over one in three (33.33%) of the 2,058 small firms sampled stated that they are having trouble finding qualified employees in the short-run (Richardson, 2021).

Let us look at the supply side in the labour market a little closer. How are the perceived gaps going to be filled? These gaps will likely force people to reconsider their capabilities and look for ways to improve their skills. While profits give companies incentives, better pay and better quality of life give labourers incentives (Emanuel and Harrington, 2020). In a world with open access to knowledge and training like never before, self-learning has become easy and affordable. As just one example, note the recent rise in graduate enrollments in the United States for fall 2020 - an increase of nearly 3.6 percent over fall 2019 (St. Amour, 2020). Figures compiled by the Chronicle of Higher Education show that in spite of the disruptive effect of the pandemic on higher education, approximately 21 percent of the institutions surveyed saw an increase in their undergraduate enrollments, 10 percent in Associate programs, 27 percent in Baccalaureate, 22 percent in Masters, and 17 percent in Doctoral degrees (Gardner, 2021: 9-10). In short, individuals seem to be responding to the expected technical demand of the future voluntarily.

Once labourers develop new skills, they become part of a strong labor market that has the potential to deliver substantial benefits and drive economic development. Figure 3 provides some evidence of the labour market's recoverable nature. Over the last 30 years, even though the unemployment rate in the US has fluctuated quite a bit, it maintained an approximate average rate of 5 percent between each peak and trough cycle.

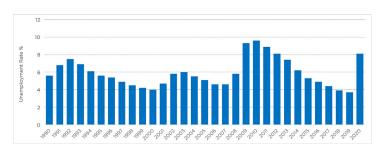


Figure 3: Unemployment Rate in the United States,

Source: US Bureau of Labor Statistics, 2021.

1990 to 2020

The Fourth Industrial Revolution has been around for many years and labour markets are re-shaping themselves in response. Labourers improving their skills, either through employer-offered specific programs and facilities, or through their own selfmotivation, has always balanced the effect of the changing work landscape and readjusted the overall unemployment rates. Indeed, if supply and demand are to work, people must adapt to the market conditions and evolving situations, and the development cycle continues. Figure 3 can be seen as a graph of this cyclical pattern. Business leaders should recognize this Schumpeterian cycle as they seek to manage unemployment in the US economy.

COVID-19 has seen the closure of many businesses (especially brick-and-mortar stores), but it is hard to ignore the simultaneous rise in the number of other start-ups in the past year. By January 2021, the number of new business applications over a 12-month period in the United States alone increased by 73 percent (Koop, 2021). Similar trends have been observed in many other parts of the world. These observations illustrate why it is important not to overreact to the loss of jobs caused by pandemic lockdowns.

We often hear that the disruption of existing processes might pose a threat to the labour market by decreasing the number of jobs (for example, through automation). While creative destruction can create a zero-sum game for ideas and enterprises, the job market operates as a positive-sum game (Oster, 2015). In the words of economist Charles Wheelan, "Technology displaces workers in the short run but does not lead to mass unemployment in the long run. Rather, we become richer, which creates demand for new jobs elsewhere in the economy" (Oster, 2015). Developmental changes might eliminate the jobs in a few areas, but new jobs are simultaneously created in many unknown areas. As a result, the hiring process never ends. According to Filipowicz and Lafleur (2020), between 2001 and 2019, Canada's economy employed approximately 4.1 million more people for new jobs (an increase of 27.6 percent). In short, while creative destruction might cause structural changes in the labour market, the argument of market shrinkage due to it is not supported by facts. Past studies, as well as the ADP presentation cited earlier, should be highlighted. Although many low-skilled jobs are being replaced as a result of the pandemic, government unemployment relief could very well contribute to the short-term shortage for workers. Palagashvili



and Suarez (2020) highlight the negative correlation between the intensity of government regulations and the overall birth of firms. The ADP suggestion that future hiring incorporate a retraining process beyond the matching of a job description to a task could be a path to a new normal. Schumpeterian creative destruction provides good guidance on how to search for that path.

To conclude, the apparently alarming number of jobs lost

during the pandemic is likely an illusion because the world is going through a Schumpeterian cyclical change. The transition phases of such changes are, most of the time, rough. However, situations evolve and eventually become normal. The economy's current move to a new normal will probably be the outcome of voluntary actions by both the job and labour markets. The future question to consider, though, is to what extent the government can help improve and empower this free market process.

Mahita Reddy Gogireddy is an MBA student at New York Institute of Technology, Vancouver. She takes special interest in academic research and analysis of various socio-economic topics, and hopes to incorporate these interests in her future career advancements.

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## NEW WORKPLACE PRACTICES HINGE ON INCREASED PRODUCTIVITY STEVEN GLOBERMAN AND MILAGROS PALACIOS

The pandemic has, among other things, stimulated profound actual and proposed changes in workplace practices, which have been necessitated by formal and informal safety protocols to slow the spread of the virus. However, several changes, most notably more flexible work schedules including work-from-home and a four-day work week, are proving popular with many employees who are calling for their continuation even after COVID subsides.

Crucially, whether these or other substantive innovations in labour market practices are sustainable depends upon whether sufficient improvements can be achieved in labour productivity, which is conventionally measured as the value of output produced per hour of labour. Clearly, if a four-day work week and work-from-home result in less output produced per hour of labour, employers will be obliged to reduce compensation paid to employees to sustain the profit margins they need to stay in business.

Obviously, employees would prefer to work fewer hours and enjoy greater flexibility in where they live and work while maintaining—or even increasing their financial compensation. However, the arithmetic confronting their preferences is compelling. Again, maintaining or increasing financial compensation while reducing hours worked is feasible only if sufficient improvements in labour productivity are attained.

A Fraser Institute study from early 2020, Reducing the Work Week Through Improved Productivity, showed that if labour productivity growth averaged 2 percent per year from 2018 to 2030, Canadian workers in 2030 could work a four-day work week year-round while enjoying a higher material standard of living than they enjoyed in 2019. However, since labour productivity grew at a relatively slow 0.88 percent average annual rate from 2016 to 2019, productivity growth must accelerate substantially over the current decade to reach the 2 percent per year objective.

In fact, labour productivity in Canada increased at a remarkable 8.1 percent rate in 2020 from 2019. However, the rapid productivity increase in 2020 appears to be largely a statistical artifact of the economic lockdown. Specifically, the essential industries that were allowed to continue operating during the lockdown phase of the pandemic (in the first half of 2020) enjoy above-average rates of productivity growth, while businesses that were effectively closed traditionally suffer below-average productivity growth rates. This change in the composition of business activity contributed to an increase in labour productivity of 4.1 percent (expressed as an annualized rate) in the first quarter of 2020 followed by

an increase of 12.8 percent in the second quarter (see chart below). But as the Canadian economy broadly reopened in the second half of 2020, labour productivity declined at a 9.8 percent annual rate in the third quarter and by 2.1 percent in the fourth quarter. That decline continued in the first quarter of 2021 (-1.7 percent).

BUSINESSES THAT WERE EFFECTIVELY CLOSED TRADITIONALLY SUFFER BELOW-AVERAGE PRODUCTIVITY GROWTH RATES Managerial decisions about implementing new workplace practices including work-from-home or a four-day work week would be straightforward if it was clear that such innovations contributed to improved labour productivity. Unfortunately, the available (and admittedly early) evidence on this issue is, at best, inconclusive. Although it appears that innovative practices such as work-from-home and flexible work hours are more likely to be successful when accompanied by investments in new equipment, new software and other productivity-enhancing assets.

Unfortunately for the many Canadian workers who want new workplace practices, a majority of privatesector industries in Canada actually reduced capital expenditures on machinery and equipment and intellectual property products such as software from 2015 to 2019. That so many Canadian businesses found it unprofitable to increase capital expenditures on critical business assets during a period that was free of any major recessions, and which was characterized by relatively low real interest rates, should worry government policymakers.

Since Canadian workers want innovations in labour market practices that will require increased business investments in productivity-enhancing assets, labour leaders in Canada should join with business leaders to encourage public policy changes that will make Canada more competitive for business investments. ◆

Read the blog post here.

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## FEDERAL DEBT ACCUMULATION WILL DISPROPORTIONATELY BURDEN YOUNGER CANADIANS

JAKE FUSS AND BEV DAHLBY

The pandemic has had a profound impact on the state of federal finances and political parties of all stripes are currently proposing to increase spending and debt for the foreseeable future. While the issue of debt accumulation has largely fallen to the wayside during the election campaign, there are important reasons why Canadians should be concerned about deficits and debt in the coming years.

While federal debt was already on the rise in the years prior to COVID, government debt accumulation has spiked markedly higher in the past year-and-a-half. Over a two-year span between fiscal years 2019/20 and 2021/22, Ottawa is expected to add more than \$500 billion in federal debt. Further deficits are also projected until at least 2070, absent changes in taxes or spending, according to a recent report from the Parliamentary Budget Officer.

Of course, there are consequences associated with these policy decisions. Large deficits come with costs and Canadians will have to pay for our borrowing today through additional taxation implemented at a later date. Put differently, today's deficits are tomorrow's taxes.

According to a recent study, The Lifetime Tax Burden for Canadians from Federal Debt Accumulation, Canadians aged 16 to 80 in 2025 can expect to collectively pay an additional \$332.5 billion in personal income taxes (on a present value basis) over their lifetimes to pay for current and expected future federal borrowing. To put this number in perspective, this translates to roughly \$10,500 per person in additional taxes that people would not otherwise pay were it not for the current borrowing being done to finance spending. Simply put, deficit-financed spending imposes substantial burdens on future Canadian taxpayers.

While all Canadians can expect to pay thousands of dollars in additional personal income taxes as a consequence of federal debt accumulation, the costs will not be evenly felt by all Canadians. Younger generations, in particular, will bear a disproportionately large amount of the burden to pay for the increase in federal debt.

Indeed, Canadians aged 16 to 35 will be responsible for paying an average of \$19,880 per person in additional personal income taxes over their lifetimes. Conversely, those over age 65 are estimated to pay less than one-tenth of this amount, an average of \$1,524 per person. This means that while the growth of federal debt should be a concern for all Canadians, it should be especially disconcerting for younger Canadians.

To be clear, these calculations do not assess whether or not the level of federal debt accumulation was appropriate during the pandemic. Instead, these numbers highlight the direct consequences of federal debt accumulation for future generations of Canadians.

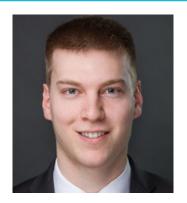
There's also a significant risk for Canadians due to the potential for higher interest rates in the future. Specifically, rising interest rates could increase federal debt accumulation and impose an even larger tax burden on Canadians relative to our projections. In other words, growing government debt interest costs could mean Canadians pay an amount much higher than \$10,500 per person in income taxes over their lifetimes due to debt accumulation.

Although political parties paid little attention to debt accumulation in the campaign, this is undoubtedly an important issue that will affect Canadians. Critically, young Canadians will bear the brunt of the costs of today's debt accumulation through substantial increases in future personal income taxes. This is clearly an issue worthy of more discussion.

#### Read the blog post here.

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Bev Dahlby, Senior Fellow of the Fraser Institute, attended St. Peter's College, the University of Saskatchewan, Queen's University and the London School of Economics. He was Professor of Economics at the University of Alberta from 1978 to 2012 and Distinguished Fellow in Tax and Economic Growth at the School of Public Policy at the University of Calgary from 2012 to 2020. Bev has published extensively on tax policy and fiscal federalism.







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#### **Community Revival in the Wake of a Disaster** *Stefanie Haeffele*

Rebounding after disasters like tsunamis, hurricanes, earthquakes, and floods can be daunting. Communities must have residents who can not only gain access to the resources that they need to rebuild but who can also overcome the social dilemma that characterizes post-disaster relief efforts. Community Revival in the Wake of Disaster argues that entrepreneurs, conceived broadly as individuals who recognize and act on opportunities to promote social change, fill this critical role. Link to Stefanie Haeffele Recording

#### Is Capitalism Sustainable?

Michael Munger

Market advocates claim that capitalism harnesses self-interest for the common good. But in a democracy, public choice theory suggests that capitalism has a strong tendency toward cronyism. Dismissing this objection by saying "That's not REAL capitalism!" misses the point, which is that capitalism is unsustainable. Join Michael Munger as he addresses this critique.

Link to Michael Munger Recording







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