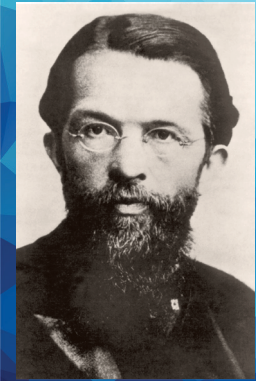
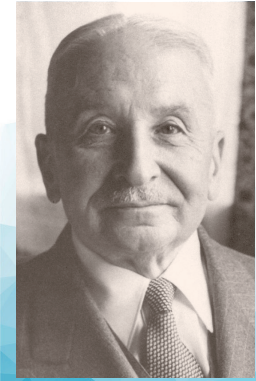




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HOW TO FOSTER ENTREPRENEURSHIP IN CANADA

THE TEACHINGS OF THE AUSTRIAN SCHOOL OF ECONOMICS

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How to Foster Entrepreneurship in Canada: The Teachings of the Austrian School of Economics

Montreal Economic Institute

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HIGHLIGHTS

Everyone claims to favour entrepreneurship, but politicians routinely propose various programs to help entrepreneurs, when they should instead concentrate on getting rid of policies that discourage them. Indeed, the empirical literature shows that interventionist policies are detrimental to entrepreneurship. The Austrian School of Economics has much to teach us about the kinds of policies that truly encourage entrepreneurship and wealth creation, and thus how to improve public policies in Canada.

Chapter 1 – The Origins and Development of the Austrian School of Economics

- The Austrian School of Economics has a long and storied intellectual history, and can count among its adherents some of the most accomplished scholars in the field of economics, beginning with founder Carl Menger.
- The Austrian theoretical account of the market process stressed a positive program of *laissez-faire*, one in which the role of economic policy was to eliminate legal privileges that stifle the creative powers of a free civilization.
- The Scottish Enlightenment philosophers, Adam Smith prominently among them, sought to demonstrate that social institutions could emerge from human action without necessarily being the result of human design.
- The prevailing attitude of the economists educated in Vienna was that of a “student of civilization,” not a “master of the universe” attitude that often captured the imagination of intellectuals at the birth of the industrial age.
- Ludwig von Mises explained that a market economy based on private property was a necessary condition for economic agents to engage in “rational economic calculation” regarding alternative courses of investment and production.
- During the 20th century, the newer members of the Austrian School became leading voices in a counter-revolution against the excessive aggregation and formalism of the post-WWII consensus.
- As Friedrich Hayek explained, while market prices may not be perfect, the alternative of having a central figure, a conductor of some sort, try to take into account all of the tiny, dispersed bits of information that would be needed to direct the economy is simply unworkable.

Chapter 2 – What Does the Austrian Theory Tell Us about Entrepreneurship and Wealth Creation?

- Wealth creation and economic progress follow from individuals freely discovering and then pursuing the gains from productive specialization and the gains from peaceful social cooperation through trade.
- Jean-Baptiste Say, one of the greatest thinkers in the French classical political economy tradition, was among the first to clearly define the key role of the entrepreneur, who sees opportunity and acts to coordinate production with a view to turning a profit.
- However, the advancement of neoclassical economics in the late 19th century, and the near universal acceptance of the use of mathematical tools developed in the natural sciences, led gradually to the disappearance of the entrepreneur as a central character in economic theory.
- Joseph Schumpeter resisted the allure of the Walrasian model of general competitive equilibrium, and focused on how the path to economic development was punctuated by disruptions due to innovation. He described the competitive behaviour of entrepreneurs in the market as “creative destruction.”
- For Israel Kirzner, the kind of knowledge the entrepreneur discovers is the realization of errors by market participants: prices being too high or too low, goods being overabundant in one place but under-supplied in another, innovations that are not being implemented, etc.
- Entrepreneurship is omnipresent in economic arrangements, but depending on the institutional arrangements individuals are operating under, it can be either productive or unproductive.

- The societies that become rich are the ones whose institutional environments push their best and brightest toward productive entrepreneurship, while societies that stagnate are those whose institutional environments make it more rewarding to engage in destructive entrepreneurial behaviour.
- Without the incentives provided by private ownership, the informational signals contained in prices, and the market discipline of loss and the market reward of profit, economic systems will fail to allocate resources efficiently and to continually discover new and innovative ways of producing and delivering products to satisfy consumer wants.

Chapter 3 – Measuring Entrepreneurship in Canada

- Even when it comes to entrepreneurship in the conventional sense, that is, creating and operating a new for-profit business, it is difficult to measure, yet even a partial account of entrepreneurship can be useful as a general indicator of variations through time, or when comparing different institutional contexts.
- Entrepreneurship is perceived positively by majorities of Canadians polled, who agree that entrepreneurship is a good career choice, and that it leads to high social status when successful.
- Poll respondents in Canada see entrepreneurial opportunities around them, yet are somewhat limited by the fear of failure, and also constrained by their capabilities.
- In the 2017 *Doing Business* ranking, Canada fares very well in a few categories, such as “Starting a Business,” “Getting Credit,” and “Protecting Minority Investors.” However, in other categories, especially “Enforcing Contracts,” Canada ranks much lower.
- Within Canada, Quebec fares poorly, suggesting an institutional environment less conducive to growth than that of other provinces such as Saskatchewan, British Columbia, and Alberta, and even the Atlantic Provinces.

- The portrait of entrepreneurship in Canada that emerges from surveys and statistics is a relatively good one, although with significant (if not unexpected) differences between provinces, and also with room for improvement.

Chapter 4 – Applying Austrian Lessons on Entrepreneurship to Canadian Policies

- A critical examination of activist policies reveals that rather than providing the tools needed to organize a vibrant and growing economy, they are often the main source of the very problems they purport to solve.
- Taxes, for example, can both distort the incentives created by private property, and affect prices, which are seen by the Austrian school as surrogates for information, since they are an indirect indication of how abundant or scarce a resource really is.
- Heavy taxation of individual income weakens private property because it deprives individuals of a substantial portion of their income, which in turn weakens incentives for wealth formation.
- For prices to generate quality information, and ultimately for profits and losses to generate innovation, the economy must be a dynamic one in which money is free to flow, but the capital gains tax makes such movement of funds costly.
- Austrian economics criticizes the effect on innovation of legal monopolies, as competition among entrepreneurs to attract customers is generally the biggest incentive to innovate. Even when sectors are not nationalized, the government crowds out private enterprise by using scarce resources like labour and capital.
- The Canadian government is a large provider of subsidies, with a whopping 38% of the subsidies granted by Industry Canada from 1961 to 2013 going to just ten recipients.
- Making predictions about the success or failure of particular start-ups would require government not only to know what everyone has in their minds, but also to have this knowledge long before the people involved actually have it.

- Occupational licensing regulations limit the number of people who can work in certain jobs, preventing outsiders from entering those fields and making workers much more expensive than they would otherwise be.
- Labour regulations that limit flexibility in terms of hiring and firing workers affect entrepreneurship by making it costlier to do business, and even sometimes completely ruling out certain business models.
- In Canada, getting a drug approved and included on public insurance plan formularies of reimbursable drugs requires both federal and provincial approval, which can take years.
- The standard example of entrepreneurs arbitraging between markets by moving a good from one market to another where it is worth more, which benefits consumers by bringing goods to where they are in higher demand, is effectively blocked by inter-provincial barriers to trade, which cost Canadians on the order of \$100 billion a year, or \$2,700 per Canadian.

INTRODUCTION

In the Canadian political landscape, entrepreneurship is like apple pie. Every politician claims to favour it. However, there is considerable confusion about the kinds of public policies that foster entrepreneurship. Politicians routinely take advantage of this confusion to propose various programs to help entrepreneurs, when they should instead concentrate on getting rid of policies that discourage them.

Indeed, the empirical literature on the policies and institutions that affect entrepreneurship throughout the world shows that interventionist policies, such as excessive government taxation and regulation, limits to trade (both internationally and domestically), and government control of economic sectors, are detrimental to entrepreneurship.¹

“One way to ground policy in a sound understanding of entrepreneurship is to focus on the research being carried out by scholars in the tradition of the Austrian School of Economics.”

This Research Paper further explores this question by providing an analytical grid for thinking about policies and institutions, and why some might be better than others in terms of increasing the quantity and quality of entrepreneurship.

One way to clear up the confusion and to ground policy in a sound understanding of entrepreneurship is to focus on the research being carried out by scholars in the tradition of the Austrian School of Economics.

The Austrian tradition refers to a type of economic analysis that has its roots in the University of Vienna in the latter part of the 19th century, hence the name. Today, it is an approach to economic research that includes academic practitioners all around the world. One of its specificities is to think of most economic phenomena, and in fact many kinds of human interactions more generally, in terms of entrepreneurial processes. Going back to a basic understanding of what it means to act entrepreneurially, beyond the business environment, and understanding the kind of alertness to opportunities that

is prior to any entrepreneurial venture, provides important insight into the topic of entrepreneurship.

If entrepreneurship is something that is ubiquitous in human societies, what can government do to encourage this attitude? Can policy fundamentally make individuals more alert to opportunities?

Chapter 1 of this Research Paper starts to answer these questions by going back to the origins and basic research themes of the Austrian School of Economics. Chapter 2 is devoted to what the Austrian theory can teach us about policies that encourage entrepreneurship and wealth creation. Chapter 3 takes a look at the actual levels of entrepreneurship in Canada, and how we compare with the rest of the world. Finally, Chapter 4 applies the lessons of the Austrian economics analysis of entrepreneurship to Canadian public policies, with a view to improving those policies.

1. Mathieu Bédard, *Entrepreneurship and Economic Freedom: An Analysis of Empirical Studies*, Montreal Economic Institute, Research Paper, November 4, 2016.

CHAPTER 1

The Origins and Development of the Austrian School of Economics

The Austrian School of Economics has a long and storied intellectual history dating from the late 19th century, and can count among its adherents some of the most accomplished scholars in the field of economics, beginning with Carl Menger (1840-1921) and continuing with Eugen Bohm-Bawerk (1851-1914) and Friedrich Wieser (1851-1926). In the early 20th century, it included major contributors to economic thought such as Joseph Schumpeter (1883-1950) and Ludwig von Mises (1881-1973), who in turn influenced the generation of economists that included F. A. Hayek (1899-1992), Fritz Machlup (1902-1983), Oskar Morgenstern (1902-1977), and Gottfried Haberler (1900-1995).

All of these scholars made a lasting impact not only on the Austrian School of Economics, but on the discipline as a whole. They were all educated at the University of Vienna, and those who migrated away from Austria to the United Kingdom and the United States in the 1930s and 1940s had already developed an international reputation before leaving.

From its earliest beginnings, the Austrian School had a methodological, analytical, and practical public policy influence far beyond Austria, as the main tenets of the school were incorporated into economic systems of thought throughout Europe and North America. In fact, it is fair to say that while each of the figures named were proud of their educational background at the University of Vienna, they did not envision themselves as doing anything other than contributing to the scientific/scholarly literature in economics and incorporating the latest theoretical developments in order to move the science forward. In other words, they didn't see themselves as forming a "school" of thought, but rather as advancing a scientific discipline, lifting it to new heights of analysis grounded in the revolutionary insights of Carl Menger and the rigorous development of modern economics in the hands of Bohm-Bawerk and Wieser.

Others outside Austria, such as Philip Wicksteed (U.K.), Knut Wicksell (Sweden), John Bates Clark (U.S.), Herbert Davenport (U.S.), Frank Knight (U.S.), and Lionel Robbins (U.K.) developed "Austrian" ideas on methodological individualism, subjective utility theory, and the competitive, entrepreneurial market process in their own unique ways in the first half of the 20th century. During this era, the contributions of Austrian economists were simply

part of the common knowledge of all economists being trained in the latest, most up-to-date developments in neoclassical economics.

As is often the case, the notion of an Austrian "school" of thought was a label attributed to these scholars early on by their intellectual opponents, in this case the German Historical School. The German historicists were critics of both the classical political economists such as Adam Smith, David Ricardo, and John Stuart Mill, and emerging neoclassical economists like Leon Walras, William Stanley Jevons, and Carl Menger.

Since Menger, Bohm-Bawerk, and Wieser wrote in German, they were specific targets of attacks by the German historicists. Thus, "the Austrian School" was born in contrast with the "German Historical School" in the 1880s, and the label stuck.

"From its earliest beginnings, the Austrian School had a methodological, analytical, and practical public policy influence far beyond Austria."

The German Historical School criticized what they saw as a faulty model of human nature developed by classical and neoclassical economists, namely *homo economicus*, or "economic man." They also rejected the role of abstract theory, as opposed to direct access to historical data, in understanding social phenomena. The German historicists argued that there are no economic laws, but only factual operations of the economic system that are historically determined. Accordingly, the task of the scholar was seen as engaging in detailed historical research, and not in theorizing about the abstract dynamics governing individual decision-making and commercial life.

Interestingly, Menger had originally seen his work as a complement to the German historicist literature, in accordance with the idea that all historical research is guided by a theoretical framework. Given that historical facts are theory-laden, the choice in economic analysis was between an articulated and defended theory versus an unarticulated and hidden theory. Therefore, Menger concluded, we should explicitly articulate our theoretical framework and subject it to rigorous critique by our scientific peers as to its internal logic and its relevance to

the problems that our science was attracted to and which required solving.

To Menger, the purpose of theory was to aid in the production of historical scholarship. Theory provides us with a pair of glasses that enable us to better see the “facts” and aids us in arranging those facts into coherent and relevant depictions of economic phenomena.

In addition to their criticisms of theorizing, the German historicists dismissed the public policy implications of classical political economy as “Manchesterism,” a pejorative term coined by the German socialist Ferdinand Lassalle that caricatured classical political economy as defending a *laissez-faire* economic policy that was atomistic and privileged the rich at the expense of the poor.²

“The contributions of Austrian economists were simply part of the common knowledge of all economists being trained in the latest, most up-to-date developments in neoclassical economics.”

It is certainly the case that both in its theories and in the policies that follow from them, the Austrian School since Carl Menger has regarded itself as the modern continuation of classical political economy and policy.³ But contrary to the claims of its critics, the Austrian theoretical account of the market process stressed a positive program of *laissez-faire*, one in which the role of economic policy was to eliminate legal privileges that stifle the creative powers of a free civilization. It also outlined the institutional preconditions for a society of free, prosperous, and responsible individuals. These preconditions include the rule of law, monetary stability, and an overall absence of legal privileges, the policy implications of which benefit the least advantaged in society and check the hubris of those in political power.

The Key Role of the Institutional Framework

From 1776 to the 1930s and 1940s, economists answered policy questions by focusing on the relevant institutional framework. The Scottish Enlightenment philosophers, Adam Smith prominently among them,



Carl Menger (1840–1921)

sought to demonstrate that social institutions could emerge from human action without necessarily being the result of human design.⁴

Commercial life and entrepreneurship, for instance, existed prior to any effort to create them. Money and other tools of trade can be found throughout human history, from the depths of antiquity to contemporary commercial society. Individuals pursue mutually beneficial exchange and realize the gains from innovation without any central direction. Social cooperation and complex patterns of exchange and production are simply characteristics of modern life.

This is what is meant by “invisible hand” explanations, which have been the hallmark of economic reasoning since the 18th century. The market works as described by the theory of the invisible hand precisely because a host of other background considerations are in place as a result of the operation of non-market factors. Governance

2. Erwin Dekker and Stefan Kolev, “Introduction to ‘The Social Theories of Classical Political Economy and Modern Economic Policy,’” *Econ Journal Watch*, Vol. 13, No. 3, p. 469, 2016.

3. Carl Menger, *Carl Menger’s Lectures to Crown Prince Rudolf of Austria*, edited by Erich Streissler and Monika Streissler, Edward Elgar Publishing, 1994.

4. The phrase “of human action, but not of human design” to describe invisible hand phenomena was first coined by another Scottish Enlightenment thinker, Adam Ferguson, in his book, *An Essay on the History of Civil Society*, 1782 [1767], p. 205. The exact phrasing in the book is “of human action, but not the execution of any human design.”

institutions must be in place, and certain social mores must be widely accepted; economic life occurs within those formal and informal institutions. Economic life never happens in a social vacuum, but always within a specific institutional context. Government, in this same context, should be restricted to those activities that it can do well, and only those activities.

In many ways, the classical economist's position was the commonly accepted wisdom of 19th century Western political philosophy.

It is worth noting that at the University of Vienna, economics was part of the law curriculum. The educational program stressed the laws and legal institutions that circumscribed the economic activity under examination. And the prevailing attitude of the economists educated in Vienna was that of a "student of civilization," not a "master of the universe" attitude that often captured the imagination of intellectuals at the birth of the modern industrial age.

"The Austrian theoretical account of the market process stressed a positive program of *laissez-faire*, one in which the role of economic policy was to eliminate legal privileges that stifle the creative powers of a free civilization."

F. A. Hayek, for example, would repeatedly use the metaphor of the liberal-minded statesman as a gardener who helps cultivate an ecology of creative evolutionary growth, rather than an engineer who designs a system for the optimization of potential.⁵ In *The Road to Serfdom*, Hayek stresses the importance of the institutional framework when he states:

It is regrettable, though not difficult to explain, that in the past much less attention has been given to the positive requirements of a successful working of the competitive system than to these negative points. The functioning of a competition not only requires adequate organization of certain institutions like money, markets, and channels of information—some of which can never be adequately provided by private enterprise—but it depends, above all, on the existence of an appropriate legal

5. F. A. Hayek, "The Pretence of Knowledge," *American Economic Review*, Vol. 79, No. 6, 1989, p. 7; Erwin Dekker, *The Viennese Students of Civilization: The Meaning and Context of Austrian Economics Reconsidered*, Cambridge University Press, 2016.



Ludwig von Mises (1881–1973)

system, a legal system designed both to preserve competition and to make it operate as beneficially as possible. [...] The systematic study of the forms of legal institutions which will make the competitive system work efficiently has been sadly neglected.⁶

All of the unique and enduring characteristics of the Austrian School of Economics and its application to the realm of public policy are embedded in this passage.

Progress in the theory of economic policy is made when the focus isn't on the characteristics of specific players, but rather on the institutional environment in which they interact. Questions of public policy always circle back to a focus on institutions, the rules of the game, and their enforcement. The strategies players adopt are devised against a background of incentives, information, and learning. Furthermore, progress in comparative political economy follows directly from rejecting the assumptions of omniscience, omnipotence, and benevolence. We are instead very imperfect beings interacting with other imperfect beings in a very imperfect world, stumbling

6. F. A. Hayek, *The Road to Serfdom*, University of Chicago Press, 2007 [1944], p. 87.

upon ways to live better together than we ever could in isolation.

The critical point is that humans choose in the face of scarcity. Where scarcity is absent, economic analysis is not relevant. But once scarcity is recognized, we can begin to analyze choice within constraints and all that this entails. Those constraints are a consequence of nature, other people, and the institutional environment in which individuals interact with nature and with each other. Individuals must weigh the marginal benefits of any course of action along with the marginal costs of that course, and this analysis will determine their efforts to pursue exchange relationships with others, as well as the way they mix their labour with nature in production.

In a world of scarcity, choosing individuals need mental aids in negotiating trade-offs. Individuals also rely on a background set of rules that create expectations which guide their actions. The most basic such rule is that which delineates ownership.

“Progress in the theory of economic policy is made when the focus isn’t on the characteristics of specific players, but rather on the institutional environment in which they interact.”

This insight doesn’t come exclusively from the Austrian economists, but can be found throughout intellectual history. It was stated particularly clearly in David Hume’s *A Treatise of Human Nature*, when he argued that society is made possible only because of the adoption of rules that provide stability of possession, permit transference only through consent, and promote the keeping of promises.⁷ Absent the institutions of property, contract, and consent, social order will devolve into a war of all against all, and life will indeed be, in the words of Thomas Hobbes, “nasty, brutish, and short.”⁸

Ludwig von Mises explained that a market economy based on private property was a necessary background condition for economic agents to engage in “rational economic calculation” regarding alternative courses of



Friedrich A. Hayek (1899–1992)

investment and production.⁹ Economic calculation is critical to risk management and investment assessment in modern commercial life because it is the means by which the economic system is able to sort out which projects among the array of technologically feasible options are economically viable.

Absent this ability to engage in economic calculation, production activities would be so many steps in the dark, and the social system of exchange and production would be characterized by errors in the pattern of resource use and mal-coordination, as the desires and wants of individuals would go unfulfilled and mismatched. We would not have escaped the wretched conditions of poverty, ignorance, and squalor that define most of human history; instead, these would appear to hopelessly be the natural state of mankind.

These insights concerning “economic calculation” are the most important and unique contributions made by the Austrian School to political economy. Economic

7. David Hume, *A Treatise of Human Nature*, edited by David Fate Norton and Mary J. Norton, Oxford University Press, 2000 [1738], pp. 322-331.

8. Thomas Hobbes, *Leviathan*, revised edition, edited by A. P. Martinich and Brian Battiste, Broadview Press, 2010 [1651], XIII.9.

9. Ludwig von Mises, *Economic Calculation in the Socialist Commonwealth*, Ludwig von Mises Institute, 1990 [1920]; Ludwig von Mises, *Socialism: An Economic and Sociological Analysis*, Yale University Press, 1951 [1922].

calculation, and the institutional conditions that make it possible, should always be in the forefront of any discussion of public policy.

Entrepreneurs, for example, allocate their time and attention based on the relative pay-offs they face in any given social setting. If the institutional environment rewards productive entrepreneurship, then the time and attention of entrepreneurial actors in the economy will be directed toward realizing the gains from trade and innovation. If, in contrast, there are greater returns from the allocation of that time and attention to rent-seeking and even criminal activity, alert individuals will respond to those incentives accordingly. Whether economic actors are playing positive-sum games, zero-sum games—or worse yet, negative-sum games—is a function of the rules of the game that are in operation in that particular context.

Economics Is Transformed

During the 20th century, the discipline of economics was transformed by thinkers who wanted to move beyond the role of student of civilization and statesman as gardener to play the role of engineer and envision the statesman as an active intervener in the system. They also rejected the Smithian emphasis on the rules of the game and the invisible hand.

Imperfect individuals were replaced by hyper-rational and fully informed actors who were not faced with real choices but with simple exercises of constrained optimization in frictionless environments with an infinite number of buyers and sellers.

“If the institutional environment rewards productive entrepreneurship, then the time and attention of entrepreneurial actors in the economy will be directed toward realizing the gains from trade and innovation.”

Furthermore, the creative evolution of the market, animated by entrepreneurs who are guided by relative prices, attracted by the lure of pure profit, and disciplined by the penalty of loss, was squeezed out in favour of a textbook model that replaced the haggling and bargaining of the market with a pre-reconciliation of all plans. It provided optimality conditions and equilibrium end-states that could be compared against ideal



Murray Rothbard (1926–1995)

conditions in order to assess the performance of the economy.

Modern industrial capitalism, it was presumed, required an active government to counter the inherent instability of business cycles and curb the tendency in capitalism toward industrial concentration and the exploitation of the consumer through monopoly power. Addressing these new tasks of government would by definition require economic expertise.

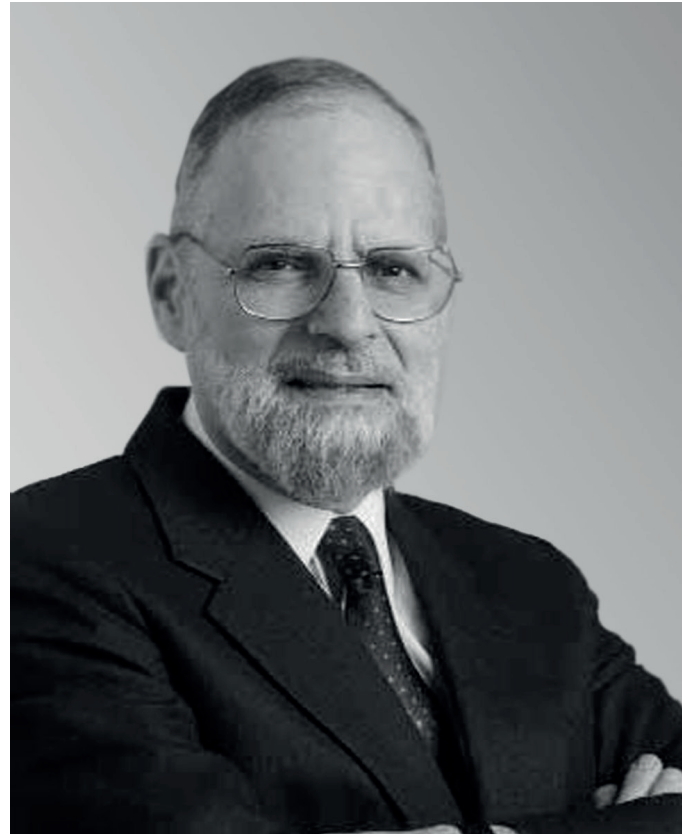
During the Progressive Era, there was an explosion of regulatory agencies, and these agencies were staffed with economists. World War I, the Great Depression, and World War II each accelerated this trend, and as the number of economists employed at all levels of government continued to grow, new PhD programs were established to keep up with the demand. This transformed the discipline throughout the 20th century from a branch of moral philosophy into basically an applied discipline of social engineering.

Abba Lerner’s *The Economics of Control* summarizes the emerging progressive consensus of Western economists

around WWII and thereafter.¹⁰ Similarly, William Baumol's *Welfare Economics and the Theory of the State* reflected this consensus, and Paul Samuelson's *Foundations*, as well as his *Economics*, cornered the education market from introductory courses to advanced graduate training in the discipline until the 1980s.¹¹ Even with the development in the 1970s and 1980s of New Classical Macroeconomics and New Institutional Microeconomics, the consensus, while cracked, never gave way—especially in the realm of public policy.

“Imperfect individuals were replaced by hyper-rational and fully informed actors who were not faced with real choices but with simple exercises of constrained optimization in frictionless environments with an infinite number of buyers and sellers.”

The newer members of the Austrian School became leading voices in a counter-revolution against the excessive aggregation and formalism of this post-WWII consensus. The pivotal texts in the Austrian contribution to this counter-revolution against the Samuelsonian neo-classical synthesis were Mises's *Human Action*, Hayek's *Individualism and Economic Order*, Murray Rothbard's *Man, Economy and State*, and Israel Kirzner's *Competition and Entrepreneurship*.¹² But it would be a mistake to view these works in isolation from a broader counter-revolution which included the property rights economics of Armen Alchian, the law and economics movement spearheaded by Ronald Coase, the New Institutional Economics of Douglass North, Oliver Williamson, and Elinor Ostrom, and the public choice and constitutional political economy of James Buchanan, Gordon Tullock, and Vincent Ostrom.



Israel Kirzner (1930–)

The Contemporary Austrian School

There is a significant unity in the core ideas about economic theory and economic policy in the Austrian School from Menger to Mises, Hayek, and contemporary practitioners. It is characterized by methodological individualism, the subjective theory of value and expectations, and market process analysis.

Ultimately, the general guiding principle offered by the Austrian School, from a strictly economic point of view, is to discover the set of rules that cultivate an environment conducive to the process of economic calculation and that encourage vibrant economic growth and development by unleashing the creative powers of a free civilization. From Adam Smith to F. A. Hayek, this has meant rules that exhibit neither discrimination nor domination. These rules are abstract, general, and don't favour any particular group at the expense of others. Preferential politics, or the granting of privileges, is to be avoided, and this is the criteria which all proposed public policies must be subjected to in the first round of critical evaluation.

10. Abba P. Lerner, *The Economics of Control*, Macmillan, 1944.

11. William J. Baumol, *Welfare Economics and the Theory of the State*, Harvard University Press, 1952; Paul A. Samuelson, *Foundations of Economic Analysis*, Harvard University Press, 1947; Paul A. Samuelson, *Economics*, McGraw-Hill, 1948; David Levy and Sandra Peart, "Soviet Growth and American Textbooks: An Endogenous Past," *Journal of Economic Behavior & Organization*, Vol. 78, No. 1, 2011, pp. 110-125.

12. Ludwig von Mises, *Human Action: A Treatise on Economics*, Henry Regnery, 1966 [1949]; F. A. Hayek, *Individualism and Economic Order*, University of Chicago Press, 1948; Murray N. Rothbard, *Man, Economy and State*, Van Nostrand, 1962; Israel M. Kirzner, *Competition and Entrepreneurship*, University of Chicago Press, 1973.

There has been a resurgence of interest in these ideas since the 1970s, primarily in North America, but increasingly elsewhere as well, around the figures of Israel Kirzner, Murray Rothbard, Ludwig Lachmann, and Hans Sennholz.

Rothbard was a towering figure who had a significant ideological impact on American culture. In many ways, he created the modern libertarian movement by blending his natural rights political philosophy with a revisionist history of the abuse of state power and his Austrian understanding of the market, the critique of interventionism, the impossibility of socialist economic calculation, and the consequences of the manipulation of money and credit.

Sennholz's biggest impact was through his teaching. Lachmann, in contrast, was a research scholar of some note, although he spent most of his career in South Africa. It was only in the last decade and a half of his career that he would regularly spend time at New York University as a visiting professor, teaching and influencing PhD students and young scholars just embarking on their scientific careers.

Kirzner's work was primarily focused on the entrepreneurial market process and microeconomics more generally. Scholars building on his work in the area of microeconomics include Mario Rizzo, Richard Langlois, and Don Lavoie.

Several other scholars who came into the profession in the 1970s and 1980s such as Gerald O'Driscoll, Roger Garrison, Lawrence White, and George Selgin made their way in macroeconomics and brought about a resurgence of interest in the Austrian theory of the business cycle.

During this period, there also emerged a few generalists and historians of the Austrian School who played important roles in communicating the basic insights of the tradition to academic audiences, namely Richard Ebeling, Lawrence Moss, and Karen Vaughn.

Themes in Austrian Economics

A way to understand what is generally understood today by the moniker of the "Austrian School of Economics" is to compare it to neoclassical economics. We do so not because Austrian economics should be seen as a reply or even an alternative to the neoclassical approach, but because neoclassical economics has become the default language of economists.

While Lionel Robbins's definition of economics is often invoked, according to which "[e]conomics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses," the Austrian tradition would generally find this definition lacking.¹³ The reason is that Robbins leaves no room for the entrepreneur. Robbins's definition implies that the economic problem is simply one of choosing the right allocation of resources in reaction to the available information. There is no element of discovery, no narrative about how those different potential allocations of resources become known. And indeed, if the problem economics wishes to solve were comparable to a mathematical equation, there would be no need for entrepreneurs.¹⁴

But the market and productive activities do include elements of discovery, and therefore so should the study of economics. To respond to Robbins's definition, deliberate human activity always intrinsically implies that new information will be discovered about the world, that new means will be tried, and that individuals will choose to pursue new ends. In the process of exchange, even consumers will learn more about their own preferences.

"The newer members of the Austrian School became leading voices in a counter-revolution against the excessive aggregation and formalism of this post-WWII consensus."

For example, neoclassical economics would suggest an optimal balance of t-shirts and pairs of jeans that a consumer might buy, but Austrian economics would take into account the possibility that the same consumer might find shoes he didn't even know existed on his way to the store, and that given this new information, he would now rather buy the shoes instead of jeans and t-shirts.

Another point of departure between the Austrian approach to entrepreneurship and mainstream economic analysis is in reference to equilibrium. Equilibrium in economics can be understood as the snapshot of a

13. Lionel Robbins, *An Essay on the Nature and Significance of Economic Science*, 2nd edition, Macmillan and Co., 1945, p. 16.

14. Israel M. Kirzner, *Competition and Entrepreneurship*, University of Chicago Press, 1973; Israel M. Kirzner, "Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach," *Journal of Economic Literature*, Vol. 35, No. 1, 1997, p. 69.

point in time when the market is running smoothly because all opportunities have been seized and all economic adjustments have been made. There are neither shortages nor oversupplies. Economics in general makes extensive use of equilibrium thinking, in part because it makes the integration of mathematics much easier. Economic adjustments are then a matter of knowing what the next equilibrium should be, with little discussion of how to actually get there.

Austrian economics takes issue with this. If the analytical framework is at equilibrium, and all profit opportunities have already been identified and seized, it is easy to see why entrepreneurship has no role to play. Austrians see the entrepreneur as playing precisely that role: identifying and seizing profit opportunities. It is in fact through the entrepreneurial process that economic change comes about. Entrepreneurs are the agents of economic change because they must satisfy the needs of consumers in order to turn a profit. Entrepreneurs compete with each other, and even with potential entrepreneurs, which brings innovation and solutions to the market.

Another way of putting this is to say that mainstream economics, with its mathematical expositions, focuses on the consequences of choices, while Austrian economics is interested in the choices themselves and the process through which individuals and entrepreneurs make those choices.¹⁵ In fact, economic analysis done in the Austrian tradition seeks to explain how prices come into being rather than what system of prices will perfectly balance supply and demand at one point in time.¹⁶

This focus on the process, rather than on equilibrium and optimal prices, means that Austrian economics considers most market prices to be “imperfect.” Moreover, if this perfect equalization of supply available on the market and consumer demand were to come about at some point in time, it would be entirely coincidental and very short-lived.

These imperfect prices, however, have an important motivational and informational role to play in guiding economic activity.¹⁷ They provide incentives even though they are not absolutely perfect. Prices that are too low or too high, leading to surpluses or shortages on the market, are themselves strong incentives for adjustment. Surpluses and shortages are generally signs of either

waste or missed opportunities, two things entrepreneurs are constantly on the lookout for. Competition and the search for profit tend to lead to the “correction” of imperfect prices, with the activity of entrepreneurs pushing prices closer to a state of equilibrium without ever reaching it.¹⁸

While market prices may not be perfect, the alternative of having a central figure, a conductor of some sort, try to take into account all of these tiny, dispersed bits of information—each individual’s different preferences, budget, resources, etc.—to somehow direct the economy is simply unworkable. In the sartorial example used earlier, how would a central planner know how to take into account a consumer’s preference for shoes that the consumer himself didn’t even know existed? Even when the information is known, it can be difficult to communicate. Explaining to someone how to swim, for instance, is hardly a substitute for getting in the water. The same is true of many of the tiny decisions made daily by entrepreneurs that could never be fully communicated to, or absorbed by, a single central conductor.¹⁹

“There has been a resurgence of interest in these ideas since the 1970s, primarily in North America, but increasingly elsewhere as well, around the figures of Israel Kirzner, Murray Rothbard, Ludwig Lachmann, and Hans Sennholz.”

The Austrian tradition uses these insights about prices and applies them to other social phenomena. It studies the properties of the “rules of the game” in society, such as culture, law, and the political order. It contrasts rules that happen gradually without being designed by a central authority, such as culture, conventions, and private commercial arrangements, with rules that are handed down from on high by a legislator. The rules that emerge spontaneously and through repeated interactions between merchants, such as non-binding arbitration to settle disputes, can often be superior to the rules legislators come up with. The degree to which this was believed varied even within the Austrian tradition itself; F. A. Hayek, for instance, thought that legislators

15. Fritz Machlup, *Methodology of Economics and Other Social Sciences*, Academic Press, 1978, p. 281.

16. Nicholas Kaldor, “A Classificatory Note on the Determinateness of Equilibrium,” *Review of Economic Studies*, Vol. 1, No. 2, 1934, p. 128.

17. Peter J. Boettke, *Living Economics: Yesterday, Today, and Tomorrow*, Independent Institute / Universidad Francisco Marroquin, 2012, p. 219.

18. Ludwig von Mises, *Human Action: A Treatise on Economics*, 4th edition, edited by Bettina Bien Greaves, Book 2, Liberty Fund, 2007 [1949], pp. 337-338.

19. F. A. Hayek, “The Use of Knowledge in Society,” *American Economic Review*, Vol. 35, No. 4, September 1945, pp. 519-530.

could sometimes straighten out flaws in these spontaneous, often informal rules.²⁰

“Mainstream economics, with its mathematical expositions, focuses on the consequences of choices, while Austrian economics is interested in the choices themselves and the process through which individuals and entrepreneurs make those choices.”

The themes characteristic of the Austrian approach can be summarized as follows:²¹

1. The subjective yet socially embedded quality of human decision-making;
2. The passage of time and its effect on the economic process;
3. The profound uncertainty of expectations about the market and exchange;
4. The dispersion of knowledge in society;
5. The dynamic market processes generated by individual action, especially entrepreneurship;
6. The function of the price system in transmitting knowledge;
7. The supplementary role of cultural norms and other cultural products ('institutions') in conveying knowledge;
8. The spontaneous—that is, not centrally directed—evolution of social institutions.

20. Edward P. Stringham, *Private Governance: Creating Order in Economic and Social Life*, Oxford University Press, 2015; F. A. Hayek, *Law, Legislation and Liberty: Rules and Order*, Routledge / Kegan Paul Ltd., 1973.

21. Mario Rizzo, "Austrian Economics: Recent Work," in Steven N. Durlauf and Lawrence E. Blume (eds.), *The New Palgrave Dictionary of Economics Online*, Palgrave Macmillan, 2009.

CHAPTER 2

What Does the Austrian Theory Tell Us about Entrepreneurship and Wealth Creation?

A vibrant economy is one that is constantly introducing new products and services, and also new ways of obtaining products and services. The founder of McDonald's did not invent the cheeseburger, French fries, or sodas, but he figured out a way of delivering them to consumers at a price they found attractive using mass production techniques. As a result, there came a time when the signs on the distinctive golden arches announced that the franchises had collectively sold 1 million burgers, 10 million burgers, 1 billion burgers (the billionth ceremonially served by Ray Kroc himself on national TV in 1963). They stopped informing us about each new milestone in 1994, when they estimated that they had sold 99 billion burgers.²²

The purpose of bringing up this example is not to celebrate the drive thru window, or the meal deal, but simply to illustrate that entrepreneurship comes in many forms, and each variety reflects gains from trade and from innovation. Wealth creation and economic progress follow from individuals freely discovering and then pursuing the gains from productive specialization and the gains from peaceful social cooperation through trade.

The entrepreneur was attributed a central role in classical political economy. It was the human propensity to truck, barter, and exchange that animated economic life, according to Adam Smith. This human propensity is put into operation by the alertness of individuals to opportunities for mutually beneficial exchange. "Give me that which I want," Smith reasoned, "and you shall have this which you want, is the meaning of every such offer." And as Smith famously argued, "It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages."²³

Jean-Baptiste Say, one of the greatest thinkers in the French classical political economy tradition, was among the first to clearly define the key role of the entrepre-

neur, who sees opportunity and acts to coordinate production with a view to turning a profit:

The contribution of entrepreneurs to productive activity is a necessary one, without which production would not take place. All of the inputs required for making paper would exist, but without someone to organize them, no paper would be made from all of these disparate elements. Yet no entrepreneur would go to the trouble of assembling these scattered inputs, and run the risks associated with the manufacturing process, if he did not anticipate that the resulting product would suffice not only to reimburse his initial investment, but also to provide him with a profit to pay him for his time, his skill, and his trouble.²⁴

"Jean-Baptiste Say, one of the greatest thinkers in the French classical political economy tradition, was among the first to clearly define the key role of the entrepreneur, who sees opportunity and acts to coordinate production with a view to turning a profit."

In his *Principles of Economics*, first published in German in 1871, the founder of the Austrian School, Carl Menger, gave this definition a more modern twist by describing the entrepreneur as the one "obtaining *information* about the economic situation" and making the "economic *calculation*—all the various computations that must be made if a production process is to be efficient (provided that it is economic in other respects)."²⁵ [Emphasis in original.]

Entrepreneurs are the agents of change in an economic system. The price system with its array of relative prices guides this process of constant adaptation and adjustment to changing circumstances in an economy. Profits attract attention, and losses discipline wishful conjectures. But it is the entrepreneur who undertakes an enterprise. All classical political economists understood that discussing the economic system without reference

22. Spencer Jakab, "McDonald's 300-Billionth Burger Delayed," *The Wall Street Journal*, January 22, 2013.

23. Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, Liberty Fund, 1981 [1776], pp. 26-27.

24. Jean-Baptiste Say, *Cours complet d'économie politique pratique*, Book 1, Second Edition, Guillaumin, 1840, p. 118 (our translation).

25. Carl Menger, *Principles of Economics*, Libertarian Press Inc., 1994 [First English translation: 1976; First German edition: 1871], p. 160.

to an entrepreneur was akin to discussing *Hamlet* without talking about the prince.

But this changed with the development of the formal model of neoclassical economics. The advancement of neoclassical economics in the late 19th century, and the near universal acceptance of the use of mathematical tools developed in the natural sciences, led gradually to the disappearance of the entrepreneur as a central character in economic theory. The formal theory of maximizing behaviour at the individual level by necessity had to postulate a close-ended nature of choice. If choice was to be open-ended it couldn't be modeled as maximizing, it had to postulate fixed ends and given means. Choice ceased to be a creative voyage into the unknown. In fact, it ceased to be about change.

Similarly, the model of perfect competition would by construction describe a situation where competitive activity ceased, where profits were zero, where all adjustments to change had been made. By design, in other words, the entrepreneur had no role in the theory because the work carried out by the entrepreneur in classical political economy's depiction of the market was assumed to have already been accomplished in the model, in order to be able to write down the equilibrium as a set of equations.

The rediscovery of the entrepreneur in modern economic theory owes much to the Austrian tradition of economics. Menger, Mises, and Hayek all made contributions to our understanding of the entrepreneur and the competitive market process. But for our purposes, we will focus on the two leading figures: Joseph Schumpeter and Israel Kirzner.

Schumpeter went to school with Mises, and earned an international reputation as an economic thinker from an early age. In his *Theory of Economic Development*, Schumpeter resisted the allure of the Walrasian model of general competitive equilibrium, and focused on how the path to economic development was punctuated by disruptions due to innovation.²⁶ The author of these disruptions was the creative entrepreneur who, in recognizing the gains that could be had through destroying the existing economic arrangement, would carry out a variety of innovations in production, marketing, delivery, etc.

Schumpeter would later describe the competitive behaviour of entrepreneurs in the market as "creative

destruction."²⁷ The previous period of settled equilibrium with the attending optimality conditions would be upset by entrepreneurial innovation, thus initiating a period of market adjustment and adaptation to changing circumstances, followed by a new period of equilibrium.

Israel Kirzner's view of entrepreneurship differed from Schumpeter's: He saw the entrepreneur not as a destroyer, but as a coordinator of economic activities through time.²⁸ He emphasized that while equilibrium is a useful pedagogical tool for teaching economics, the true economist should consider the process leading to new equilibria. In this process, the entrepreneur is the key player whose main tool is "alertness" to unnoticed opportunities.

"The advancement of neoclassical economics in the late 19th century, and the near universal acceptance of the use of mathematical tools developed in the natural sciences, led gradually to the disappearance of the entrepreneur as a central character in economic theory."

When the entrepreneur notices and exploits these opportunities, prices change, and as more and more opportunities are exploited, markets can clear. Without the entrepreneur to act upon these opportunities, there would be no market to speak of, and profit opportunities would remain untapped. The competitive market is therefore considered inseparable from entrepreneurship. Moreover, this is a self-reinforcing process, since the reiteration of exchanges allows more information to be gleaned about unexploited opportunities.

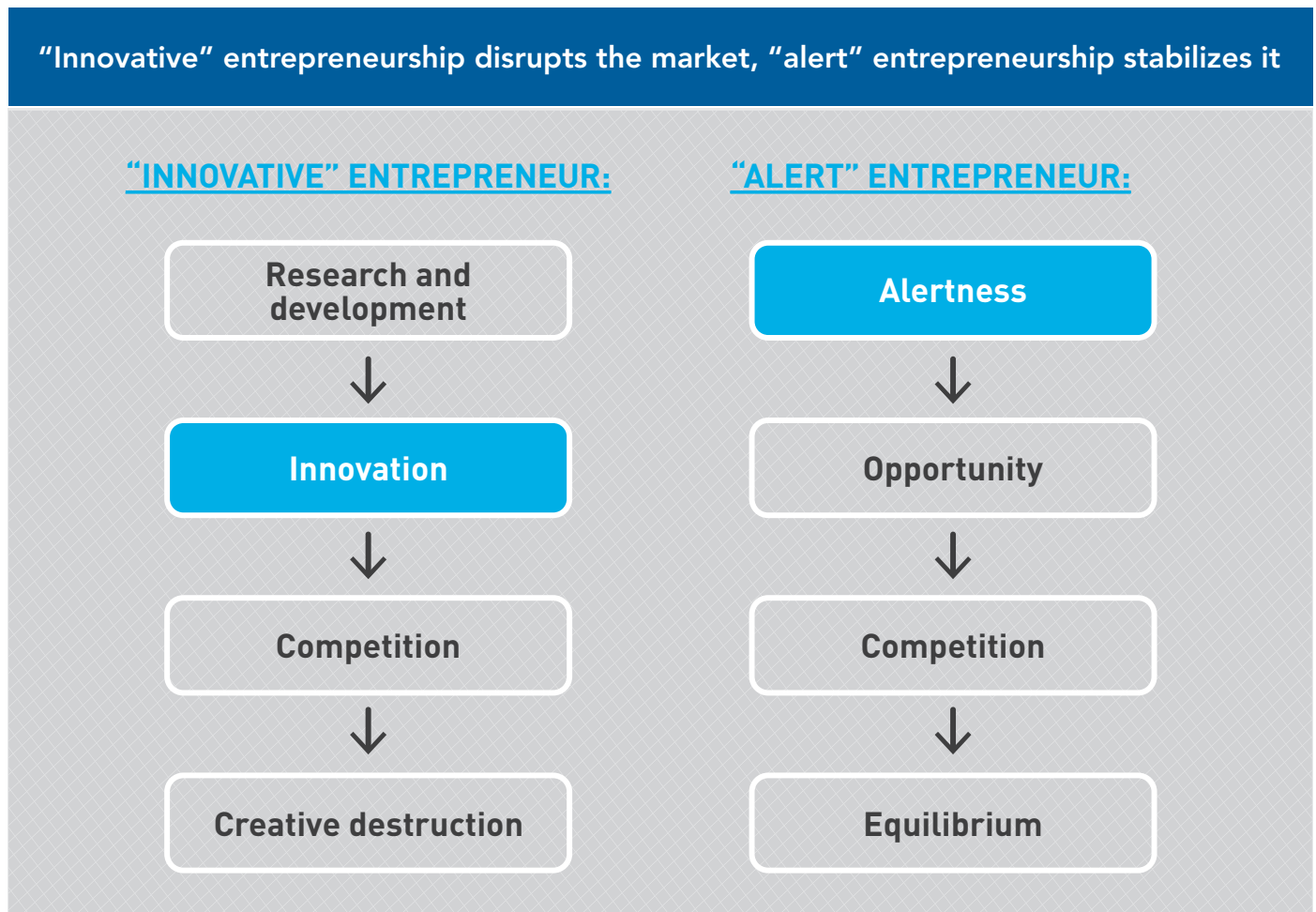
The kind of knowledge the entrepreneur discovers is the realization of errors by market participants: prices being too high or too low, goods being overabundant in one place but undersupplied in another, consumer demand that remains unsatisfied, productivity-enhancing methods or technological innovations that are not being implemented, etc. All of these can be interpreted as profit opportunities that can be realized if one acts to correct the errors. To act entrepreneurially is therefore to be

26. Joseph Schumpeter, *Theory of Economic Development*, Routledge, 1980 [First English translation: 1934; First German edition: 1911].

27. Joseph Schumpeter, *Capitalism, Socialism, and Democracy*, Harper Perennial Modern Classics, 2008 [1942], pp. 81-86.

28. Israel M. Kirzner, *Competition and Entrepreneurship*, University of Chicago Press, 1973.

Figure 2-1



alert to these arbitrage opportunities, and to act upon this knowledge by seizing the unrealized profit opportunity they represent. Doing so takes the market a little bit closer to a state of equilibrium, although as seen earlier, this state is never fully attained.

The entrepreneur is therefore seen as “responding to opportunities rather than creating them; as capturing profit opportunities rather than generating them.”²⁹ What incentives drive entrepreneurs, and ultimately shape the types of entrepreneurial opportunities they will identify and pursue, is determined in large part by the institutional framework, the rules of the economic game.

Whereas a common neoclassical definition of competition in economics is a situation in which there are enough different participants that none can individually affect the outcome of the market, Kirzner sees a market

“The kind of knowledge the entrepreneur discovers is the realization of errors by market participants: prices being too high or too low, goods being overabundant in one place but undersupplied in another, consumer demand that remains unsatisfied, etc.”

as being competitive as long as there are no arbitrary barriers to entry.³⁰ Barriers to entry can take many forms, be they taxes, quotas, regulations, a ban on a technique or activity, or any other policies that increase the cost for an entrepreneur to enter the market.

29. *Ibid.*, p. 74.

30. Israel M. Kirzner, *Discovery and the Capitalist Process*, University of Chicago Press, 1985, p. 130.

In fact, it is not an overstatement to say that freedom of entry can be seen as the very definition of a competitive market. This feature of Austrian economics was gradually incorporated into the mainstream of economics by scholars like William Baumol, Harold Demsetz, and Vernon Smith.³¹ According to this broad Austrian tradition, any public policy that limits entry prevents the emergence of productive (and “corrective”) entrepreneurship.

Figure 2-1 summarizes the differences between Schumpeter’s “innovative” entrepreneur and Kirzner’s “alert” entrepreneur.

“Entrepreneurship is omnipresent in economic arrangements, but depending on the institutional arrangements individuals are operating under, entrepreneurship can be either productive or unproductive.”

For our purposes, however, as important as the subtle differences between Schumpeter and Kirzner are for economic theory, they are less important than the recognition that in both of their analyses, we reintroduce the notion of the entrepreneur as the mover of resources from less valued uses to more highly valued uses, whether through arbitrage activity or technological innovation.³² The entrepreneur, in other words, is what drives the economic system to not only tend toward the realization of all the gains from trade, but also to constantly realize the gains from innovation. This capacity of entrepreneurial capitalism has been referred to as the “free-market innovation machine.”³³ Modern market societies have made innovation routine, in production, distribution, and consumption.

The Influence of Institutions on Entrepreneurship

Entrepreneurship is omnipresent in economic arrangements, but depending on the institutional arrangements individuals are operating under, entrepreneurship can be either productive or unproductive. Productive entrepreneurship follows from pursuing opportunities for wealth creation, whereas unproductive entrepreneurship follows from efforts to extract resources from others, as summarized in Table 2-1.

Key to understanding whether an economic system is geared toward wealth creation or wealth transfer is how the institutional environment shapes the incentives of entrepreneurs. If the profit opportunity from wealth-creating activities is greater than the profit opportunity coming from the transfer of wealth through political action, then individuals will create new businesses, innovate in production, distribution, and consumption, and act on price spreads to realize the gains from trade.

This insight from Austrian scholars has resonated with numerous other thinkers who have tried to distinguish between different types of entrepreneurs. For example, historian Burton Folsom wrote an important history of American business in the late 19th and early 20th century in which he emphasized the difference between “market entrepreneurs” and “political entrepreneurs.” Both types of entrepreneurs were alert to unexploited opportunities, but only the former sought to profit by innovating in order to expand the scope for specialization and exchange, thereby contributing to wealth creation. The latter sought instead to manipulate the political environment in order to acquire unearned gains.³⁴

There is nothing particularly natural or innate in the human inclination to truck and barter. At the risk of sounding cynical, human beings are also unfortunately keen to rape, pillage, and plunder.³⁵ Societies had to develop different institutions, be they culture, public policies, or private governance, in order to align the incentives of individuals toward the promotion of productive entrepreneurship. Inside the Austrian framework, the question that is of greatest interest is how such institutions emerge.

Prior to the institutional analysis revolution, economic growth theory concentrated on what could be called proximate causes: demographics, education, how much

31. William J. Baumol, John C. Panzar, and Robert D. Willig, *Contestable Markets and the Theory of Industry Structure*, Harcourt Brace Jovanovich, 1988; Don Coursey, R. Mark Isaac, and Vernon L. Smith, “Natural Monopoly and Contested Markets: Some Experimental Results,” *Journal of Law and Economics*, Vol. 27, No. 1, 1984, pp. 91-113; Harold Demsetz, “Barriers to Entry,” *American Economic Review*, Vol. 72, No. 1, 1982, pp. 47-57.

32. For further discussion of the difference between these two, see Harvey Leibenstein, “Entrepreneurship and Development,” *American Economic Review*, Vol. 58, No. 2, 1968, pp. 72-83; Israel M. Kirzner, *Competition and Entrepreneurship*, University of Chicago Press, 1973.

33. William J. Baumol, *The Free-Market Innovation Machine: Analyzing the Growth Miracle of Capitalism*, Princeton University Press, 2002.

34. Burton Folsom, *The Myth of the Robber Barons: A New Look at the Rise of Big Business in America*, Young America’s Foundation, 1990.

35. Peter J. Boettke, *Living Economics*, Independent Institute, 2012.

Table 2-1

Productive and unproductive entrepreneurship			
	RESPECT INSTITUTIONS	AVOID INSTITUTIONS	ALTER INSTITUTIONS
Productive	Create a business within the legal framework.	Circumvent the lack of flexibility of banking regulation by proposing Internet services for transferring funds.	Supply a new local public good, for example by setting up a private security company.
Unproductive or destructive	Launch abusive lawsuits against one's competitors to obtain a part of their profits.	Bribe a civil servant in order to obtain a public contract.	Engage in lobbying in order to secure regulation that gives one's business an advantage, to the detriment of others.

physical and human capital has been accumulated, the state of technological knowledge, the quality of infrastructure, etc.³⁶ The entrepreneur played a minor role in those narratives, and the institutions that allowed productive entrepreneurs to flourish played an even smaller role. Yet the shortcomings of this approach to the study of economic growth and development rapidly became apparent. This eventually led some mainstream economists to import certain features of Austrian economics into their own research by emphasizing the key role of institutions in fostering productive entrepreneurship.³⁷

This rediscovery of institutional analysis was carried out by such distinguished economists as Daron Acemoglu, Armen Alchian, William Baumol, Harold Demsetz, Andrei Shleifer, and some who went on to receive the Nobel prize such as James Buchanan, Ronald Coase, Douglass North, and Oliver Williamson. They naturally incorporated ideas from Austrian economists such as Carl Menger, Ludwig von Mises, and Friedrich Hayek.³⁸ While it is incorrect to say that all of these modern authors would self-identify as Austrians, they were clearly deeply influenced by the arguments advanced by the Austrian School of Economics.

36. Greg Mankiw, "The Growth of Nations," *Brookings Papers on Economic Activity*, No. 1, 1995, pp. 275-326.

37. Peter Boettke and Christopher Coyne, "Institutions, Immigration and Identity," *NYU Journal of Law and Liberty*, Vol. 2, No. 1, 2006, pp. 131-156.

38. Liya Palagashvili, Ennio Piano, and David Skarbek, *The Decline and Rise of Institutions: A Modern Survey of the Austrian Contribution to the Economic Analysis of Institutions*, Cambridge University Press, 2017.

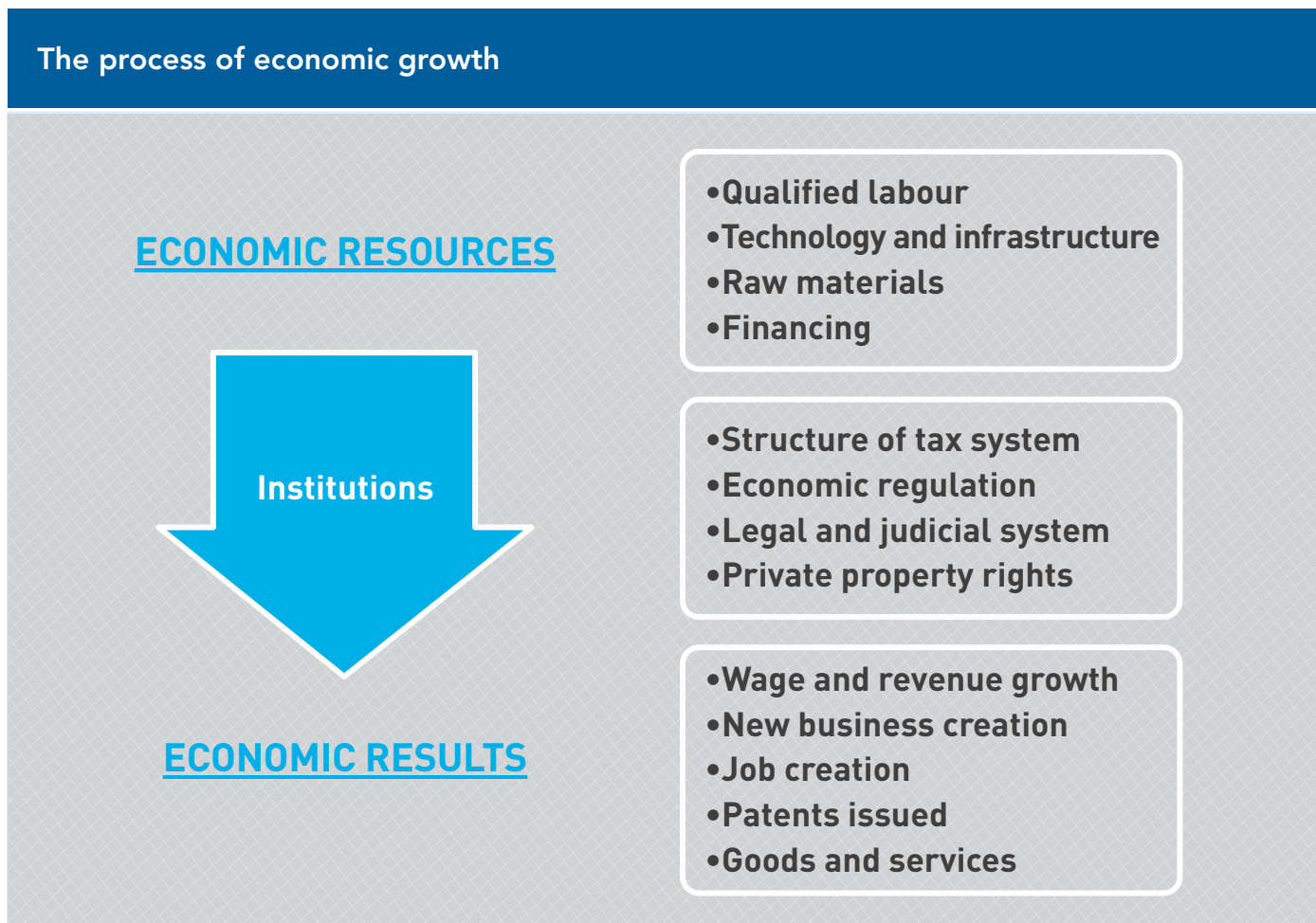
"The societies that become rich are the ones whose institutional environments push their best and brightest toward productive entrepreneurship. In contrast, societies that languish in poverty are those whose institutional environments make it more rewarding to engage in destructive entrepreneurial behaviour."

The best example of successful importation of insights from the Austrian School is Deirdre McCloskey, one of the most eminent living economic historians. Concerned with why only some countries became rich while others did not, McCloskey imported Kirzner's logic to explain the matter. In her words, it was because entrepreneurs were "motivated by dignity and enabled by freedom" that they acted in ways that allowed them to profit from their improvement of the general welfare.³⁹ McCloskey openly confesses her intellectual debt to Kirzner in speaking of "more and more opportunities for Kirznerian alertness."⁴⁰ Her entire argument weaves the role of the

39. Deirdre N. McCloskey, *Bourgeois Dignity: Why Economics Can't Explain the Modern World*, University of Chicago Press, 2010, p. 20.

40. Deirdre N. McCloskey, "A Kirznerian Economic History of the Modern World," *Annual Proceedings of the Wealth and Well-Being of Nations*, Vol. 3, 2011, p. 50.

Figure 2-2



Source: Russell S. Sobel, "Testing Baumol: Institutional Quality and the Productivity of Entrepreneurship," *Journal of Business Venturing*, Vol. 23, No. 6, November 2008, Figure 1, p. 644.

entrepreneur with that of institutions that favour the emergence of the productive kind of entrepreneurship.

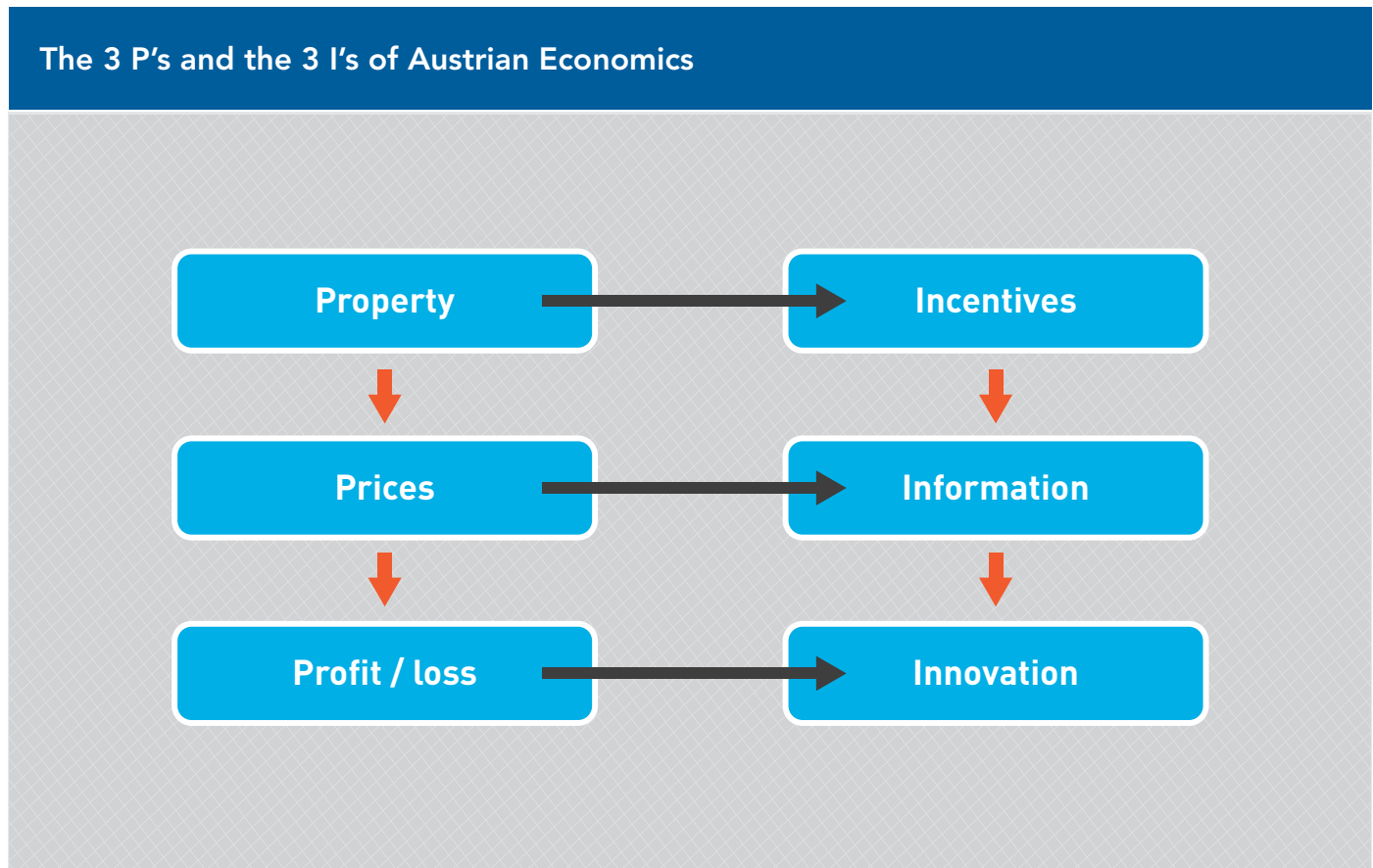
The renewal of the theory of institutions, and its application to entrepreneurship in the 1990s,⁴¹ should be seen as a restoration of Adam Smith's message. This message is integral to Austrian economics: While pursuing their self-interest, economic agents can generate benefits for all of society, on the condition that the underlying institutional environment makes mutually beneficial exchange, specialization, and economic cooperation through trade more profitable than unproductive and destructive activities.

"The analysis of institutions provides a strong alternative to the proximate causes approach to economic growth and development. It proposes that property rights (or the lack thereof) are the fundamental cause of economic development (or stagnation)."

Enterprising individuals, because they think about their own well-being, will be alert to their interest, and thus indirectly to the relative payoffs associated with engaging in productive entrepreneurial activity, such as bringing a new product to market, or making a scarce product more abundant. In a good institutional environment, it will be more rewarding to go down this route

41. See Kevin M. Murphy, Andrei Shleifer, and Robert W. Vishny, "The Allocation of Talent: Implications for Growth," *Quarterly Journal of Economics*, Vol. 106, No. 2, 1991, pp. 503-530; Robert G. King and Ross Levine, "Finance, Entrepreneurship and Growth," *Journal of Monetary Economics*, Vol. 32, No. 3, 1993, pp. 513-542.

Figure 2-3



than to pursue unproductive entrepreneurial activity such as rent-seeking.

The societies that become rich are the ones whose institutional environments push their best and brightest toward productive entrepreneurship. In contrast, societies that languish in poverty are those whose institutional environments make it more rewarding to engage in destructive entrepreneurial behaviour.

Imperial China, for example, might have been the most technologically, scientifically, and culturally advanced society in the world for many centuries. Yet it failed to produce sustainable economic growth, and within the span of a few centuries, was widely surpassed by Western European countries.

By focusing solely on the quantity of wealth accumulated, on new technologies being discovered, and on access to natural resources, it would be impossible to explain the relative decline of Imperial China. If economic growth had been the product of these and only these factors, Western Europe would never have been able to challenge China as the most prosperous place

on earth.⁴² These proximate causes are important, to be sure, but how they are ultimately used is what really matters (see Figure 2-2).

The analysis of institutions provides a strong alternative to the proximate causes approach to economic growth and development. It proposes that property rights (or the lack thereof) are the fundamental cause of economic development (or stagnation). By focusing on the formal and informal rules of different societies, as Austrian economics does, a convincing explanation emerges to explain many historical economic miracles and tragedies.

The 3 P's and the 3 I's: A Framework for Thinking about Policies

At their core, institutions boil down to how they handle the 3 P's of Property, Prices, and Profit/Loss, and the corresponding 3 I's of Incentives, Information, and Innovation (see Figure 2-3). Modern economic life is the product of

42. William J. Baumol, "Entrepreneurship: Productive, Unproductive, and Destructive," *Journal of Political Economy*, Vol. 98, No. 5-1, 1990, pp. 893-921.

an economic system that has marshalled incentives, utilizes information, and spurs innovation (and weeds out poor decisions with respect to resource use), often as an unintended consequence of entrepreneurial processes. It is dependent on how well the institutional environment of a given place handles the 3 P's and the 3 I's.⁴³

Institutions are important because they structure the incentives that individuals face when making decisions, and they influence the information that economic actors use in making decisions. They determine the relative payoffs for different types of entrepreneurial behaviour. They are the humanly devised rules that govern our interactions. Another way to put it is that institutions are rules of the game through which property rights take shape. So in discussing property rights as an institution, we mean both their cultural underpinnings, which act to legitimate them and strengthen them, and the enforcement mechanism that protects them. Both interact together: Cultural norms can either raise or lower the costs of enforcing property rights.⁴⁴ But even in the most culturally supportive environment, some enforcement will always be necessary to protect property rights, be it through private or public means.

“Institutions are important because they structure the incentives that individuals face when making decisions, and they influence the information that economic actors use in making decisions.”

Property rights provide the incentives for economic actors to make decisions concerning their time, their energy, and their material resources. Prices that emerge in market transactions (made possible by property rights) provide the information that economic actors need regarding the terms of the exchange and the relative scarcity of goods and services available on the market. Finally, the lure of profit, and the penalty of loss, ensures that market participants will constantly be on the lookout to discover creative innovations that cut costs in production, deliver goods and services to market with greater ease, or introduce new products to

satisfy the diverse and constantly evolving tastes of consumers.

Without the constant prodding of the incentives provided by private ownership, the informational signals contained in prices, and the feedback from the market discipline of loss and the market reward of profit, economic systems will fail to allocate resources efficiently and to continually discover new and innovative ways of producing and delivering products to satisfy consumer wants.

43. Peter Boettke, Paul Heyne, and David L. Prychitko, *The Economic Way of Thinking*, 13th Edition, Pearson, 2013.

44. Harold Demsetz, “Toward a Theory of Property Rights,” *American Economic Review*, in *Papers and Proceedings of the Seventy-ninth Annual Meeting of the American Economic Association*, Vol. 57, No. 2, 1967, pp. 347-359; Yoram Barzel, *Economic Analysis of Property Rights*, Cambridge University Press, 1997.

CHAPTER 3

Measuring Entrepreneurship in Canada

Measuring entrepreneurship empirically while remaining perfectly faithful to the Austrian approach is an impossible task. Entrepreneurship is a category of human action that is ubiquitous in our everyday lives. On any given day, one might act entrepreneurially not only in one's work, but also in one's love life, with family, at church, etc., by being alert to opportunities and reaping (nonmonetary) profits that can take many forms, including personal fulfilment. It is simply not possible to track all of these things, which are often done instinctively without the "entrepreneur" noticing that he or she is acting entrepreneurially. Even for a careful outside observer, entrepreneurship is sometimes hard to see, because there is a subjective element involved.

Even when it comes to entrepreneurship in the conventional sense, that is, creating and operating a new for-profit business, it is difficult to measure. The person being alert and pursuing a profit opportunity is not always the owner, and sometimes is not even the manager, but a third party. Add to this the phenomenon of "intrapreneurship," whereby employees are being entrepreneurial within an organization by creating innovation and getting things done managerially, and it becomes obvious that any empirical account can only be a partial one.

Yet, there are scenarios in which a partial account of entrepreneurship can be useful as a general indicator of variations through time, or when comparing different institutional contexts.

We will consider two ways of measuring the level of entrepreneurship in Canada. The first is through polls and surveys such as the annual Global Entrepreneurship Monitor (GEM) report, which measures both the proportion of the working-age population that is about to create a business, as well as the proportion that created one recently.⁴⁵

The Global Entrepreneurship Monitor also publishes a report looking specifically at Canada,⁴⁶ which shows that

intentions to start a business are very high. Figure 3-1 compares the rates of this early stage entrepreneurship with established business rates in a few other developed economies. Canada ranks first in terms of early stage entrepreneurs.

Despite the fact that the GEM labels one of their categories "opportunity-driven" entrepreneurship, from the point of view of Austrian economics, all of them are opportunity-driven. The GEM uses this nomenclature among self-reported entrepreneurs to underline that some "necessity-driven" entrepreneurs, mainly in the developing world, appear to have created their own businesses because of a lack of jobs. In such a context, the profit opportunity associated with starting a business is obviously the most rewarding possibility, as there are few or no alternatives.

"The Global Entrepreneurship Monitor publishes a report looking specifically at Canada, which shows that intentions to start a business are very high."

There are also GEM reports focusing on specific provinces. In 2015, two of these provincial reports were published, namely for Ontario and Quebec, as well as a report on the Atlantic region.⁴⁷

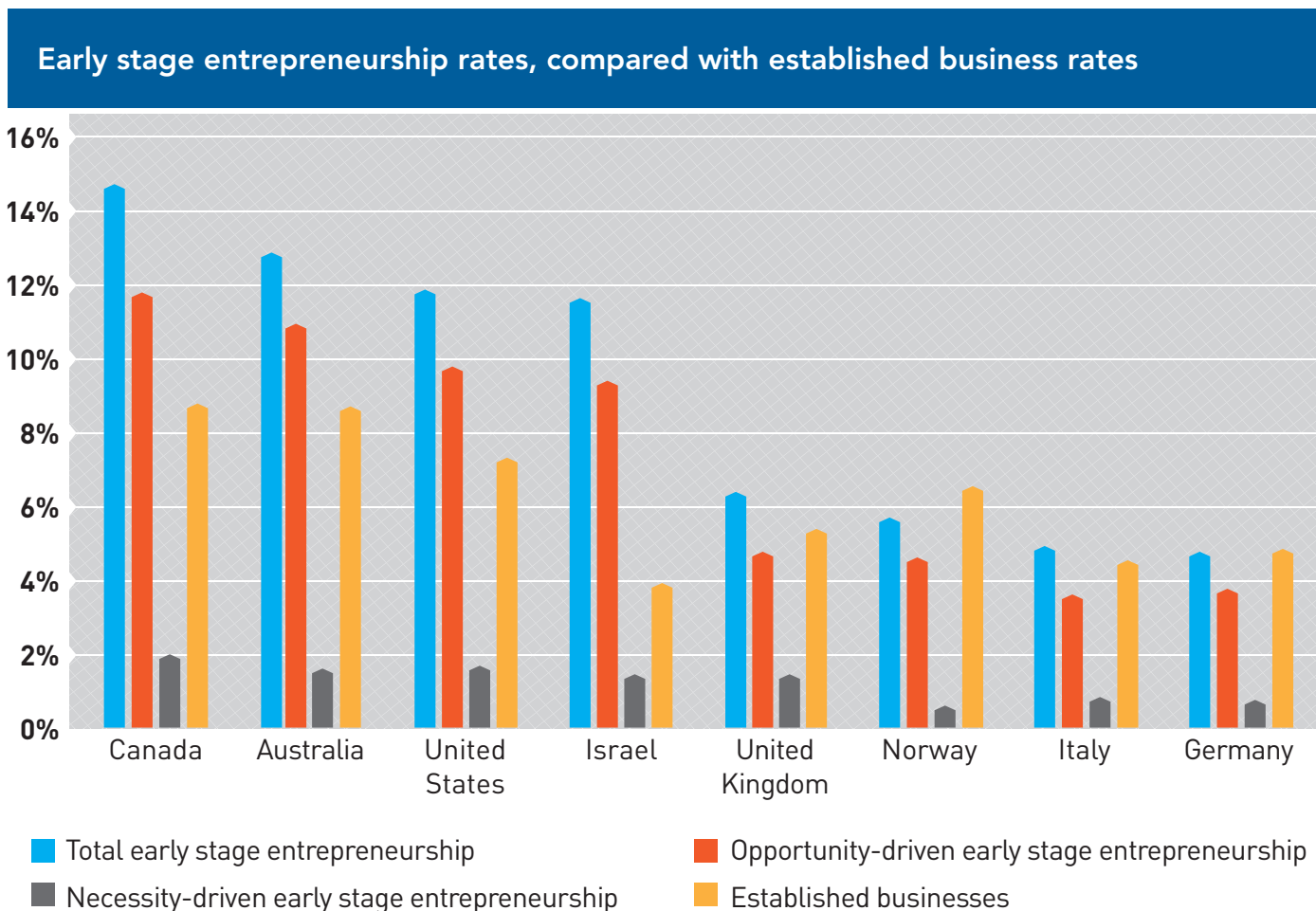
Table 3-1 shows that entrepreneurship is perceived positively by Canadians. Majorities of those polled agree that entrepreneurship is a good career choice, and that it leads to high social status when successful. This corresponds very well to the research advanced by Deirdre McCloskey, the economic historian inspired by Austrian economics who documents the causes of the unprecedented economic growth of the Western world since 1800. Her key point is that for this growth to occur, entrepreneurs needed not only to be free, but they also needed

45. Donna Kelley, Slavica Singer, and Mike Herrington, *Global Entrepreneurship Monitor: 2015/16 Global Report*, Global Entrepreneurship Research Association, 2016, p. 7.

46. Cooper H. Langford, Peter Josty, and Chad Saunders, *2015 GEM Canada National Report: Driving Wealth Creation & Development in Canada*, Global Entrepreneurship Research Association, 2015.

47. Sigal Haber, Matthew Lo, and Charles H. Davis, *2015 GEM Ontario Report: Driving Wealth Creation & Social Development in Ontario*, Global Entrepreneurship Research Association, 2015; Étienne St-Jean and Marc Duhamel, *Situation de l'activité entrepreneuriale québécoise*, Global Entrepreneurship Research Association, 2015; Cooper H. Langford, Peter Josty, and Chad Saunders, *GEM Report to the University of Calgary Community 2015-2016*, Global Entrepreneurship Research Association, 2016; Chad Saunders, *2015 GEM Atlantic Canada Report: Driving Wealth Creation & Social Development in Atlantic Canada*, Global Entrepreneurship Research Association, 2015.

Figure 3-1



Note: Entrepreneurship rates are calculated by dividing the number of entrepreneurs by the working-age population.
Source: Cooper H. Langford, Peter Josty, and Chad Saunders, 2015 *GEM Canada National Report*, Global Entrepreneurship Research Association / Centre for Innovation Studies, Figure 2.5 TEA Values for Reference Economies and Canada (18 – 64), p. 23.

“Entrepreneurship is perceived positively by Canadians. Majorities of those polled agree that entrepreneurship is a good career choice, and that it leads to high social status when successful.”

their work to be considered dignified (i.e., productive entrepreneurship had to be socially rewarding).⁴⁸

Table 3-2 shows that poll respondents in Canada see entrepreneurial opportunities around them, yet are

somewhat limited by the fear of failure, and also constrained by their capabilities. Despite ranking very high in terms of perceiving entrepreneurial opportunities, intent to start a business is relatively low compared to other countries. This could reflect the fact that with more advanced stages of economic development, entrepreneurship involves administrative requirements that are more formalized.

Another source of data for comparing Canada with other countries is the World Bank’s *Doing Business* report.⁴⁹ In the 2017 *Doing Business* ranking, Canada fares very well in a few categories, such as Starting a Business, Getting Credit, and Protecting Minority Investors. However, in other categories, especially

48. Deirdre N. McCloskey, *Bourgeois Dignity: Why Economics Can’t Explain the Modern World*, University of Chicago Press, 2011.

49. World Bank, *Doing Business 2017: Equal Opportunity for All*, 2017.

Table 3-1

Global Entrepreneurship Monitor poll on entrepreneurial behaviour and attitudes in Canada, societal values section		
	VALUE	GEM 2016 RANK OUT OF 65 COUNTRIES
Percentage of the 18-64 population who agree with the statement that in their country, successful entrepreneurs receive high status	73.5%	23 rd
Percentage of the 18-64 population who agree with the statement that in their country, most people consider starting a business as a desirable career choice	65.5%	26 th

Sources: Global Entrepreneurship Monitor, Canada.

Table 3-2

Global Entrepreneurship Monitor poll on entrepreneurial behaviour and attitudes in Canada, self-perception section		
	VALUE	GEM 2016 RANK OUT OF 65 COUNTRIES
Percentage of the 18-64 population (individuals involved in any stage of entrepreneurial activity excluded) who see good opportunities to start a firm in the area where they live	59%	8 th
Percentage of the 18-64 population (individuals involved in any stage of entrepreneurial activity excluded) who believe they have the required skills and knowledge to start a business	54.1%	24 th
Percentage of the 18-64 population (individuals involved in any stage of entrepreneurial activity excluded) who indicate that fear of failure would prevent them from setting up a business	39%	24 th
Percentage of the 18-64 population (individuals involved in any stage of entrepreneurial activity excluded) who are latent entrepreneurs and who intend to start a business within three years	14%	41 st

Sources: Global Entrepreneurship Monitor, Canada.

Table 3-3

2017 <i>Doing Business</i> ranking, Canada	
	DOING BUSINESS 2017 RANKING, OUT OF 190 COUNTRIES
Overall	22
Starting a Business	2
Dealing with Construction Permits	57
Registering Property	43
Getting Credit	7
Protecting Minority Investors	7
Paying Taxes	17
Trading across Borders	46
Enforcing Contracts	112
Resolving Insolvency	15

Source: Doing Business, Ease of Doing Business in Canada.

“In the 2017 *Doing Business* ranking, Canada fares very well in a few categories, such as Starting a Business, Getting Credit, and Protecting Minority Investors. However, in other categories, especially Enforcing Contracts, Canada ranks much lower .”

Enforcing Contracts, Canada ranks much lower (see Table 3-3).

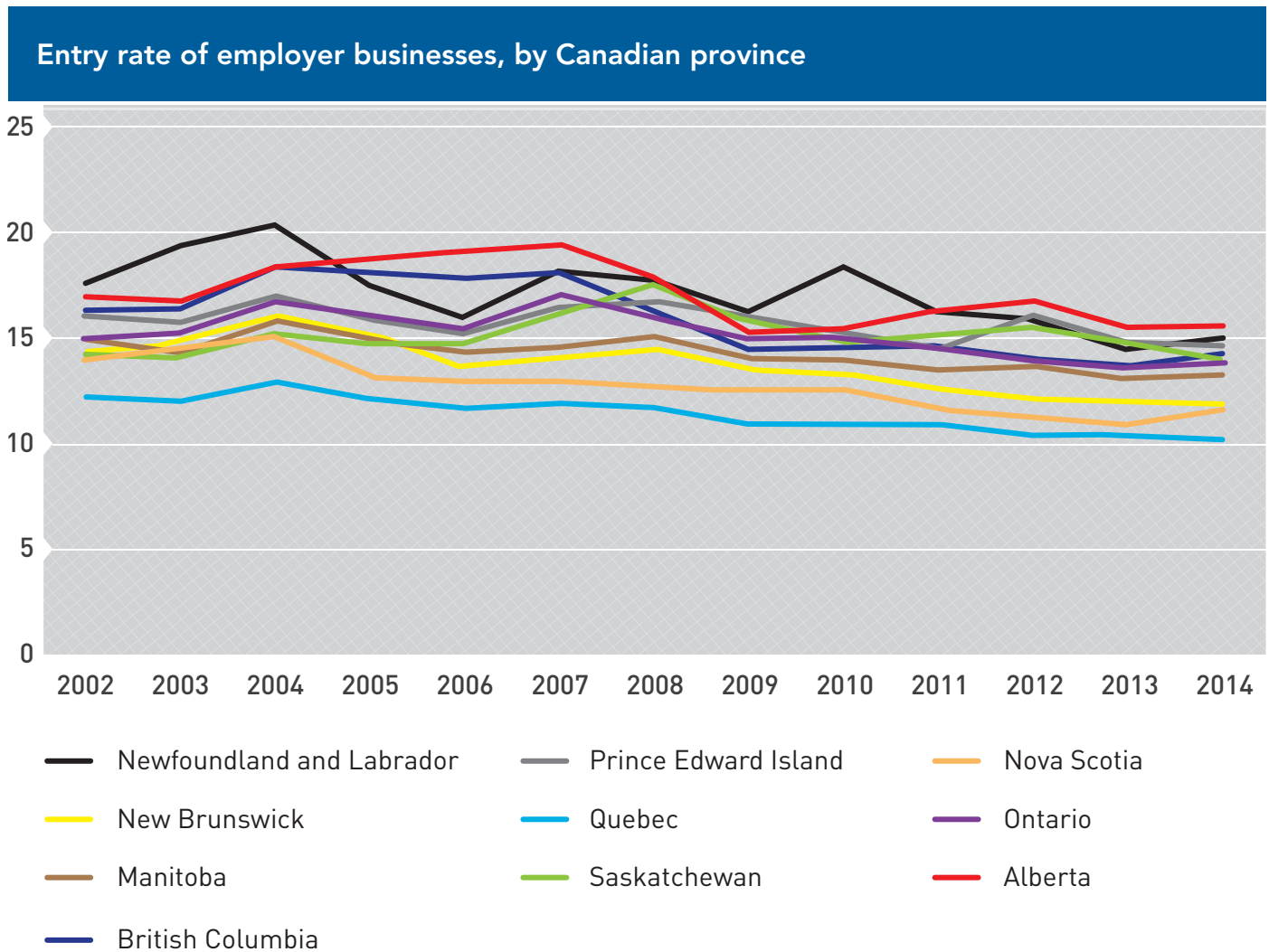
The second way of indirectly measuring entrepreneurship uses data and statistics related to the activities of entrepreneurs. Here we will review two such metrics, the

first of which is the entry rate of business, which is a yearly measure of the ratio of new employer businesses, as shown in Figure 3-2. It provides an indication of how well each province’s institutional environment channels entrepreneurial alertness into business creation. As we can see, Quebec consistently has the lowest rate, while Alberta consistently has one of the highest.⁵⁰

A second measure, which gives a slightly different reading of the Canadian situation, is employment creation by entrant businesses, illustrated in Figure 3-3. This tabulates the number of jobs at companies that had no employees the previous year. This is a useful metric, which serves as a reminder that entrepreneurship does

50. Note that the general situation in each province has evolved significantly since 2014. It is very likely that Quebec has improved and that Alberta has lost ground.

Figure 3-2



Note: Smaller provinces have a much more volatile rate, simply because the absolute number of businesses in these provinces is much smaller.
Source: Statistics Canada, CANSIM Table 527-0007: Business dynamics measures, 2002-2014.

not stop once a business is created, but is an ongoing process. Here again, Quebec fares poorly, suggesting an institutional environment less conducive to growth than that of other Canadian provinces such as Saskatchewan, British Columbia, and Alberta, and even the Atlantic Provinces.

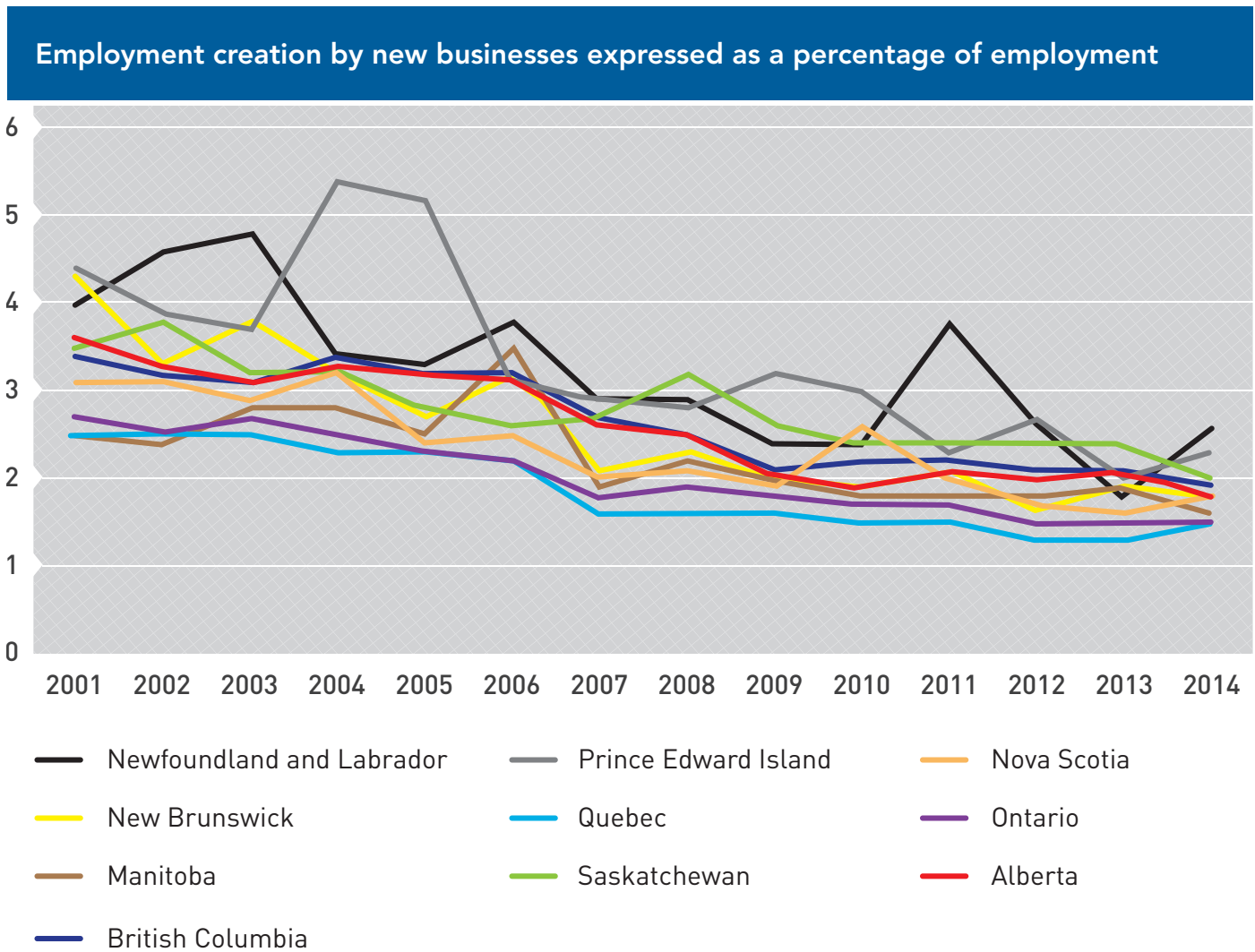
The portrait of entrepreneurship in Canada that emerges from the surveys and statistics discussed above is a relatively good one, although with significant (if not unexpected) differences between provinces. Despite this generally positive news, there is still much room for improvement.

The next chapter will explore some existing public policies that have major opportunity costs from an Austrian

“The portrait of entrepreneurship in Canada that emerges from surveys and statistics is a relatively good one, although with significant (if not unexpected) differences between provinces.”

perspective. In other words, the purported benefits of these policies need to be weighed against their substantial costs in terms of lower levels of entrepreneurship than could otherwise exist.

Figure 3-3



Note: Smaller provinces have a much more volatile rate, simply because the absolute number of businesses in these provinces is much smaller.
Source: Statistics Canada, CANSIM Table 527-0009: Private sector employment flow rates, 2001-2014.

CHAPTER 4

Applying Austrian Lessons on Entrepreneurship to Canadian Policies

A large body of academic literature and political opinion argues that due to problems of monopoly, externalities, public goods, and inequality, government has to play a more active role in the operation of the economy through the use of price controls, regulations, taxes, and subsidies.

Yet a critical examination of these kinds of activist policies reveals that rather than providing the tools needed to organize a vibrant and growing economy, they are often the main source of the very problems they purport to solve. In short, they distort the economic incentives and signals that actors use to coordinate their behaviour, and they destabilize the economic environment in which decisions are made.

As seen in Chapter 2, policies in line with the Austrian School's analysis would on the contrary have to support and strengthen the basic principles that allow property, prices, and profit/loss to exist, providing incentives, information, and innovation. These policies would encourage additional entrepreneurial activity in the market economy.

This chapter will analyze certain Canadian policies from an Austrian perspective, examining how they affect the 3 P's in various ways and, consequently, the 3 I's. They will be grouped under four themes: policies that affect private property, the crowding out of entrepreneurship, the regulatory burden, and openness to trade.

The institutions of private property affect the kind of entrepreneurship that exists in an economy. When private property is well protected, entrepreneurial efforts tend to be directed toward productive, market- and exchange-oriented entrepreneurship.

Some ill-advised public policies crowd out entrepreneurship by having the government assume the provision of services that could be provided successfully by entrepreneurs. Sometimes, but not always, they do so by giving government a monopoly over those services. Doing so reduces innovation and makes services less responsive to user feedback. By its very definition, public monopoly crowds out entrepreneurship completely, but some crowding out occurs even when the government provides services in a situation of competition.

The regulatory burden also affects entrepreneurship by raising the cost of doing business. If pursuing an entrepreneurial opportunity is made prohibitively expensive, or requires disproportionately high initial investments simply to satisfy regulations, the opportunity will quite simply not be pursued.

And finally, openness to trade is of paramount importance to entrepreneurship, because a typical entrepreneurial profit opportunity is arbitrage, whereby goods are bought from a place where they are less valued, and sold in a place where they are more valued.

Private Property

One thing economists in general look at with respect to property rights and related policies is how secure they are through time. When they are well-defined, and well-protected, property rights make carrying out business more predictable and less costly.

"A critical examination of activist policies reveals that rather than providing the tools needed to organize a vibrant and growing economy, they are often the main source of the very problems they purport to solve."

Whether those property rights are well-defined or not depends on more than the simple legal definition of what you own. Taxes, for instance, are widely regarded as a threat to private property. This is not to say that economists, Austrian or otherwise, make a moral judgment on taxation in general; the argument is in terms of incentives and information. Taxes can both distort the incentives created by private property, and affect prices, which are seen by the Austrian school as surrogates for information, since they are an indirect indication of how abundant or scarce a resource really is.⁵¹

Blurry price signals can have a substantial negative effect on entrepreneurs. Observing the prices of different alternative resources, and the fluctuations of these prices, allows entrepreneurs to make decisions about

51. F. A. Hayek, "The Use of Knowledge in Society," *American Economic Review*, Vol. 35, No. 4, September 1945, pp. 519-530; Steven Horwitz, "Monetary Calculation and the Unintended Extended Order: The Misesian Microfoundations of the Hayekian Great Society," *Review of Austrian Economics*, Vol. 17, No. 4, December 2004, pp. 307-321.

Table 4-1

Statutory Top Marginal Personal Income Tax Rate, 2017					
Province	FEDERAL		PROVINCIAL		MAXIMUM COMBINED RATE
	Rate	Income at which rate applies	Rate	Income at which rate applies	
Alberta	33%	\$202,800	15%	\$303,900	48%
British Columbia			14.7%	\$108,460	47.7%
Manitoba			17.4%	\$68,005	50.4%
New Brunswick			20.3%	\$152,100	53.3%
Newfoundland and Labrador			18.3%	\$179,214	51.3%
Nova Scotia			21%	\$150,000	54%
Ontario			13.16%	\$220,000	53.5%*
Prince Edward Island			16.7%	\$63,969	51.4%*
Quebec			25.75%	\$103,915	53.3%
Saskatchewan			15%	\$129,215	48%

* Includes provincial surtax.

Sources: Canada Revenue Agency, Canadian income tax rates for individuals – current and previous years; Revenu Québec, Income Tax Rates; KPMG, *Personal Tax Rates Federal and Provincial/Territorial Income Tax Rates and Brackets for 2017*, KPMG, 2017.

which resources to use without having any deep and technical knowledge of just how and why those prices are what they are, and why they fluctuate the way they do. If those signals are distorted by taxes, entrepreneurs will adapt their profit ventures. The decisions they make, however, will likely be inferior to those they would otherwise have made, because of the additional constraints of blurry price signals.

Incentives are also affected by taxation. In fact, it is difficult to dissociate the information function of prices from their incentive function. One obvious way incentives can be affected by taxes is by modifying the payout associated with different types of entrepreneurship.

First of all, high levels of publicly financed service provision and generous social security modify incentives to engage in entrepreneurship in order to make a living. The opportunity cost of engaging in entrepreneurial activities, and actually seizing unrealized profit opportunities, is higher than it otherwise would be.

But also, while entrepreneurship requires being perceptive of opportunities, as seen earlier, one must also act to seize those opportunities. Heavy taxation of individual income weakens private property because it deprives individuals of a substantial portion of their income,

“Taxes can both distort the incentives created by private property, and affect prices, which are seen by the Austrian school as surrogates for information, since they are an indirect indication of how abundant or scarce a resource really is.”

which in turn weakens incentives for wealth formation. Israel Kirzner argued that corporate income tax induces some entrepreneurs to leave profit opportunities unpursued, simply because it reduces the gains to be realized from alertness to profit opportunities.⁵² By reducing the profit associated with building a new business, or investing in general, governments discourage those entrepreneurial activities.

Taxation also affects entrepreneurs’ capacity to fund their businesses, not only because they have less wealth accumulated themselves, but also because it is generally

52. Israel M. Kirzner, *Discovery and the Capitalist Process*, University of Chicago Press, 1976, p. 77.

harder to convince banks, angel investors, and family members to become investors than it is to use one's own resources. They are not perfect substitutes. If the incentives to accumulate wealth are diminished by taxation, one would expect that, at the margin, there would be less entrepreneurship.

Entrepreneurship is, in the Austrian paradigm, an aspect of human action that is as omnipresent and as routine as speculating on the future.⁵³ Yet it is reasonable to say that large projects and important, global innovation⁵⁴ are more likely to require large amounts of funding, often supplied by wealthy individuals. Canada's relatively high top marginal personal income tax rates can thus be expected to discourage entrepreneurship. Indeed, the effect of marginal tax rates on entrepreneurship has been extensively documented in the empirical literature.⁵⁵

“Heavy taxation of individual income weakens private property because it deprives individuals of a substantial portion of their income, which in turn weakens incentives for wealth formation.”

Ottawa's top marginal bracket taxes individual income at 33%. Provinces add their own income tax on top of that. At the higher end, Nova Scotia's combined top income tax rate is 54%, while at the lower end, British Columbia's is 47.7% (see Table 4-1).⁵⁶

53. Israel M. Kirzner, “Uncertainty, Discovery and Human Action: A Study of the Entrepreneurial Profile in the Misesian System,” in Israel M. Kirzner (ed.), *Method, Process and Austrian Economics*, D.C. Heath & Company, pp. 139-160.

54. Raymond J. March, Adam G. Martin, and Audrey Redford, “The Substance of Entrepreneurship and the Entrepreneurship of Substances,” *Journal of Entrepreneurship and Public Policy*, Vol. 5, No. 2, 2016, pp. 201-220.

55. Yannis Georgellis and Howard J. Wall, “Entrepreneurship and the Policy Environment,” *Review, Federal Reserve Bank of St. Louis*, March/April 2006, pp. 95-111; Donald Bruce, “Effects of the United States Tax System on Transitions into Self-Employment,” *Labour Economics*, Vol. 7, No. 5, 2000, pp. 545-574; William M. Gentry and R. Glenn Hubbard, “Tax Policy and Entrepreneurial Entry,” *American Economic Review*, Vol. 90, No. 2, 2000, pp. 283-287; William M. Gentry and R. Glenn Hubbard, “‘Success Taxes’, Entrepreneurial Entry and Innovation,” in Adam B. Jaffe, J. Lerner, and S. Stern (eds.), *Innovation Policy and the Economy*, Vol. 5, NBER and MIT Press, 2005, pp. 87-108; Tami Gurley-Calvez and Donald Bruce, “Do Tax Rate Cuts Encourage Entrepreneurial Entry?” *Journal of Entrepreneurship and Public Policy*, Vol. 2, No. 2, 2013, pp. 178-202; Åsa Hansson, “Tax Policy and Entrepreneurship: Empirical Evidence from Sweden,” *Small Business Economics*, Vol. 38, No. 4, May 2012, pp. 495-513; Martin T. Robson and Colin Wren, “Marginal and Average Tax Rates and the Incentive for Self-Employment,” *Southern Economic Journal*, Vol. 65, No. 4, April 1999, pp. 757-773.

56. Canada Revenue Agency, Canadian income tax rates for individuals – current and previous years; Revenu Québec, Income Tax Rates.

These Canadian rates are not only high; they also apply at a lower threshold than top rates in neighbouring jurisdictions: \$202,800 for the Canadian federal income tax, with provincial rates generally starting at an even lower threshold, whereas in many American states, the top rate kicks in only at a much higher level of income (see Figure 4-1). In the case of New York State, the top marginal rate for couples kicks in at approximately \$2.5 million.⁵⁷

Another effect taxation has on entrepreneurship is that it changes the kind of profit opportunities that exist. Increasing taxes on some products and services eats away at their profit margins. When the profit opportunity is smaller, entrepreneurs look elsewhere. Depending on the structure of taxation, what the tax base is for each tax, and how high the rates are relative to one another, entrepreneurial decisions will be affected. In the Canadian context, excise taxes, various tax credits, and exceptions to sale taxes direct entrepreneurs toward ventures that are different from the ones they would otherwise pursue.

For example, high levels of taxation and the structure of taxation have a direct impact on services such as renovation and home improvement. Since it is relatively easy to stop buying these services and substitute your own household's labour, many businesses in the service sector might be negatively affected by high sales taxes. Higher rates of taxation, whatever their nature, discourage the market from providing goods and services, especially those for which it is easy to substitute one's own labour. Higher individual tax rates reduce the scope for entrepreneurial expansion in markets where the main selling point is saving time, or supplying close substitutes.

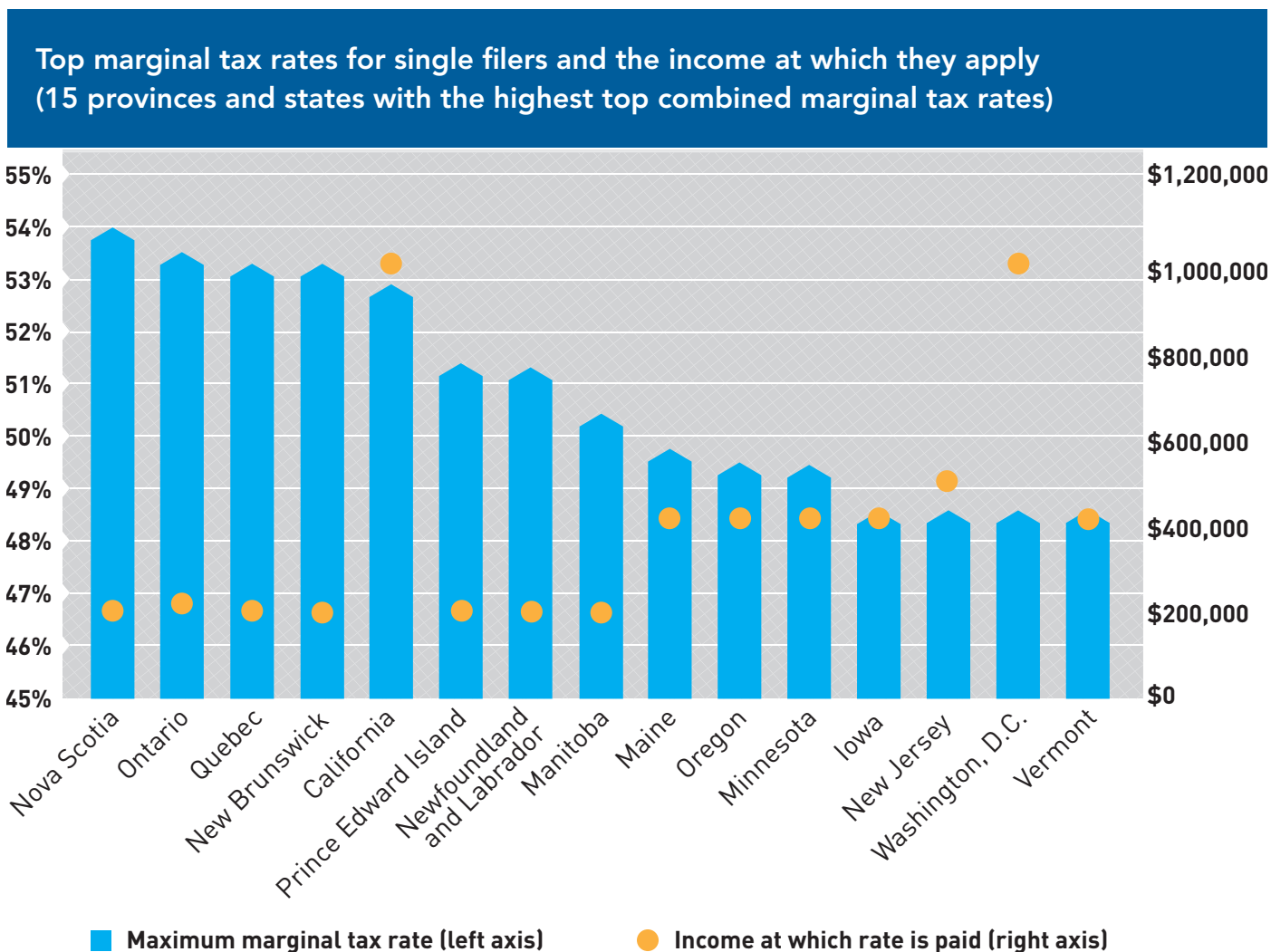
The 2016 Economic Freedom of the World index ranks Canada 39th (tied with 11 other countries) among 159 countries for top marginal personal income and payroll tax rate.⁵⁸ Among the OECD's 35 member countries, our combined federal and provincial corporate income tax rate places us 23rd (see Table 4-2).

As pertinent as these numbers are, however, Austrian School economists favour relying on disaggregated data, and on how institutions affect decisions. They seek to identify the effect of taxes on the structure of incentives.

57. Morgan Scarborough, State Individual Income Tax Rates and Brackets for 2017, Tax Foundation, March 9, 2017.

58. James Gwartney, Robert Lawson, and Joshua Hall, *Economic Freedom of the World: 2016 Annual Report*, Fraser Institute, 2016, p. 56.

Figure 4-1



Sources: Morgan Scarboro, State Individual Income Tax Rates and Brackets for 2017, Tax Foundation, March 9, 2017; Kyle Pomerleau, 2017 Tax Brackets, Tax Foundation, November 10, 2016; Chaire en fiscalité et en finances publiques de l'Université de Sherbrooke, *Bilan de la fiscalité au Québec – Édition 2017*, Cahier de recherche 2017/01, January 13, 2017, p. 16; Canada Revenue Agency, Canadian income tax rates for individuals – current and previous years, January 4, 2017.

“In the Canadian context, excise taxes, various tax credits, and exceptions to sale taxes direct entrepreneurs toward ventures that are different from the ones they would otherwise pursue.”

Aggregate data do not reveal much about the effects taxes have at the micro-level.

One example of such effects is the by-product of the fact that Canada has two corporate income tax rates at the federal level: one for general corporations, set at

15%, and one for small businesses with revenues below \$500,000, set at 10.5%.⁵⁹ This kind of policy is not neutral and creates perverse incentives to remain under the threshold for the 15% regular rate. As businesses grow, their effective tax rate on investment increases.⁶⁰ This showcases how taxes affect the “P” of property, therefore having an effect on the “I” of incentives.

Empirical research finds evidence that small business entrepreneurs do limit their projects below the small

59. Canada Revenue Agency, Corporation tax rates.

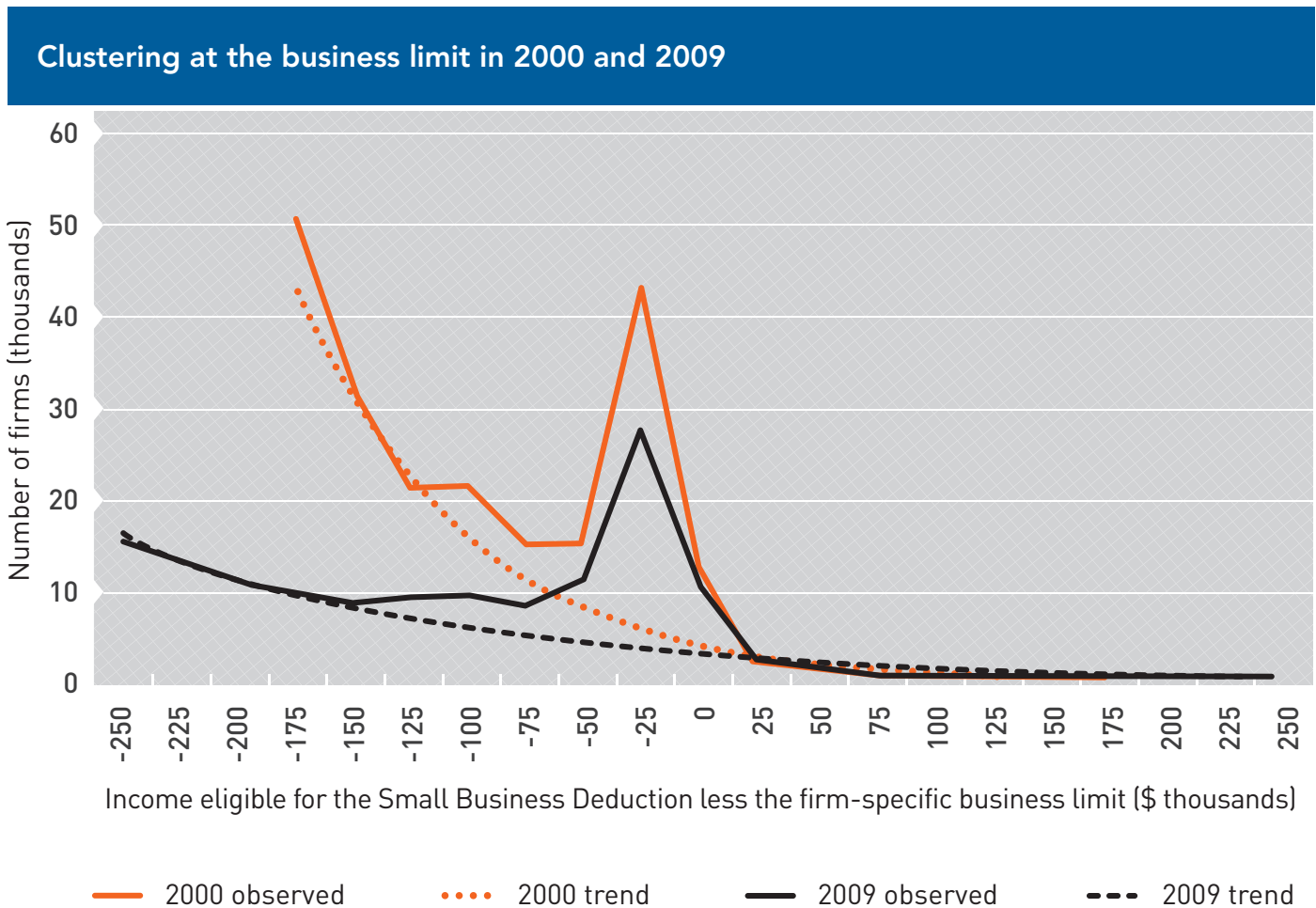
60. Duanjie Chen and Jack Mintz, *Small Business Taxation: Revamping Incentives to Encourage Growth*, University of Calgary, SPP Research Paper, Vol. 4, No. 7, May 2011.

Table 4-2

Statutory corporate income tax rates in OECD countries, 2017				
RANKING	COUNTRY	CENTRAL GOVERNMENT CORPORATE INCOME TAX RATE	AVERAGE SUB-CENTRAL (PROVINCIAL, MUNICIPAL, STATE) GOVERNMENT CORPORATE INCOME TAX RATE	COMBINED CORPORATE INCOME TAX RATE
1	Hungary	9%		9%
2	Ireland	12.5%		12.5%
3	Latvia	15%		15%
4	Poland	15%		15%
		19%		19%
5	Czech Republic	19%		19%
6	Slovenia	19%		19%
7	United Kingdom	19%		19%
8	Estonia	20%		20%
9	Finland	20%		20%
10	Iceland	20%		20%
11	Turkey	20%		20%
12	Slovak Republic	21%		21%
13	Switzerland	8.5%	14.45%	21.15%
14	Denmark	22%		22%
15	Sweden	22%		22%
16	Israel	24%		24%
17	Norway	24%		24%
18	Korea	22%	2.2%	24.2%
19	Austria	25%		25%
20	Chile	25%		25%
21	Netherlands	25%		25%
22	Spain	25%		25%
23	Canada	15%	11.7%	26.7%
24	Luxembourg	20.33%	6.75%	27.08%
25	Italy	24%	3.9%	27.81%
26	New Zealand	28%		28%
27	Greece	29%		29%
28	Portugal	28%	1.5%	29.5%
29	Japan	23.4%	7.38%	29.97%
30	Australia	30%		30%
31	Mexico	30%		30%
32	Germany	15.83%	14.35%	30.18%
33	Belgium	33%		33.99%
34	France	34.43%		34.43%
35	United States	35%	6.01%	38.91%

Source: OECD, Stat, Table II.1: Statutory corporate income tax rate.

Figure 4-2



Source: Benjamin Dachis and John Lester, *Small Business Preferences as a Barrier to Growth: Not so Tall After All*, C.D. Howe Institute, Commentary No. 426, May 2015, Figure 2, p. 13.

business income rate threshold. One study estimated that in 2000, when the corporate tax rate was much higher, at 28%, 15% of firms that were filing as a small business were limiting their growth to remain below the threshold, while in 2009, after the general federal corporate tax rate had been slashed and the threshold increased, 8.5% of small firms were limiting their growth (see Figure 4-2).⁶¹

When this happens, entrepreneurs forego profit opportunities. This means less of the good behaviour that a society wants: individuals identifying problems that

“Even when sectors are not completely nationalized, the government crowds out private enterprise by utilizing scarce resources such as labour and capital.”

need to be solved and acting to seize the profit opportunities associated with solving them.

Another major tax policy that affects entrepreneurship is the capital gains tax. The tax’s top rate in Canada is set at 26.5%, and one major grievance is that it does not

61. Kenneth Hendricks, Raphael Amit, and Diana Whistler, *Business Taxation of Small and Medium-Sized Enterprises in Canada*, Technical Committee on Business Taxation, Working Paper No. 97-11, October 1997; Ajay Agrawal, Carlos Rosell, and Timothy S. Simcoe, *Do Tax Credits Affect R&D Expenditures by Small Firms? Evidence from Canada*, NBER, Working Paper No. 20615, October 2014.

take inflation into account.⁶² This tax, which has existed since 1972, is essentially a tax on entrepreneurship. A former Chairman of the American Federal Reserve, Alan Greenspan, once commented that the major impact of the capital gains tax “is to impede entrepreneurial activity and capital formation.” He added, “While all taxes impede economic growth to one extent or another, the capital gains tax is at the far end of the scale.” The appropriate capital gains tax rate, he argued, was zero.⁶³

Once funds are invested in a project, the capital gains tax makes it costly for capital to flow to another project because investors have to pay this tax before moving funds. But for prices to generate quality information, and ultimately for profits and losses to generate innovation, the economy must be a dynamic one in which money is free to flow. A high capital gains tax also has the effect of driving investors to other, more welcoming jurisdictions, thereby slowing innovation and growth.⁶⁴

Crowding Out of Entrepreneurship

Inappropriate public policies can also crowd out entrepreneurship. This happens when the scope of government is large, such as a government which has nationalized certain industries, and/or has many state-controlled enterprises. In those sectors, there is typically very little room for entrepreneurship, or none at all, given that government monopolies are, by definition, the sole legal provider of these services. Here, Austrian economics criticizes the effect on innovation of legal monopolies, as competition among entrepreneurs to attract customers is generally the biggest incentive to innovate.

In Canada, for example, the health care sector has been nationalized in all ten provinces. Provincial governments also provide services in other areas, for example through alcohol distribution monopolies, public schools, long-term care facilities, etc., even though these sectors are not completely monopolized. Subsidized daycare centres, inspired by Quebec’s system, are also currently being discussed in Ottawa.

62. This problem has been highlighted by one of Quebec’s commissions on tax reform, but also applies at the federal level. Québec Taxation Review Committee, “Focusing on Québec’s Future: Summary – The Reform in Brief,” March 19, 2015, p. 23; Stephen A. Jarislowsky, “Canada’s capital gains tax is already highly unjust. Raising it will make that worse,” *Financial Post*, March 14, 2017.

63. Alan Greenspan, Testimony before the Senate Banking Committee, February 25, 1997, cited in Lawrence Whitman, *Cutting Capital Gains Tax Rates: The Right Policy for The 21st Century*, Joint Economic Committee Staff Report, August 1999, p. 12.

64. Reuven Brenner, *La taxe sur les gains de capital: un énorme fardeau social*, Montreal Economic Institute, Research Paper, December 1, 1999.

Yet these are sectors that are highly suitable for genuine free-market entrepreneurship, and the decision to engage in expensive and tightly controlled government enterprises is preventing high-growth entrepreneurship from taking place. Even when sectors are not completely nationalized, the government crowds out private enterprise by utilizing scarce resources such as labour and capital, and also because the services they provide are usually at least partially subsidized by taxpayers, and users therefore pay less than the government’s true cost of providing them.

“What these regulations do is limit the number of people who can work in these jobs, preventing outsiders from entering this business and also making these workers much more expensive than they would otherwise be.”

The spending side of government is an imperfect indicator of this crowding out phenomenon. This is because the activities of the government bid up factor costs, including both labour and capital, thereby crowding out private investment. When the government increases its spending, it competes more with the private sector in attracting workers and capital. In sectors where physical or human capital is specific to a certain job or a certain use, the crowding out is concentrated within the same industry. But when capital is not specific, it can affect the whole economy. As a result, the private sector has fewer resources with which to expand its activities, and these resources are also less affordable. Start-ups and small businesses are particularly affected by these repercussions.

Beyond nationalized industries and the direct provision of services, the Canadian government is also a large provider of subsidies, and research has shown that a whopping 38% of the subsidies granted by Industry Canada (now known as Innovation, Science and Economic Development Canada) from 1961 to 2013 went to just ten recipients.⁶⁵ It should come as no surprise that direct government activism generally favours large established corporations, since they are best organized to seek rents from the government. Because the benefits of these programs are concentrated among relatively few corporations, while the costs are dispersed among all taxpayers, the incentives of the former en-

65. Mark Milke, *Government Subsidies in Canada: A \$684 Billion Price Tag*, Fraser Institute, June 2014, pp. 13-17.

gauge in seeking those benefits are far stronger than the incentives of taxpayers to organize and oppose these subsidies.

In the grand scheme of things, however, government subsidies to large businesses are detrimental to entrepreneurship. Most obviously, they create financial barriers to entry for new firms, for whom it is essentially impossible to lobby government due to the high costs involved.

Governments try to encourage entrepreneurship with programs like training and education, financial support for business incubators, and subsidies and loan guarantees for young entrepreneurs. As paradoxical as it may sound, it is not clear that these government interventions have any notable influence on the net level of entrepreneurship within a society. Some merely displace entrepreneurs, who start other kinds of businesses in order to be eligible for these programs.⁶⁶ If entrepreneurship is, as Austrian economists see it, an activity that is ubiquitous among humans, subsidies are unlikely to have a determining effect on net levels. Removing obstacles would be more effective.⁶⁷

Some economists and analysts suggest using algorithms to compute the probabilities of success for each business, and orienting support toward certain firms.⁶⁸ Austrian economics provides a strong rebuttal to such proposals, as it views entrepreneurship as a discovery process.⁶⁹

While individuals and entrepreneurs do plan, it is impossible for government to plan an entire economy. Thinking that a government can predict market outcomes, and which entrepreneurs will succeed or fail, is a facet of the “fatal conceit” that Friedrich Hayek warned against.⁷⁰ It is especially hard to predict the outcome of the whole market because the “data” needed to make such predictions are the ideas and opinions that individual entrepreneurs and consumers have in their minds. These ideas and opinions will often only emerge through market interactions.⁷¹

“Labour regulations that limit flexibility in terms of hiring and firing workers are sure to affect entrepreneurship by making it costlier to do business, and even sometimes completely ruling out certain business models.”

Making predictions about the success or failure of particular start-ups would require government not only to know what everyone has in their minds, but also to have this knowledge long before the people involved actually have those ideas themselves. This explains why government-run entrepreneurship subsidy programs are not likely to be able to focus on the next few champions, nor should they.⁷²

Regulatory Burden

There are other kinds of policies that exert direct control over the economy. One type that directly forbids entrepreneurial behaviour is occupational licences. In Canada, close to 13% of private sector workers aged between 18 and 60 in 2010 were working under occupational licensing.⁷³

Based on the National Occupational Classification, a 2014 study found that there were 127 jobs in Canada regulated in at least one province (see Table 4-3), by

66. Examples abound in the empirical literature. See among others: Christopher Coyne and Lotta Moberg, “The Political Economy of State-Provided Targeted Benefits,” *Review of Austrian Economics*, Vol. 28, No. 3, September 2015, pp. 337-356. These authors find that aid targeted at attracting businesses in a given area tends to lead to misallocation and to encourage political entrepreneurship over market entrepreneurship. Wenli Li, “Entrepreneurship and Government Subsidies: A General Equilibrium Analysis,” *Journal of Economic Dynamics & Control*, Vol. 26, No. 11, September 2002, pp. 1815-1844. This author even finds that the total level of entrepreneurial activity is reduced by loan assistance programs. Moreover, entrepreneurial activity attracts venture capital, but the inverse is not true, according to Steven F. Krefl and Russell S. Sobel, “Public Policy, Entrepreneurship, and Economic Freedom,” *Cato Journal*, Vol. 25, No. 3, Fall 2005, pp. 595-616. Another study notes that the effect of tax measures to encourage entrepreneurship in the United States has been negligible: Donald Bruce and Mohammed Mohsin, “Tax Policy and Entrepreneurship: New Time Series Evidence,” *Small Business Economics*, Vol. 26, No. 5, June 2006, pp. 409-425.

67. Mathieu Bédard, *Entrepreneurship and Economic Freedom: An Analysis of Empirical Studies*, Montreal Economic Institute, Research Paper, November 4, 2016.

68. Jorge Guzman and Scott Stern, *The State of American Entrepreneurship: New Estimates of the Quantity and Quality of Entrepreneurship for 15 US States, 1988-2014*, NBER Working Paper No. 22095, March 2016; Jorge Guzman and Scott Stern, *Nowcasting and Placecasting Entrepreneurial Quality and Performance*, NBER Working Paper No. 20954, February 2015.

69. F. A. Hayek, *The Fatal Conceit: The Errors of Socialism*, University of Chicago Press, 1991.

70. See also Roger Koppl, “Computable Entrepreneurship,” *Entrepreneurship: Theory and Practice*, Vol. 32, No. 5, September 2008, pp. 919-926.

71. F. A. Hayek, “Economics and Knowledge,” *Economica*, Vol. 4, No. 13, February 1937, pp. 33-54.

72. What private start-up incubators do is very different from these subsidy programs, and criticisms of the latter do not mean that the former cannot be successful.

73. Rafael Gomez et al., “Do Immigrants Gain or Lose by Occupational Licensing?” *Canadian Public Policy*, Vol. 41, Supplement 1, August 2015, p. S81.

Table 4-3

Occupations that are regulated in at least one province in Canada (2014)		
Financial Auditors and Accountants	Chiropractors	Estheticians, Electrologists and Related Occupations
Securities Agents, Investment Dealers and Brokers	Other Professional Occupations in Health Diagnosing and Treating	Service Station Attendants
Other Financial Officers	Pharmacists	Contractors and Supervisors, Electrical Trades and Telecommunications Occupations
Specialists in Human Resources	Dietitians and Nutritionists	Plumbers
Professional Occupations in Business Services to Management	Audiologists and Speech-Language Pathologists	Steamfitters, Pipefitters and Sprinkler System Installers
Assessors, Valuers and Appraisers	Physiotherapists	Gas Fitters
Chemists	Occupational Therapists	Carpenters
Geologists, Geochemists and Geophysicists	Registered Nurses	Bricklayers
Biologists and Related Scientists	Medical Laboratory Technologists and Pathologists' Assistants	Concrete Finishers
Forestry Professionals	Medical Laboratory Technicians	Tilesetters
Agricultural Representatives, Consultants and Specialists	Veterinary and Animal Health Technologists and Technicians	Plasterers, Drywall Installers and Finishers and Lathers
Civil Engineers	Respiratory Therapists, Clinical Perfusionists and Cardiopulmonary Technologists	Roofers and Shinglers
Mechanical Engineers	Medical Radiation Technologists	Glaziers
Electrical and Electronics Engineers	Denturists	Insulators
Chemical Engineers	Dental Hygienists and Dental Therapists	Painters and Decorators
Industrial and Manufacturing Engineers	Dental Technologists, Technicians and Laboratory Bench Workers	Floor Covering Installers
Metallurgical and Materials Engineers	Opticians	Electricians (Except Industrial and Power System)
Mining Engineers	Midwives and Practitioners of Natural Healing	Industrial Electricians
Geological Engineers	Licensed Practical Nurses	Electrical Power Line and Cable Workers
Petroleum Engineers	Ambulance Attendants and Other Paramedical Occupations	Stationary Engineers and Auxiliary Equipment Operators
Aerospace Engineers	Other Technical Occupations in Therapy and Assessment	Sheet Metal Workers
Computer Engineers (Except Software Engineers and Designers)	Dental Assistants	Boilermakers
Other Professional Engineers, n.e.c.	Other Assisting Occupations in Support of Health Services	Ironworkers
Architects	Lawyers and Quebec Notaries	Welders and Related Machine Operators
Landscape Architects	Psychologists	Construction Millwrights and Industrial Mechanics (Except Textile)
Urban and Land Use Planners	Social Workers	Heavy-Duty Equipment Mechanics
Land Surveyors	Family, Marriage and Other Related Counsellors	Refrigeration and Air Conditioning Mechanics
Mathematicians, Statisticians and Actuaries	Social Policy Researchers, Consultants and Program Officers	Elevator Constructors and Mechanics
Software Engineers and Designers	Secondary School Teachers	Automotive Service Technicians, Truck and Bus Mechanics and Mechanical Repairers
Civil Engineering Technologists and Technicians	Elementary School and Kindergarten Teachers	Motor Vehicle Body Repairers
Mechanical Engineering Technologists and Technicians	Educational Counsellors	Oil and Solid Fuel Heating Mechanics
Industrial Engineering and Manufacturing Technologists and Technicians	Paralegal and Related Occupations	Electric Appliance Servicers and Repairers

Table 4-3 (Cont.)

Occupations that are regulated in at least one province in Canada (2014)		
Construction Estimators	Early Childhood Educators and Assistants	Motorcycle and Other Related Mechanics
Electrical and Electronics Engineering Technologists and Technicians	Translators, Terminologists and Interpreters	Commercial Divers
Electronic Service Technicians (Household and Business Equipment)	Interior Designers	Other Trades and Related Occupations
Industrial Instrument Technicians and Mechanics	Insurance Agents and Brokers	Heavy Equipment Operators (Except Crane)
Aircraft Instrument, Electrical and Avionics Mechanics, Technicians and Inspectors	Real Estate Agents and Salespersons	Crane Operators
Air Pilots, Flight Engineers and Flying Instructors	Cooks	Drillers and Blasters - Surface Mining, Quarrying and Construction
Specialist Physicians	Sheriffs and Bailiffs	Oil and Gas Well Drillers, Servicers, Testers and Related Workers
General Practitioners and Family Physicians	Security Guards and Related Occupations	Oil and Gas Well Drilling Workers and Services Operators
Dentists	Outdoor Sport and Recreational Guides	Chain Saw and Skidder Operators
Veterinarians	Hairstylists and Barbers	
Optometrists	Funeral Directors and Embalmers	

Source: Rafael Gomez et al., "Do Immigrants Gain or Lose by Occupational Licensing?" *Canadian Public Policy*, Vol. 41, Supplement 1, August 2015, supplementary material available on the publisher's website.

more than 400 regulatory bodies,⁷⁴ ranging from tilesetters in Quebec to cooks in Saskatchewan. What these regulations do is limit the number of people who can work in these jobs, preventing outsiders from entering this business and also making these workers much more expensive than they would otherwise be. These costs can act as a powerful barrier to entry for entrepreneurs.

"A recent study estimates the potential productivity gains of eliminating interprovincial barriers at \$100 billion, or the equivalent of \$2,700 per Canadian."

More broadly speaking, any regulation that limits contractual flexibility is an additional constraint that adds to the difficulty of creating a business and expanding existing businesses. Labour regulations, for example, that limit flexibility in terms of hiring and firing workers are sure to affect entrepreneurship by making it costlier to

do business, and even sometimes completely ruling out certain business models.⁷⁵

Government regulation of the economy strongly affects entrepreneurial activity, simply because by its very nature it prevents entrepreneurs from making choices that they would have made in the absence of such regulation, as explained by Israel Kirzner.⁷⁶ Other types of regulation create a burden on firms that must pay additional costs, such as for operating licences, and that have access to a smaller pool of job candidates. For small companies, the cost of regulation can be prohibitive.

The regulatory burden in Canada is complicated by the fact that there are ten provinces, which on many matters have their own distinct administrations and regulations. In the pharmaceutical industry, for example, getting a drug approved and included on public insurance plan formularies of reimbursable drugs requires both federal and provincial approval, which can take years. The long

74. In Canada, occupational licensing is under provincial jurisdiction, thus multiplying the number of potential regulatory bodies for each occupation.

75. Samuel Bentolila and Giuseppe Bertola, "Firing Costs and Labour Demand: How Bad Is Euroclerosis?" *Review of Economic Studies*, Vol. 57, No. 3, 1990, pp. 381-402; Giuseppe Bertola, "Job Security, Employment and Wages," *European Economic Review*, Vol. 34, No. 4, 1990, pp. 851-879.

76. Israel M. Kirzner, *Discovery and the Capitalist Process*, University of Chicago Press, 1985.

timelines and extensive data required by these processes have a negative impact on entrepreneurship.⁷⁷ The results are that innovative drugs don't always reach the consumer.⁷⁸

Openness to Trade

Another type of policy that affects entrepreneurship is openness to trade and investment, whether at the international level or more locally. Because unseized profit opportunities can be noticed not just locally, but also abroad, openness to trade is very important in allowing entrepreneurship to flourish. This means allowing not just goods to flow through borders, but also workers and capital.

While Canada benefits from multiple trade deals with other countries and other economic zones, trade between its provinces is still difficult. The most emblematic of these is trade in alcohol. A resident of one province may not order alcohol online from another province, and crossing provincial lines to buy alcohol is subject to strict quotas in nearly all provinces.

Alcohol is not the only market restricted by trade barriers within Canada. Supply management for dairy, poultry, and eggs makes interprovincial trade in these goods very complicated, just as it is for financial services, energy, and many other goods and services. A report published by the Senate suggests that these barriers to trade cost between \$50 billion and \$130 billion a year.⁷⁹ A recent study estimates the potential productivity gains of eliminating interprovincial barriers at \$100 billion, or the equivalent of \$2,700 per Canadian.⁸⁰

Some of these barriers are regulation-oriented. One frequently cited example is that of the transportation of

goods by road. A truck that travels the length of Canada faces significant regulatory hurdles with regard to such details as tire types and load restrictions. For instance, some truck configurations can only be driven at night in British Columbia, but only during the day in neighbouring Alberta.⁸¹

Other barriers are more straightforward bans. Quebec's unpasteurized cheeses, for instance, are not sold in any other Canadian province.

"While entrepreneurship in Canada is healthy, comparatively speaking, there are many opportunities that nonetheless go unpursued because of ill-advised policies."

It is easy to see how such barriers to trade prevent instances of entrepreneurship from taking place. The standard example of entrepreneurs arbitraging between markets by moving a good from one market to another where it is worth more, which benefits consumers by making goods available where they are in higher demand,⁸² is effectively blocked by interprovincial barriers to trade.

Canada also restricts imports of certain goods from abroad, even from countries with whom it has signed free trade agreements. Supply management, again, severely restricts the supply of American dairy, poultry, and eggs coming into Canada. While there could certainly be some entrepreneurial opportunities for Canadians to seize in importing these products, lowering their prices in Canada, this is made impossible by strict quotas and tariffs as high as 300% on certain products.⁸³

Conclusion

While entrepreneurship in Canada is healthy, comparatively speaking, there are many opportunities that nonetheless go unpursued because of ill-advised policies. Austrian economics provides us with a rich analysis of those Canadian policies that are detrimental to entrepreneurship.

77. Frank Lichtenberg, *The Benefits of Pharmaceutical Innovation: Health, Longevity, and Savings*, Montreal Economic Institute, Research Paper, June 15, 2016; Valentin Petkantchin, "Drug Price Controls and Pharmaceutical Innovation," Montreal Economic Institute, Economic Note, April 1st, 2004; Len Coad and Sarah Dimick, *Conflicting Forces for Canadian Prosperity: Examining the Interplay Between Regulation and Innovation*, Conference Board of Canada, February 1st, 2010.

78. Robert Higgs, "Banning a Risky Product Cannot Improve Any Consumer's Welfare (Properly Understood), with Applications to FDA Testing Requirements," *Review of Austrian Economics*, Vol. 7, No. 2, 1994, pp. 3-20; Daniel Klein and Alexander Tabarrok, "Do Off-Label Drug Practices Argue Against FDA Efficacy Requirements? A Critical Analysis of Physicians' Argumentation for Initial Efficacy Requirements," *American Journal of Economics and Sociology*, Vol. 67, No. 5, 2008, pp. 743-775.

79. David Tkachuk and Joseph A. Day, *Tear Down These Walls: Dismantling Canada's Internal Trade Barriers*, Standing Senate Committee on Banking, Trade and Commerce, 2016, p. 24.

80. Lukas Albrecht and Trevor Tombe, "Internal Trade, Productivity and Interconnected Industries: A Quantitative Analysis," *Canadian Journal of Economics*, Vol. 49, No. 1, 2016, pp. 237-263.

81. David Tkachuk and Joseph A. Day, *op. cit.*, footnote 79, p. 28.

82. Israel M. Kirzner, "Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach," *Journal of Economic Literature*, Vol. 35, No. 1, March 1997, pp. 60-85.

83. Alexandre Moreau, "Trading Supply Management for Softwood Lumber?" Montreal Economic Institute, Economic Note, March 23, 2017.

Summary of Proposals to Foster Entrepreneurship

Reduce the corporate income tax rate

Corporate income tax rates should be reduced, at both the federal and provincial levels. For this tax to be neutral with regard to entrepreneurship, the dual federal rate, for large and small companies, could be abolished and replaced with a single rate, preferably equal to the lower of the two.

Reduce the top marginal income tax rate for individuals

The top marginal income tax rate for individuals should be reduced. Nova Scotia, Ontario, and Quebec are the places where the combined federal and provincial top marginal tax rates for individuals are the highest. Their top rates also apply at some of the lowest thresholds in North America. Both the rate and the threshold should be aligned with the North American average, federally and provincially.

Eliminate, or very significantly reduce, the capital gains tax

The top rate for the capital gains tax in Canada is set at 26.5%. This tax has significant negative effects on entrepreneurship and should be entirely eliminated, or at least very significantly reduced.

Reduce occupational licensing and labour regulation

Occupational licensing should be limited to those sectors where there is a genuine information problem, and where limiting entry can help solve this problem, however imperfectly, such as medicine. In most sectors, entry does not need to be limited. Labour regulation affects contractual freedom, and seriously limits the business model innovation that often accompanies entrepreneurship.

Make it easier to get new innovative products approved

To slow down innovation is to discourage entrepreneurship from taking place in the future. In some sectors, years of research and investment are met with a barrage of regulatory barriers. This is the case, for example, in the pharmaceutical industry, where approval of new innovative drugs should be streamlined.

Free interprovincial trade

Interprovincial trade should be open and free from all regulatory and other barriers. This policy needs to be clear and explicit, and apply to all sectors of the economy.

End supply management and free foreign trade in the market for milk, poultry, and eggs

The opportunities for entrepreneurs to supply Canadian demand for foreign produce in some sectors of agriculture are being curtailed by staunch protectionism. So, too, are opportunities for Canadian producers to supply world demand. It is high time to end all forms of supply management and quotas.

CONCLUSION

At its core, entrepreneurship is ubiquitous in human societies. Offering a solution to a problem, whether one does it for profit or for other motives, is acting entrepreneurially. This is something practically everyone does: bettering the lives of others, while getting a little something for yourself in return. When someone is alert to such opportunities, and acts to seize them, he or she is acting like an entrepreneur, whether the action occurs within a business or not. Thinking about entrepreneurship as this kind of attitude improves our understanding of the working of the economy.

While we generally think of entrepreneurship exclusively in terms of business creation, it does not happen only in new businesses; when existing businesses launch new products, offer them on new markets, or even sometimes repackage old products, they are acting entrepreneurially. They are identifying an opportunity to solve a problem, and fulfilling a demand that isn't being satisfied, and generally making the world a better place in the process.

Most positive aspects of the market economy are the result of entrepreneurial action.⁸⁴ From innovation to growth, to an optimal allocation of resources, all are ultimately the products of entrepreneurs "buying low and selling high," and innovating to outcompete other entrepreneurs.

The analysis of Austrian economics suggests that above all, policies should be guided by the principle: "First, do no harm." Before calling for policies to promote entrepreneurship, it would be better to remove the obstacles that stand in the way of entrepreneurs.

These obstacles can take many forms: threats to private property, policies that crowd out entrepreneurship, an excessive fiscal and regulatory burden, and policies that affect openness to trade.

What such policies do, ultimately, is interfere with the signals coming from the 3 P's of Property, Prices, and Profit/Loss, which in turn weaken the corresponding 3 I's of Incentives, Information, and Innovation. Entrepreneurs need stable property rules to be able to plan for the future, sound prices to make proper economic calculations, and the signals of profit and loss to direct resources toward their most valued uses. Modern economic life, with its incredibly high standard of living, is the

product of an economic system that has laid these foundation stones for entrepreneurs by channelling their incentives, utilizing information, and stimulating innovation, all while weeding out poor decisions with respect to resource use.

Good policies can sustain these processes, steering entrepreneurial activity toward the kind of market-oriented problem-solving that we want, the kind that is productive and conducive to growth.

"After all, in a certain sense Al Capone was an entrepreneur, but he was not the kind that policy should foster."

Bad policies, on the other hand, will deflect entrepreneurs from productive businesses and make other kinds of opportunities more appealing. These policies can take the form of high corporate and personal income taxes, a capital gains tax, occupational licensing and labour regulation, a heavy regulatory burden in many industries such as the pharmaceutical industry, limits to interprovincial and international trade, and the quota system of supply management in dairy, poultry, and eggs, to name just a few. What such policies do is diminish the incentives, the information, and the innovative thinking of entrepreneurs with regard to productive activities, as they become attracted to other, less productive projects.

These other opportunities, calling for unproductive problem solving, can range anywhere from seeking government handouts to bribing a civil servant. Ultimately, when a policy outright discourages productive activities, it can channel entrepreneurship toward opportunities that are destructive. After all, in a certain sense Al Capone was an entrepreneur, but he was not the kind that policy should foster.

Even though Canada is in an enviable position globally with regard to entrepreneurship, many policies nonetheless keep us from fulfilling our true potential. If we do not address these policies, we are leaving money on the table by not doing everything in our power to push Canadians toward productive entrepreneurship.

84. Maria Minniti and Roger Koppl, "The Unintended Consequences of Entrepreneurship," *Journal des économistes et des études humaines*, Vol. 9, No. 4, pp. 567-586.

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