

TIME TO REVISIT LEONARD E. REED'S *I, PENCIL* ESSAY BY SAM BROWN



Interview

Benji Backer and his new book *The Conservative Environmentalist*

Blog Post

B.C. government should properly consult British Columbians about changes to Land Act by Jason Clemens and Niels Veldhuis

Essay Contest Winner

High School Winner, Graduate Second Place



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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.



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WELCOME

Dear Readers:

Welcome back to school, and to a new and exciting semester!

We're thrilled to bring you the fall issue of the *Canadian Student Review*. This edition features a thought-provoking op-ed and an exclusive interview with Benji Backer, author of *The Conservative Environmentalist*. You'll also find a recent infographic and spotlight on two of our 2024 essay contest winners.

Additionally, we've included an inspiring quote from Ronald Coase, two engaging blog posts, and more recordings from the *Explore Public Policy Issues* webinar series for your enjoyment.

If you or someone you know would like to contribute content to the *Canadian Student Review*, please feel free to reach out to me directly at Ryan.Hill@fraserinstitute.org.

Best,

Ryan and Sam

B.C. GOVERNMENT SHOULD PROPERLY CONSULT BRITISH COLUMBIANS ABOUT CHANGES TO LAND ACT

JASON CLEMENS AND NIELS VELDHUIS

It recently came to light via a [column](#) by Vaughn Palmer, a longtime commentator on politics in British Columbia, that the B.C. government plans to enact “sweeping changes to managing public lands,” which cover roughly 95 per cent of the province. Specifically, the government wants First Nations to co-manage all government-owned land, which includes waterways, agricultural land, recreational properties, grazing fields, telecommunications and energy infrastructure.

The proposed changes, which the Eby government plans to table as legislation this spring, are unprecedented and will damage the province’s investment climate by giving more than 200 First Nations [veto power](#) over land-use decisions. If enacted, this might be the most significant legislative change in B.C. history, and one the Eby government hoped to rush through the legislature without full transparency or meaningful public input, and without disclosing any analysis of its economic impacts.

Contrast that approach with how the province dealt with electoral reform in 2004-05.

In the 2001 provincial election, the BC Liberal Party committed to creating a bottoms-up process to assess potential changes in how British Columbians elect their political representatives. In 2004, the government created the [Citizens’ Assembly on Electoral Reform](#), which included 160 British Columbians from across the province selected through a non-partisan process.

From January to May of 2004, assembly members participated in a 12-week educational process, which included expert presentations, group discussions and reviewing research. From May to June, the assembly conducted more than 50 public hearings and received more than 1,600 [submissions](#) from the public. The assembly then deliberated over six weekends in the fall to reach a consensus and issued its [final report](#) in December 2004 recommending a new voting system. Then in May 2005, because the issue was considered so fundamentally important to British Columbians, it was subject to a [referendum](#), which required a super-majority of 60 per cent of voters in the province and simple majorities in 60 per cent of the 79 districts (48) to pass.



**THE B.C. GOVERNMENT
PLANS TO ENACT
“SWEEPING CHANGES
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Simply put, the provincial government took a deliberative approach with abundant time for public consultations and input, and then presented the change to the people for democratic approval. It's hard to imagine a more stark contrast with the Eby government's approach to fundamentally change how we manage roughly 95 per cent of the province's land and water.

The Ministry of Water, Land and Resource Stewardship, for instance, quietly posted a call for public submissions in January. But as Palmer noted the "ministry did not publicize the invitation with a news release, suggesting the government is not all that keen to attract attention to the exercise." Submissions will only be accepted to the end of March and are limited to five pages.

In addition, submission guidelines suggest the focus should be on how these changes create opportunities for Indigenous peoples and the province as a whole, potential costs in administration, and accountability and transparency in future land allocation decisions. In other words, the government's guidelines exclude some of the most important questions about this profound

change in public land management. For instance, what are the potential economic and investment implications of this change? Do First Nations have the administrative capacity and expertise to perform these oversight functions? How will this change affect provincial revenues from public lands?

Finally, the government has created a truncated timeline for the introduction and approval of this sweeping legislation. According to the government's website, it aims to enact this change—that is, establish joint "decision-making" agreements with First Nations—by the spring of this year, meaning within the next few months. This timeline means there will be no broad consultations or engagement with the public before the government tables the proposal in the legislature.

If the Eby government wants to fundamentally change the way 95 per cent of B.C.'s land and water is managed, then it should do so in a more thoughtful, deliberative and public manner so British Columbians have the opportunity and time to educate themselves, engage if they so wish, and reach a consensual democratic decision. ♦



Jason Clemens is the Executive Vice President of the Fraser Institute and the President of the Fraser Institute Foundation. He has an Honors Bachelors Degree of Commerce and a Masters Degree in Business Administration from the University of Windsor as well as a Post Baccalaureate Degree in Economics from Simon Fraser University.



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TIME TO REVISIT LEONARD E. REED'S *I, PENCIL ESSAY*

SAM BROWN

Roughly 50% of Canadians 18 to 34-years-old believe that socialism is the ideal economic system. This population is misinformed about what socialism actually entails, misconceptions that also extend to capitalism. A famous essay that correctly identifies capitalism's Leonard E. Read's "I, Pencil", a timeless piece that highlights the advantages of the open market, and can help educate the misinformed.

As an example of how markets function, Read takes the reader through the steps of making a pencil. A pencil is a simple product found in classrooms and offices around the world. But, making a pencil isn't that simple. Read explains the complex process that comes together to efficiently create a seemingly simple object, using the example of a family tree. He identifies how the various parts of the pencil originating from locations around the world have each been produced by individuals who have specialized in manufacturing only one element of the pencil each, yet produce the finished product without any centralized coordination.

Read's essay shows how no single person needs to know how to make a pencil (or any other good). He states, "Millions of human beings have had a hand in my creation, no one of whom even knows more than a very few of the others." The connection between individuals can exist thanks to how the price system coordinates the use of knowledge in society, a theory championed by the economist, F.A. Hayek. In an unrestricted market economy individuals can "secure the best use of resources", basing their decisions off market signals, i.e. prices. For example, loggers source the wood from the forests of British Columbia and the miners extract the graphite from mines in Madagascar because the price system guides those entities toward the best economic opportunity. The free market provides crucial knowledge about where and how necessary roles in the economy should be fulfilled. Yet out of all the various roles, no one not even the CEO of the pencil company may have a clue—and don't need to have a clue—about how to make the pencil from start to finish. This is because everyone involved in the intricate process can merely look after their own component, motivated by the desire to support

themselves and their loved ones, yet still contribute to a beneficial end result.

Conversely, in a socialist economy, there exists a serious incentive problem. In a “textbook” socialist economy, where everyone gets paid the same regardless of the number of hours they work or the output they produce, there is little motivation to create value. Individuals can produce low-quality graphite for the pencil and will be treated the same as someone who works tirelessly to make the perfect eraser. While the prospect of equal outcomes may sound like a utopia for some, the reality is that without the incentives inherent in a market economy, products will be second-rate.

History has shown that socialist economies generally produce goods of lower quality and higher cost, and are more likely to experience shortages than those in open market economies. This phenomenon isn’t merely hypothetical. Consider socialist Estonia in the 1980s. Compared to the market economy of nearby Finland, research [finds](#) that Estonians had to work 5.3 times longer to be able to afford women’s clothing and nearly 6 times longer to afford a TV. Further, residents in Soviet

Poland experienced [housing and food shortages](#) during the decades of socialism. Under socialism, average poles experienced wait times of 15 to 30 years for housing and regularly [struggled to find](#) necessities like meat, coffee or sugar in grocery stores.

The realities of participating in a socialist economy are clear: worse goods, higher prices, and shortages.

One significant element of Read’s essay is “the absence of a mastermind.” Read references the “invisible hand”, a concept first described by Adam Smith, to explain that no single entity needs to dictate or forcibly control the making of a good. In a market economy, the price system guides production in a way that is not centrally planned, with prices providing crucial information about consumers’ desires, allowing producers to effectively respond to market demands.

The complex nature of human desires can’t be understood by one person, let alone by someone who lacks information about the consumer due to the absence of price mechanisms and market



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information in a socialist economy. The socialist approach involves hubris, as leaders in socialist state must predict how many pencils should be produced and how much of each component would be required, in other words, imposing their choices and “wisdom” on the population.

When comparing the market economy discussed in Read’s essay to the “preferred” socialist economy, what do we find? First, the market economy is a complex network of workers who freely choose their occupations and master their trades. In contrast, the socialist economy presents a largely choice-less reality where individuals are forced into jobs they may not desire or excel at.

Second, in the market economy, no one person needs to understand how to make a pencil in its entirety, yet the system is effective because individuals are motivated to create value for others by providing a livelihood for themselves. In the socialist economy, there is little incentive for

individuals to work, leading to low productivity and poor-quality products.

Further, the market economy allows individual preferences to provide crucial information about market demand and supply. Conversely, the leaders of a socialist economy assume they know what is best for people in the economy, despite lacking this essential knowledge.

Read’s pencil symbolizes more than how a pencil is created. The intricate and efficient process that exists for a pencil is similar across all goods. While the prevailing narrative of today may be more sympathetic to socialism, it is imperative to revisit its past pitfalls and contrast them to the success of market economies. With an educated perspective of what socialism actually entails, 50% of Canadians might want to reconsider their stance about socialism. ♦



Sam Brown is an Economics and Data Science Major at Claremont McKenna College in the United States. He is an intern for the Fraser Institute and has been spending the summer working with the Education Programs team.

FEDERAL AND PROVINCIAL DEBT-INTEREST COSTS FOR CANADIANS, 2024

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B.C. health-care wait times and student test scores **worsen** despite marked increases in government spending



Per person spending **UP 23.5%**

Health-care wait times **1.1 WEEKS LONGER**

PISA student test scores **DOWN 20+ POINTS** in math, reading and science

GROWING THE GOVERNMENT WON'T HELP CANADA'S ECONOMY

JAKE FUSS, GRADY MUNRO AND ALEX WHALEN

Canada is suffering from an economic growth crisis, and governments across the country should reassess their policies. Governments (particularly the federal government) have recently taken a more active role in the economy through increased spending and bureaucracy. However, policymakers must take a step back and recognize that growing government doesn't lead to growth in the economy.

Canada's economy has been stagnant for the last decade. From 2013 to 2022, per-person GDP (a broad measure of living standards) grew at its slowest pace since the 1930s, after accounting for inflation. And more recent data show that in the fourth quarter of 2023, per-person GDP (inflation-adjusted) stood at \$58,111—which is \$51 per person lower than it was at the end of 2014. Simply put, Canadians have experienced a decade of dismal growth, and are now actually worse off than they were a decade ago.

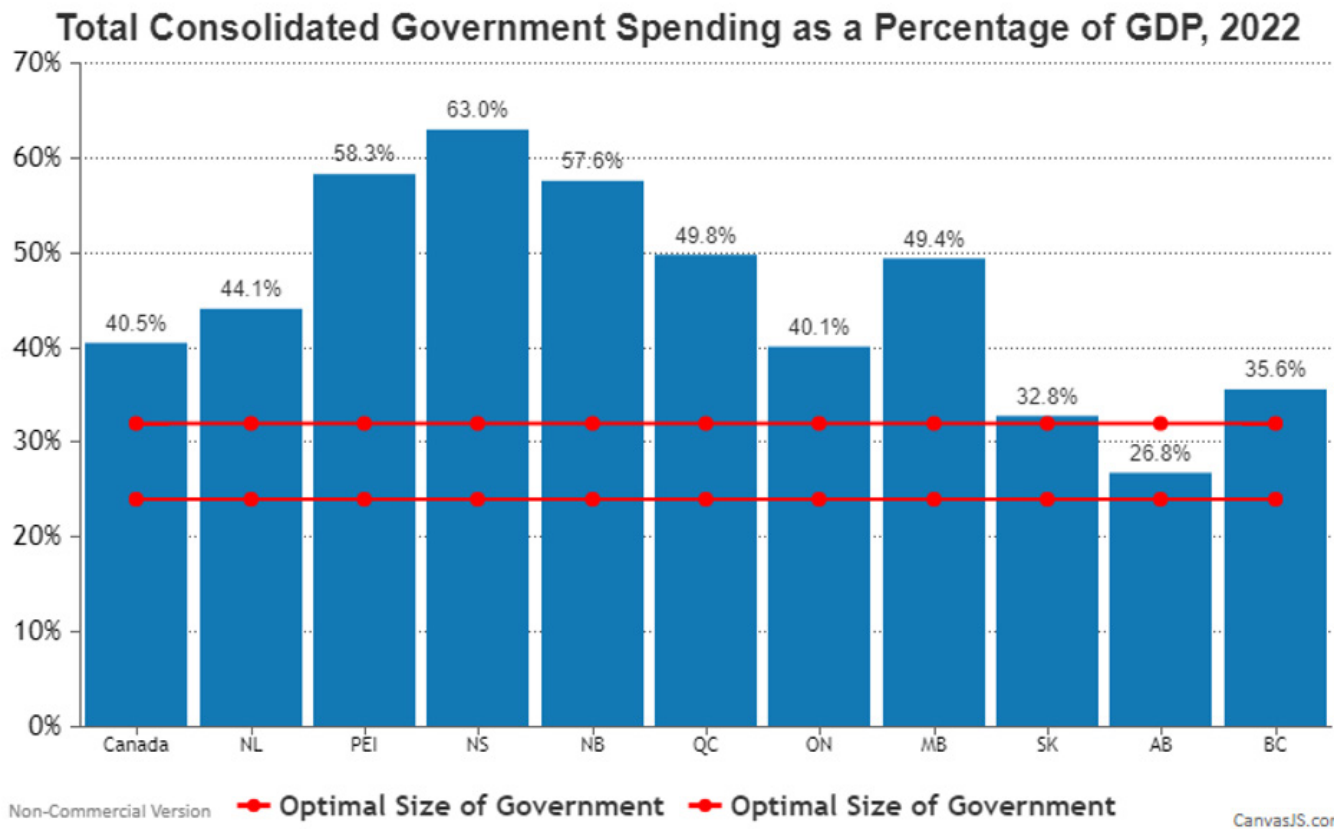
During this time, many governments in Canada have adopted an approach of greater involvement in the economy and significantly higher spending. Take the federal government, for example.

Since 2014/15, the government has increased annual program spending (total spending minus debt interest) by roughly 75 per cent, from \$256.3 billion to \$448.2 billion in 2022/23. Moreover, the Trudeau government has recorded the five-highest years of federal spending in Canadian history, after accounting for population growth and inflation. Much of this spending has gone towards expanding the Ottawa's role in the economy through increased transfers, business subsidies or new programs such as \$10-a-day daycare and national dental care.

Provincial governments in Quebec, Nova Scotia and British Columbia (to name a few) have also recently reached historical highs in per-person program spending (even after excluding COVID-related spending). Simply put, governments across the country have been increasing spending and becoming more involved in the economy.

One way to measure the size of government, that allows for the comparison of jurisdictions over time, is known as total consolidated government spending as a share of GDP. This measure includes

all spending at the local, provincial and federal levels in a jurisdiction and compares that level to the size of the economy.



According to a recent study, in 2022 (the latest year of available data) the size of government in Canada was 40.5 per cent of GDP compared to 38.2 per cent in 2014.

Among the provinces, total government spending ranged from 26.8 per cent of GDP in Alberta to 63.0 per cent of GDP in Nova Scotia. Compared to 2014, the size of government grew in eight of 10 provinces—only Prince Edward Island and B.C. experienced declines in government spending as a share of the economy. It’s also important to note that this is simply government spending. The true size of government, when accounting for things like regulation, is even larger.

Growing government matters because it influences economic growth. When the size of government is below a certain level, it lacks the resources to deliver services such as policing, courts or national defence—which are essential to a functioning economy. On the other hand, when government is too big it engages in activities best left to the free market and effectively crowds-out private-sector activity that contributes to economic growth. Therefore, when a government is too small or too big, economic growth (and consequently living standards) suffer.

Empirical research suggests that economic growth is maximized when the size of government falls between 24 and 32 per cent of GDP. In other words, when governments spend in excess of this range, the economy will not grow as much as it would if government operated within that threshold—all else equal. Based on the numbers presented above, it’s clear the vast majority of governments in Canada are too big. For nine of 10 provinces and the federal government, their spending exceeded 32 per cent of GDP in 2022.

As Canadians look for solutions to address a stagnating economy and falling living standards, governments should recognize that taking a more active role in the economy won't solve the problem—and will likely make it worse. ◆



Jake Fuss is Director of Fiscal Studies for the Fraser Institute. He holds a Bachelor of Commerce and a Master's Degree in Public Policy from the University of Calgary. He has written commentaries appearing in major Canadian newspapers including the Globe and Mail, Toronto Sun, and National Post. His research covers a wide range of policy issues including government spending, debt, taxation, labour policy, and charitable giving.



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INTERVIEW WITH BENJI BACKER ABOUT HIS BOOK THE CONSERVATIVE ENVIRONMENTALIST

SAM BROWN

Short Excerpt from the Interview

As you mentioned in your book, the green new deal has failed and the immediate “fire drill” scenario isn’t the solution. What do you believe is the right approach to actually helping the environment?

I think one of the things that ACC, my organization, put out was called the Climate Commitment, and it’s a set of principles that basically outlines a better future for the climate movement. It has principles surrounding getting unnecessary government regulation out of the way, using competition and capitalism for good, and focusing on innovation and new technologies and having entrepreneurs drive a lot of the change. I think what it all comes down to, and what is at the center of the Climate Commitment, is a community-first approach rather than a government-first approach. It’s a technology-first approach rather than a regulation-first approach. It’s focused on building a better future for our country rather than restricting things away. We want to get to the same place, but we want to build our way there rather than regulate our way there, and I think that is the difference. So, by

focusing on those principles and solutions, I think we can go a really long way in actually achieving environmental action. And so, it’s everything from nuclear energy to reforming the National Environmental Policy Act to using natural solutions like forests and soils to sequester more carbon and ensuring that we have cleaner air and cleaner water by leveraging new technologies. It’s ensuring that we bring down global emissions so that we get to net zero but also ensuring that that doesn’t come at the cost of the American economy. You can do both. And so I think by implementing those principles of innovation, technology, and less regulation, we can actually bring about those environmental solutions that will make our air cleaner, our water cleaner, and our emissions lower while actually keeping our communities alive and well. ♦

[WATCH INTERVIEW HERE](#)

HAYEK'S THEORIES TESTED BY CRYPTOCURRENCIES: CONVERGENCE OR DIVERGENCE?

ANAÏS BLANCHARD

In a world where the digitalization of finance is challenging traditional monetary structures, the ideas of Friedrich Hayek, a pioneer of free-market economics, have never been more relevant.

Friedrich Hayek, eminent theorist of the Austrian economic school, is renowned for his revolutionary perspectives on individual freedom, competition, and decentralization (Lewis, 2011). A staunch critic of centralized economies, Hayek argued that such systems fail to effectively manage information dispersed throughout society (Gamble, 2021). In his view, market mechanisms, driven by individual choice and competition, optimize the allocation of resources (Issing and Brittan, 1997). It is this same free-market essence that can be found in the structure of crypto-currencies, which have emerged as a new form of currency in the wake of these principles.

Introduced with the launch of Bitcoin in 2009, cryptocurrencies are cryptographically secured digital currencies based on blockchain technology (Gandal, Hamrick, Moore, and Vasek, 2021). They operate without the intermediation of central

banks, promoting a financial decentralization that could be seen as a modern manifestation of the free-market principles advocated by Hayek (Issing and Brittan, 1997). These currencies offer a renewed model for financial transactions, characterized by enhanced transparency, autonomy, and security.

This essay sets out to dive into the analysis of the application of Hayek's theories of decentralization and competition to the world of cryptocurrencies. We will address the following three research questions:

1. How does the decentralization intrinsic to cryptocurrencies reflect Hayek's ideas on information dissemination and decision-making?
2. To what extent can cryptocurrencies realize the monetary freedom championed by Hayek, by introducing direct competition with traditional national currencies?
3. What recommendations might Hayek have made regarding the regulation of

cryptocurrencies, given his opposition to state interventionism?

The structure of our discussion will first break down the theoretical and historical background to Hayek's ideas, before looking at the practical specifics and implications of cryptocurrencies. We will then examine the benefits of these digital currencies through the prism of Hayekian theories, offering both a critical and exploratory overview of their potential impact on modern monetary systems.

I. Historical and Theoretical Background

Friedrich Hayek, winner of the Nobel Prize in Economics in 1974, is famous for his theories on the functioning of free economies and the limitation of government power (Nobel Prize, n.d.). His major work, *The Road to Serfdom*, argues that state control of the economy inevitably leads to a loss of individual freedom (Lewis, 2011). Hayek (1944) argues that knowledge is dispersed among individuals and that the free market, using the price mechanism, is the most efficient way to collect and use this dispersed information. He thus advocated a system of monetary competition in which different currencies would compete, believing this would limit the power of central banks and encourage financial innovation (Hayek, 1944). This vision of open competition between different currencies resonates directly with the emergence of cryptocurrencies, which offer a decentralized alternative to traditional monetary systems (Trantidis and Cowen, 2020).

Since the creation of Bitcoin, the field of cryptocurrencies has exploded (Gandal, Hamrick, Moore, and Vasek, 2021). Thousands of variants have emerged, each offering different features, from greater privacy to faster transaction speeds (Gandal, Hamrick, Moore, and Vasek, 2021; Sompolinsky and Zohar, 2013). According to Conti, Kumar, Lal, and Ruj (2018), cryptocurrencies have attracted attention for their ability to provide financial services without the need for a central intermediary, thereby reducing costs and increasing accessibility. Their relevance has been reinforced by their growing adoption not only as investments but also as a means of transaction in everyday

commerce and decentralized use cases such as smart contracts and decentralized applications (Conti, Kumar, Lal, and Ruj, 2018).

The rise of cryptocurrencies can be seen as a full-scale experiment in Hayek's ideas on monetary competition. By offering an alternative to government fiat currencies, cryptocurrencies reflect Hayek's vision of a system where different currencies coexist, and the best ones survive thanks to user adherence. This move towards alternative monetary systems is partly fuelled by a growing distrust of traditional financial institutions and a desire to reduce government oversight and control over financial transactions (Fantacci, 2019; Issing and Brittan, 1997). The growing interest in decentralized digital currencies suggests a collective search for financial systems that better match the ideals of economic freedom and individual empowerment, themes central to Hayek's work (Nabilou and Prüm, 2019).

II. Hayek's Analysis of Decentralization

According to Newman and Giardina (2011), Friedrich Hayek widely advocated the concept of decentralization, but mainly in the context of economic planning and decision-making. In his view, decentralization was essential to making effective use of the knowledge dispersed throughout society (Angeletos and Pavan, 2009; Issing and Brittan, 1997). Hayek argued that individual, local, and specific knowledge could not be fully captured or utilized by a central authority (Gamble, 2006). This translates into a preference for systems where decisions are taken as close as possible to the information available, rather than by a centralized authority (Angeletos and Pavan, 2009; Lewis, 2011). For him, the market, as a decentralized coordination mechanism, was superior to any centralized control system, as it enables individuals to make decisions based on their personal and localized knowledge, leading to a more efficient and dynamic allocation of resources (Gamble, 2006).

Blockchain is a digital record-keeping system, distributed over a network of computers without any central control point (Mahmood, 2021).



**THE RISE OF
CRYPTOCURRENCIES CAN
BE SEEN AS A FULL-SCALE
EXPERIMENT IN HAYEK'S
IDEAS ON MONETARY
COMPETITION.**

Referring to Mahmood (2021), each block of transactions is verified by the network and cryptographically linked to the previous block, forming an unalterable, transparent chain. This technology underpins the majority of cryptocurrencies, enabling financial transactions without the intervention of banks or other intermediaries (Varma, 2019). In this sense, blockchain offers a practical framework for financial decentralization by enabling every participant in the network to contribute to the validation process, reflecting Hayek's idea that the best decisions are made as close to the information as possible.

Decentralized cryptocurrencies, based on blockchain technology, offer several advantages that align with Hayek's principles. First, they minimize the role of central authority, reducing the risks of currency manipulation and economic mismanagement by governments or central banks (Nabilou and Prüm, 2019). Second, they allow genuine monetary competition, giving individuals the freedom to choose the currency they prefer to use, a principle Hayek upheld throughout his career as a means of promoting economic stability and innovation (Fantacci, 2019). Third, by facilitating cheaper and faster cross-border transactions, cryptocurrencies improve the efficiency of economic

exchanges and support global economic integration without the need for centralized regulation (He, 2021). Finally, the transparent and open nature of blockchain promotes greater accountability and could help reduce corruption and improve governance (Batubara, Ubacht, and Janssen, 2019).

III. Freedom of Choice in Monetary Matters

Friedrich Hayek made one of the most impassioned pleas for currency competition in his book *Denationalisation of Money* (Issing and Brittan, 1997). Hayek argued that a government monopoly on money was as harmful as any other monopoly and that citizens should have the freedom to choose which currency to use, just as they choose between different products in a market (Issing and Brittan, 1997). In his view, competition between different forms of currency would promote monetary stability, reduce inflation, and encourage innovation in money management (Endres, 2009). According to Endres (2009), in his model, private currencies would coexist with national currencies, each supported by the trust and acceptance of users.

Cryptocurrencies can be seen as a modern-day embodiment of Hayek's theories on monetary freedom (Sanz Bas, 2020). Indeed, they operate on decentralized networks without the centralized control of banks or governments, offering users the ability to freely choose the currency they prefer to use (He, 2021). This ability to choose a currency based on its intrinsic merits, such as security, stability or confidentiality, embodies Hayek's ideal of competition and choice (Sanz Bas, 2020). What's more, the rapid development of different cryptocurrencies with varying characteristics points to a dynamic landscape of monetary competition that drives innovation and constant improvement.

The emergence of cryptocurrencies could have profound implications for traditional monetary policies (Fantacci, 2019). First, they pose a challenge to the monetary authority of central banks, which may find it difficult to control the money supply or conduct effective policies in times of crisis if a significant proportion of economic transactions escape their control. Second, the ability of

cryptocurrencies to cross borders unhindered could complicate the management of balances of payments and exchange rates. However, they also offer opportunities to rethink the way monetary policies are formulated and applied, suggesting a possible shift towards more adaptive and responsive approaches that incorporate the principles of decentralization and diversity of monetary choices.

To conclude, this essay explored the relevance of Friedrich Hayek's theories in the modern cryptocurrency context, focusing on decentralization, monetary freedom, and currency competition. We discovered that Hayek's principles align closely with the foundations of cryptocurrencies, particularly with regard to decentralization and the ability of individuals to freely choose their currency (Sanz Bas, 2020; Trantidis and Cowen, 2020). However, despite their potential to realize Hayek's ideals, cryptocurrencies face significant practical challenges such as volatility, security risks, and regulatory issues, which may hinder their adoption and functionality as viable alternatives to traditional currencies (Endres, 2009).

The findings of this essay suggest that policymakers should consider policies that recognize the potential of cryptocurrencies to function as true instruments of economic freedom and decentralization while addressing their inherent challenges (Nabilou and Prüm, 2019). Balanced regulation might require maintaining innovation and freedom of use while protecting users from fraud, and cyberattacks (Gandal, Hamrick, Moore, and Vasek, 2021). In addition, a global and collaborative approach may be required to deal with the transnational aspects of cryptocurrencies, implying international cooperation to create a consistent and supportive regulatory environment (Fantacci, 2019). Their evolution and impact will largely depend on how the challenges identified are addressed by the technological, economic, and regulatory communities on a global scale. ♦



Jake Fuss is Director of Fiscal Studies for the Fraser Institute. He holds a Bachelor of Commerce and a Master's Degree in Public Policy from the University of Calgary. He has written commentaries appearing in major Canadian newspapers including the Globe and Mail, Toronto Sun, and National Post. His research covers a wide range of policy issues including government spending, debt, taxation, labour policy, and charitable giving.

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ARTIFICIAL INTELLIGENCE AND THE PROCESS OF CREATIVE DESTRUCTION

JACKSON ROSENHEK

“The opening up of new markets ... 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, 1943/2003: 83). In his book, *Capitalism, Socialism and Democracy*, Austrian economist Joseph Schumpeter introduces his idea of the inevitable link between the pains and gain of capitalism, which he calls “creative destruction.” Schumpeter suggests that with the creation of a new product or industry, another is inexorably destroyed; moreover, he explains that such a cycle is unavoidable in the pursuit of economic growth. Although this idea is now decades old, it nonetheless holds true in observance of many contemporary economic events. Most notably, the concept of creative destruction can be aptly applied to the rise of artificial intelligence.

Since the release of OpenAI’s ChatGPT in 2022, when the artificial intelligence market was worth less than US\$90 billion (Haan, 2024), the industry has experienced remarkable growth. With a compounded annual growth rate of more than

40 percent, the industry is estimated to be worth more than US\$1.3 trillion by 2032 (Bloomberg Intelligence, 2023). Beyond that, artificial intelligence has the potential to catalyze enormous economic growth; according to McKinsey and Company, AI could add up to US\$13 trillion to the global GDP by 2030 thanks to labour automation, innovation, and new competition (Bughin, Seong, Manyika, Chui, and Joshi, 2018). Additionally, by 2030, around 70 percent of companies will adopt at least one form of artificial intelligence technology (Bughin, Seong, Manyika, Chui, and Joshi, 2018). While it is clear that AI will revolutionize the world economy, some are fearful as to whether it will produce more harm than good.

Just as artificial intelligence will lead to innovation and automation, it will simultaneously render certain tasks, occupations, and even industries obsolete. Namely, demand for jobs could shift away from repetitive tasks toward those that require more digital skills; the former category could experience the largest decline as a share of total employment by around 30 percent by 2030 (Bughin, Seong, Manyika, Chui, and Joshi, 2018). Additionally,

around 13 percent of total wages could shift to the latter group, while other workers experience stagnation or even a cut in their wages (Bughin, Seong, Manyika, Chui, and Joshi, 2018). This means that the revolution of AI, while providing economic benefit to many, may bring detriment to others.

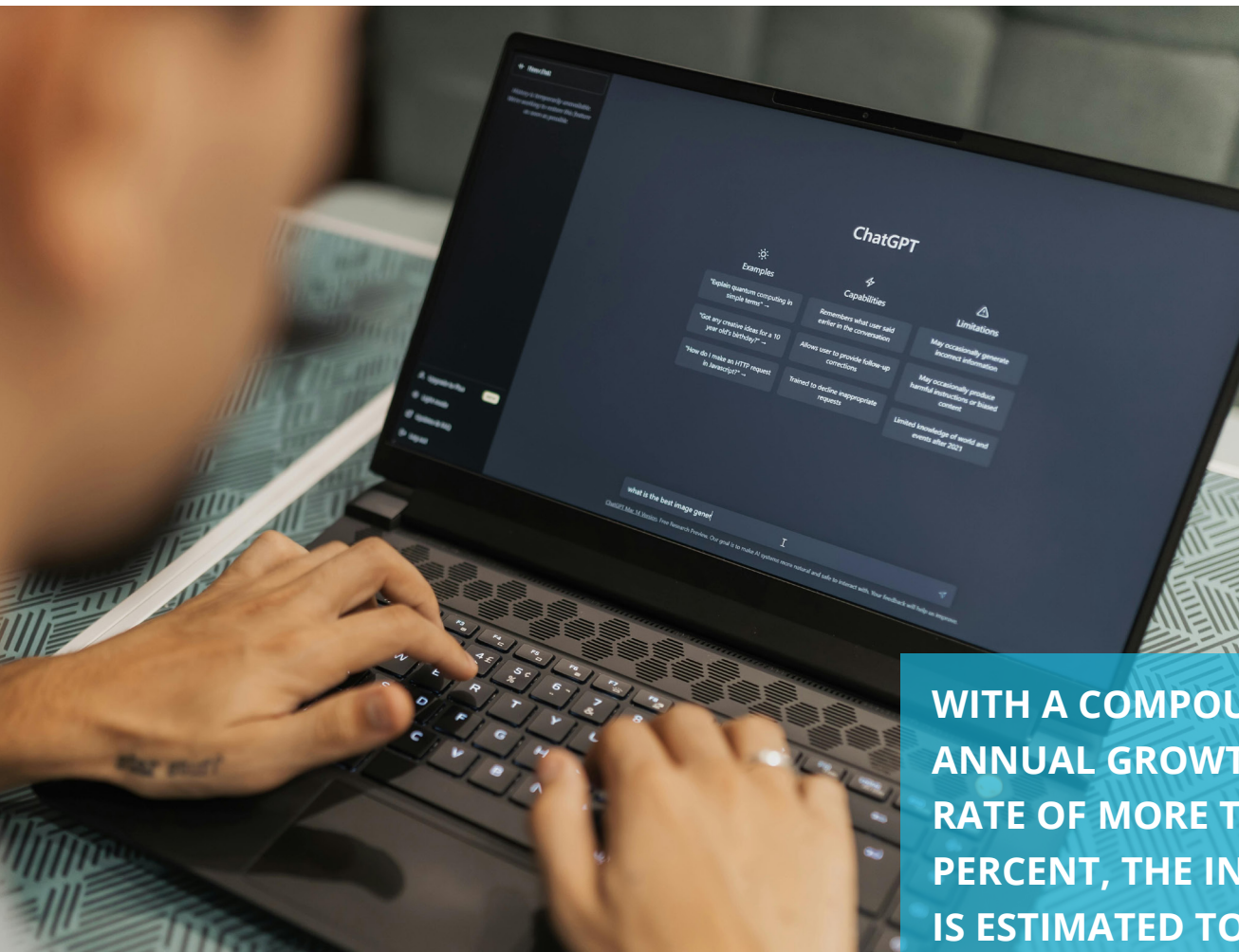
Although such a rapid economic transformation may appear concerning, this was the exact evolution that Schumpeter would have expected according to his idea of creative destruction. In his 1934 book, *The Theory of Economic Development*, he describes five stimuli that could bring on such a change: the introduction of a new good or a new quality of a good, the introduction of a new method of production, the opening of a new market, the conquest of a new source of supply, or the carrying out of the new organization of any industry (Schumpeter, 1934/2004: 66). Accordingly, the rise of artificial intelligence could be viewed as both a new good (e.g., AI-powered products like ChatGPT) and a new method of production (e.g., A newer, more efficient way to produce creative products like images and text), satisfying the requisite circumstances to begin the process of creative destruction.

Schumpeter viewed creative destruction not as a threat but rather an opportunity. In his eyes, one of the most important forms of competition was the competition between goods that exist now and goods that might exist in the future (Schumpeter, 1943/2003: 84-85). As Dr. Russell Sobel and Jason Clemens of the Fraser Institute explain, “Schumpeter stressed that it was the threat from the introduction of new goods and services that results in ... the true nature of dynamic competition. This view stood in stark contrast to the competition depicted in textbook economics that focused on competition in price, quality, or location among rival firms producing similar goods in the same industry” (Sobel and Clemens, 2020: 18). The principle of creative destruction is based on the idea that when a new product is introduced, its predecessors must adapt and find a way to compete with it. This same logic can be applied to the introduction of artificial intelligence. As AI technologies advance, traditional industries face the challenge of adapting

or becoming obsolete. For instance, AI-driven automation in manufacturing has led to significant shifts in labour demands, where repetitive tasks are increasingly performed by machines. This transition forces workers to evolve and acquire new skills they can apply to new work. As a result, the cycle of Schumpeterian creative destruction—that is to say, competition between what has been and what will be—breeds adaptation and innovation. Likewise, the emergence of artificial intelligence embodies this phenomenon as it forces competitors—companies, products, or people—to refine their processes and compete.

In Schumpeter’s eyes, not only is creative destruction an essential factor in the processes of competition and innovation, but it is also inevitable under capitalism. Schumpeter writes, “the essential point to grasp is that in dealing with capitalism we are dealing with an evolutionary process ... Capitalism, then, is by nature a form or method of economic change and not only never is but never can be stationary ... [Creative destruction] is what capitalism consists [of] and what every capitalist concern has got to live in” (Schumpeter, 1943/2003: 82-84). Schumpeter viewed entrepreneurship under capitalism as a form of evolution—“industrial mutation” was the term he used—that was nothing more than an “organic process” (Schumpeter, 1943/2003: 83). In his view, it was only natural that new, better products and production practices should emerge, gain a competitive advantage over the old ones, and subsequently wipe them out of existence.

In theory, such a phenomenon may appear brutal and unforgiving. But in reality, creative destruction has dictated the transformation of markets for hundreds of years, from the steam engine displacing traditional handcraft industries to the rise of the internet redefining media and largely replacing old forms of technology like physical mail. Each technological leap—the product of just a handful of entrepreneurs with a novel idea—brought about a wave of economic shifts, rendering old industries obsolete while paving the way for new opportunities and growth. The introduction of AI follows this pattern. As AI technologies become



WITH A COMPOUNDED ANNUAL GROWTH RATE OF MORE THAN 40 PERCENT, THE INDUSTRY IS ESTIMATED TO BE WORTH MORE THAN US\$1.3 TRILLION BY 2032

more integrated into various sectors, they are poised to revolutionize industries by enhancing efficiency; at the same time, they will replace many workers, technologies, and businesses. This process, while disruptive, ultimately contributes to overall economic progress and societal advancement. The cycle of creative destruction ensures that economies remain dynamic, continuously evolving to drive growth.

Even though creative destruction is a natural—and beneficial—product of capitalism, there is still the argument that governments should intervene to slow it. For example, more than 200 artists signed a letter asking tech firms to pledge to avoid developing AI tools that could replace human

creatives (Robins-Early, 2024). Additionally, the US state of Tennessee recently enacted legislation to protect musicians from having their vocal likeness generated by AI (Associated Press, 2024). Thus, some believe it would be appropriate to slow AI's creative destruction.

Regarding this, Schumpeter's views on creative destruction extend beyond economics to public policy. Sobel and Clemens clarify, "Schumpeter provides a road map to the policy environment conducive to economic development—jurisdictions that allow the process of creative destruction to unfold, rather than those that put up barriers to protect the status quo, are the ones that grow faster and have stronger economic progress and

development” (Sobel and Clemens, 2020: 22). In other words, while the creative destruction brought on by AI may be disadvantageous to some, it should not be impeded, as it produces a net benefit for society; this is especially apparent when considering that although artificial intelligence could replace some jobs, new jobs driven by investment in AI could augment employment by five percent by 2030, and the total productivity boost could have a positive contribution to employment of about 10 percent (Bughin, Seong, Manyika, Chui, and Joshi, 2018).

In conclusion, the rise of artificial intelligence exemplifies Joseph Schumpeter’s idea of creative destruction. AI’s potential to revolutionize industries and create economic growth comes with the inevitability of rendering certain jobs and sectors obsolete. While this rapid transformation may seem daunting, it is a natural and beneficial aspect of capitalist evolution driving competition and innovation. Governments should allow this process to unfold, as it leads to overall economic progress; despite some adverse effects, creative destruction ensures that economies continuously adapt to new challenges and opportunities. ♦



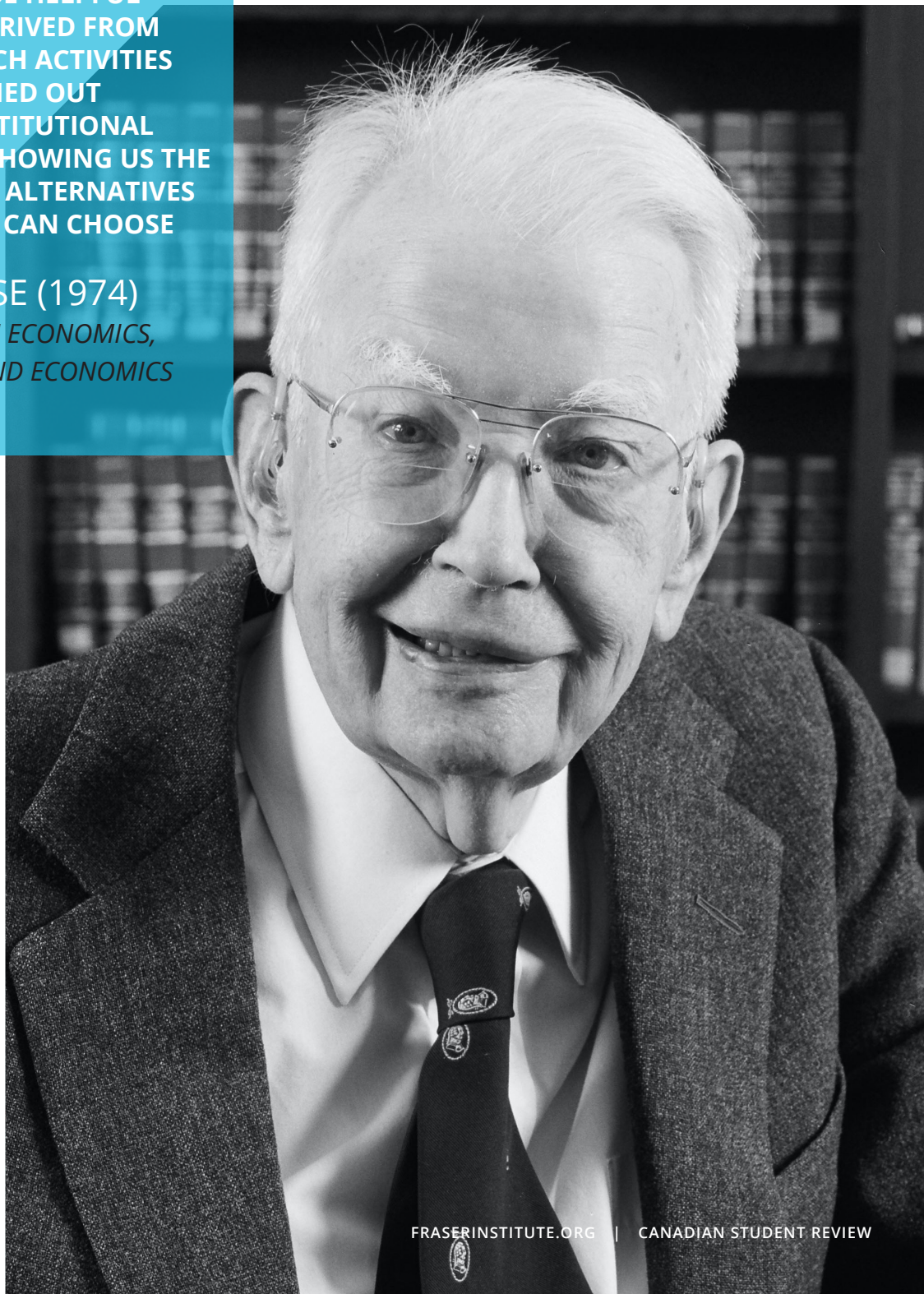
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I THINK WE SHOULD TRY TO DEVELOP GENERALISATIONS WHICH WOULD GIVE US GUIDANCE AS TO HOW VARIOUS ACTIVITIES SHOULD BEST BE ORGANIZED AND FINANCED. BUT SUCH GENERALISATIONS ARE NOT LIKELY TO BE HELPFUL UNLESS THEY ARE DERIVED FROM STUDIES OF HOW SUCH ACTIVITIES ARE ACTUALLY CARRIED OUT WITH DIFFERENT INSTITUTIONAL FRAMEWORKS... BY SHOWING US THE RICHNESS OF SOCIAL ALTERNATIVES BETWEEN WHICH WE CAN CHOOSE

— RONALD COASE (1974)
THE LIGHTHOUSE IN ECONOMICS,
JOURNAL OF LAW AND ECONOMICS
17 (1974), P. 375



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