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**NOVEMBER 2016**

# **ENTREPRENEURSHIP AND ECONOMIC FREEDOM**

## **AN ANALYSIS OF EMPIRICAL STUDIES**

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ISBN 978-2-922687-68-2

Legal deposit: 4<sup>th</sup> quarter 2016  
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Printed in Canada

Mathieu Bédard

# Entrepreneurship and Economic Freedom

## An Analysis of Empirical Studies

Montreal Economic Institute

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November 2016



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## HIGHLIGHTS

Entrepreneurship is one of the main engines of the economy. Entrepreneurs invest, create jobs, and help increase the standard of living of all. This *Research Paper* looks at the empirical connection between entrepreneurship and economic freedom. If there is a positive correlation between these two variables, then public policies aiming to support business creation must take this fact into account.

### Chapter 1

#### Defining and Measuring Entrepreneurship

- Entrepreneurs are essential to economic activity. They are the ones who identify new ways of solving the economic problem (what to produce, for whom to produce, how to produce).
- According to one of the main theories of entrepreneurship, entrepreneurs are a source of economic change, and this change leads to instability. By innovating, entrepreneurs turn the established order on its head, and other companies have to adapt.
- A second theory is that of “alertness,” which is the dominant approach today in management sciences and, to a lesser extent, in economics. Entrepreneurship is an attitude of vigilance in the face of unrealized profit opportunities.
- According to a third theory, the skill of entrepreneurs resides in having good judgment in order to make decisions despite the uncertainty that every business or economic project must face.
- Certain institutions direct entrepreneurship toward productive activities, but if entrepreneurs are guided by bad institutions, they can become agents of stagnation and economic decline instead of being agents of growth and progress.
- Neither productive nor unproductive entrepreneurs are guided solely by institutions; they can also try to avoid institutional constraints, or even try to alter institutions.
- The fact that entrepreneurship is a more abstract concept than simply being the head of a company, and that there are several notions and types of entrepreneurship, does not mean that it is impossible to measure. It just means that it sometimes needs to be observed using indirect data.

### Chapter 2

#### Defining and Measuring Economic Freedom

- Economic freedom, like entrepreneurship, is a relatively abstract concept that cannot be measured directly. Instead, one must try to measure its constituent elements, namely institutions.
- The *Economic Freedom of the World* report divides economic freedom into five components: the size of government, the legal system and property rights, the quality of the monetary system, the freedom to trade internationally, and regulation.
- The first component, the size of government, aims to evaluate the extent to which it is the political process rather than the market that determines the allocation of resources and the production of goods and services.
- The second component, the legal system and private property rights, aims to evaluate the protection of persons and their rightfully acquired property, a central element of economic freedom and a civil society.
- The third component measures whether money and the monetary system are sound. In particular, inflation reduces economic freedom since it makes long-term economic calculation more difficult.
- The fourth component, the freedom to trade internationally, measures tariffs, quotas, hidden administrative restrictions, exchange rate controls, and limits to the movement of capital.
- The fifth component measures the regulation of credit, labour, and business, which prevents companies and individuals from making choices they would have otherwise made.
- A ranking closely related to the *Economic Freedom of the World* report is the *Economic Freedom of North America* report, which ranks states and provinces. Alberta stands out clearly as the province with the most economic freedom in Canada, and Quebec is at the bottom of the pack with a score that is far below all the other provinces.
- An additional level of detail is now available in the United States thanks to *An Economic Freedom Index for U.S. Metropolitan Areas*.

## Chapter 3

### Does Economic Freedom Explain Variations in Levels of Entrepreneurship?

- The connection between economic freedom and business creation, at the international level, is quite obvious. A simple glance at the raw data confirms the close relationship that exists between these two variables.
- Three main studies look into this connection at the country level, confirming the positive effect of various components of economic freedom on entrepreneurship. Differences in the sources and methodologies used explain why the three studies do not arrive at exactly the same conclusions.
- Other studies look at differences between American states and confirm the positive effect of economic freedom on entrepreneurship at this level.
- One study at the metropolitan level in the United States finds that when economic freedom increases in one metropolitan area, more businesses are created there and also in neighbouring areas.
- While no econometric studies appear to have been carried out to verify if economic freedom can explain differences in the number of businesses created in the different Canadian provinces, an analysis of the raw data does reveal a clear trend line showing that more economic freedom is associated with a higher rate of business creation.
- As for the quality of entrepreneurship, three studies confirm that economic liberty can reorient entrepreneurship from unproductive activities toward productive ones. When there is more economic freedom, entrepreneurs start more companies in the business and trade sectors, and fewer in sectors directly related to the search for political privileges.



## INTRODUCTION

Entrepreneurship is one of the main engines of the economy. It is the job of entrepreneurs to ensure that supply meets demand, but also to make innovations available to consumers. In so doing, they invest, create jobs, and help increase the standard of living of all.

Conscious of the importance of promoting entrepreneurship in order to stimulate economic activity, many governments have put in place assistance programs of various sorts. Among these are found, for example, entrepreneurship training and education programs, financial support for business incubators, and subsidies and loan guarantees for young entrepreneurs. It is not clear, however, that these government interventions have any notable influence on the level of entrepreneurship within a society. Some merely displace entrepreneurs, who start other kinds of businesses in order to be eligible for these programs.<sup>1</sup>

**“The size of government, the tax burden, property rights, the monetary system, openness to international trade, as well as economic regulation all have an effect on business creation.”**

In contrast, the various factors that make up economic liberty play a much more important role. The size of government, the tax burden, property rights, the monetary system, openness to international trade, as well as economic regulation all have an effect on business creation. These factors correspond to what economics refers to as institutions, which is to say, the rules of the economic game.

This *Research Paper* looks at the empirical connection between entrepreneurship and economic freedom. The first chapter defines entrepreneurship and analyzes certain indicators used to measure this phenomenon. The second chapter defines economic freedom and introdu-

ces certain indices that measure economic freedom in the world and in North America. Finally, the last chapter provides an overview of the studies that establish the connection between economic freedom and entrepreneurship.

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1. 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. Kreft 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.



## CHAPTER 1

### Defining and Measuring Entrepreneurship

Entrepreneurs are essential to economic activity. It is through their decisions that goods and services are produced, and therefore that supply meets demand.<sup>2</sup> But entrepreneurs are also the ones who allow the economy to go beyond the simple mechanism of supply and demand. They are the ones who identify new ways of solving the economic problem (what to produce, for whom to produce, how to produce).

Research has historically aimed to define entrepreneurs by their capabilities. This approach amounts to saying that the definition of an entrepreneur, the very essence of what it means to be an entrepreneur, consists of certain capabilities that entrepreneurs have. In a certain sense, entrepreneurs are not like other people. This is an approach that has been roundly criticized on account of the difficulty of identifying the particular skills of entrepreneurs, or the personality traits that are particular to them.<sup>3</sup> This paradigm having proven incapable of identifying traits that were universal, or even frequent, economic research today focuses instead on the definition of entrepreneurship as an activity, and entrepreneurs as those who carry out this activity.

This kind of definition assumes that an entrepreneur is not a special kind of person. The economic analysis of entrepreneurship does not refer directly to business leaders, for example. It instead considers entrepreneurship as a kind of activity, defined by the concepts that will be enumerated in the following section. Entrepreneurship could even be defined as a certain attitude, or a state of mind. In this sense, an entrepreneur is not necessarily someone who starts a business; a company

manager could qualify, or even in certain cases someone who has no responsibility, but who acts in innovative ways by launching internal projects.<sup>4</sup>

Three theories of entrepreneurship stand out among the rest. They should not necessarily be seen as competing, or mutually exclusive, but rather as complementary.

### Different Notions of Entrepreneurship

#### A) Entrepreneurship as innovation

One of the main theories of entrepreneurship relates it to innovation: An entrepreneur introduces new products or new production methods, or creates new markets, new raw materials, or new combinations of inputs.

**“Entrepreneurship could be defined as a certain attitude, or a state of mind. An entrepreneur is not necessarily someone who starts a business.”**

According to this theory, entrepreneurs are a source of economic change, and this change leads to instability. By innovating, entrepreneurs turn the established order on its head, and other companies have to adapt. Thanks to the competitive advantage of innovation, an entrepreneur transforms the market structure that was up until then stable and mature. Joseph Schumpeter, to whom we owe this vision of entrepreneurship, called this process “creative destruction”: it destroys the formerly established order to give rise to technical progress and growth, which pushes the economy to find a new equilibrium.<sup>5</sup>

There are many examples of this kind of entrepreneurship and “creative destruction.” The automobile was an innovation of this kind. There were an estimated 109,000 carriage and harness makers in the United States in 1900, and an estimated 238,000 blacksmiths in 1910.<sup>6</sup> These jobs became obsolete as automobiles, trucks, and airplanes replaced carriages and horses as means of transport. However, innovation in turn created jobs

2. The most widely-used definition of economics is unfortunately silent about entrepreneurs. There is indeed no place for the entrepreneur if economics is just “the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses,” as Lionel Robbins claims in *An Essay on the Nature and Significance of Economic Science*, 2<sup>nd</sup> ed., Macmillan and Co., 1935, p. 16. If the frame of reference is equilibrium, as is the case in microeconomics for instance, there is by definition no profit opportunity that has not already been seized and the entrepreneurial spirit has no role to play, as explained by Israel Kirzner in “Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach,” *Journal of Economics Literature*, Vol. 35, No. 1, March 1997, p. 69.

3. William B. Gartner, “‘Who Is an Entrepreneur?’ Is the Wrong Question,” *American Journal of Small Business*, Vol. 12, No. 4, 1988, pp. 11-32; James W. Carland, Frank Hoy, and Jo Ann C. Carland, “‘Who Is an Entrepreneur?’ Is a Question Worth Asking,” *American Journal of Small Business*, Vol. 12, No. 4, 1988, pp. 33-39; Brian McKenzie, Steve D. Ugbah, and Norman Smothers, “‘Who Is an Entrepreneur?’ Is It Still the Wrong Question?” *Academy of Entrepreneurship Journal*, Vol. 13, No. 1, 2007, pp. 23-44.

4. In some cases, there is talk of the *intrapreneur*, the prefix “intra” highlighting the fact that a person is acting like an entrepreneur within a company.

5. Joseph A. Schumpeter, *The Theory of Economic Development*, Harvard University Press, 1934; Joseph A. Schumpeter, *Capitalism, Socialism, and Democracy*, Harper Perennial, 1948.

6. W. Michael Cox and Richard Alm, “Creative Destruction,” in David R. Henderson (ed.), *The Concise Encyclopedia of Economics*, Liberty Fund, 2008.

Table 1-1

The effect of "creative destruction" on employment			
NEW PRODUCT	JOBS REQUIRED	PRODUCTS REPLACED	JOBS REPLACED
<b>Automobile</b>	<ul style="list-style-type: none"> <li>• Assemblers</li> <li>• Designers</li> <li>• Road builders</li> <li>• Petrochemists</li> <li>• Mechanics</li> <li>• Truck drivers</li> </ul>	<ul style="list-style-type: none"> <li>• Carriage</li> <li>• Train</li> </ul>	<ul style="list-style-type: none"> <li>• Blacksmiths</li> <li>• Saddlers</li> <li>• Harness makers</li> <li>• Carriage drivers</li> <li>• Railroad workers</li> </ul>
<b>Airplane</b>	<ul style="list-style-type: none"> <li>• Pilots</li> <li>• Mechanics</li> <li>• Flight attendants</li> <li>• Travel agents</li> </ul>	<ul style="list-style-type: none"> <li>• Train</li> <li>• Ocean liner</li> </ul>	<ul style="list-style-type: none"> <li>• Railroad workers</li> <li>• Ship hands</li> </ul>
<b>Plastic</b>	<ul style="list-style-type: none"> <li>• Petrochemists</li> </ul>	<ul style="list-style-type: none"> <li>• Steel</li> <li>• Aluminium</li> <li>• Barrels</li> <li>• Pottery</li> <li>• Glass</li> </ul>	<ul style="list-style-type: none"> <li>• Miners</li> <li>• Founders</li> <li>• Metalworkers</li> <li>• Coopers</li> <li>• Potters</li> <li>• Colliers</li> </ul>
<b>Computer</b>	<ul style="list-style-type: none"> <li>• Programmers</li> <li>• Computer engineers</li> <li>• Electrical engineers</li> <li>• Software designers</li> </ul>	<ul style="list-style-type: none"> <li>• Adding machine</li> <li>• Slide rule</li> <li>• Abacus</li> <li>• Paper</li> <li>• Filing cabinet</li> </ul>	<ul style="list-style-type: none"> <li>• Assemblers</li> <li>• Clerks</li> <li>• Tinsmiths</li> <li>• Lumberjacks</li> </ul>

**Source:** W. Michael Cox and Richard Alm, "Creative Destruction," in David R. Henderson (ed.), *The Concise Encyclopedia of Economics*, Liberty Fund, 2008.

related to these new technologies or elsewhere in the economy. Table 1-1 provides some examples of the effects of creative destruction on employment: Those occupations that become obsolete are replaced by new occupations. The workers displaced will therefore work to meet other consumer needs.

The continued relevance of this approach to entrepreneurship is confirmed by a rich scientific literature that places innovation at the centre of economic development and growth.<sup>7</sup>

7. To give just two examples from the substantial literature on innovation in which the entrepreneur unfortunately sometimes comes second, like a phenomenon that underlies the discussion, see Daron Acemoglu, Gino Gancia, and Fabrizio Zilibotti, "Competing Engines of Growth: Innovation and Standardization," *Journal of Economic Theory*, Vol. 147, No. 2, 2012, pp. 570-601; Philippe Aghion and Peter Howitt, "A Model of Growth Through Creative Destruction," *Econometrica*, Vol. 60, No. 2, 1992, pp. 323-351.

## B) Entrepreneurship as "alertness"

Another vision is that of "alertness," which is the dominant approach today in management sciences and, to a lesser extent, in economics. Entrepreneurship is an attitude of vigilance in the face of unrealized profit opportunities.<sup>8</sup>

According to this approach to entrepreneurship, entrepreneurial innovations in many cases consist of arbitrage,

8. 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, March 1997, pp. 60-85; Peter J. Boettke and Christopher J. Coyne, "Entrepreneurship and Development: Cause or Consequence?" in Roger Koppl, Jack Birner, and Peter Kurriid-Klitgaard (eds.), *Austrian Economics and Entrepreneurial Studies*, Advances in Austrian Economics Vol. 6, Emerald Group Publishing, 2003, pp. 67-87.

but also include marginal innovations that make slight improvements to existing products. The typical entrepreneur is thus a much more banal figure than, for instance, Steve Jobs or Bill Gates, although these must also be considered entrepreneurs. The invention of the window envelope or the pencil, for example, is as much an example of entrepreneurship as is the invention of the iPhone or of Windows.

Entrepreneurial opportunities are errors and imperfections in the market. They can consist of, among other things, a pricing error, or a supply source that has not yet been exploited. A pricing error, for example, could be an inconsistency between prices in two geographical areas. First of all, a “vigilant” entrepreneur identifies this error, noticing that a good is sold at a low price in one place and a high price in another. Second, the entrepreneur uses this information to act and seize the entrepreneurial opportunity. In this example, he or she will buy where prices are low in order to sell where prices are high. Eventually, this arbitrage will have the effect of equalizing prices between the two locations.

Entrepreneurship is characterized by this alertness, but also by the action of the entrepreneur who proposes a solution to a problem. It is not enough to pay attention to profit opportunities; these opportunities must also be seized.

This search for profit and the attempt to seize entrepreneurial opportunities makes the entrepreneur, according to this approach, a determinedly stabilizing force, in contrast to the “innovative” entrepreneurship described above. Entrepreneurs notice what can be considered the equivalent of economic shortages and surpluses, and through their actions, push the economy toward a situation of equilibrium where all opportunities are seized. Of course, since the world is constantly changing and evolving, this final state of affairs where all profit opportunities have been seized is never reached.

Figure 1-1 compares these two types of entrepreneurship. Their role differs in two ways, namely in the origin of the phenomenon, which is research and development in one case and “alertness” in the other, and in terms of the effects of entrepreneurship, which is a disruptive force in the first case and a stabilizing force in the second.

### C) Entrepreneurship as “judgment”

A popular definition of entrepreneurship relates it to risk. An entrepreneur is someone who takes the ultimate risk. Although this definition is not found very often in

the economic literature, there is another version that is similar to this.

One vision of entrepreneurship that is promoted by certain researchers is entrepreneurship as a personality trait that entrepreneurs have, which consists of a capacity to make the right choices under conditions of radical uncertainty.<sup>9</sup> In this case, entrepreneurs have the ability to make good decisions in a radically uncertain world.

To grasp what is meant by radical uncertainty, one must understand the distinction made by economist Frank Knight between uncertainty and risk.<sup>10</sup>

**“Thanks to the competitive advantage of innovation, an entrepreneur transforms the market structure that was up until then stable and mature.”**

In a situation of risk, the future is unknown, but it is possible to assign probabilities that various events will occur. Actuarial science, for example, consists of calculating these probabilities so that insurers can establish a price for the insurance they sell.

In a situation of uncertainty, not only are the final results unknown, but it is impossible to assign probabilities because our understanding of the phenomenon is too incomplete. We therefore sometimes speak, in order to accentuate the difficulty of predicting the outcome of the phenomenon, of radical, non-probabilistic, “Knightian” uncertainty. For example, when an entrepreneur starts a business, it is very difficult to establish probabilities regarding the company’s success or failure. This calculation depends on too many variables, that depend in turn on the decisions of thousands of people, which we simply have no way of measuring.<sup>11</sup>

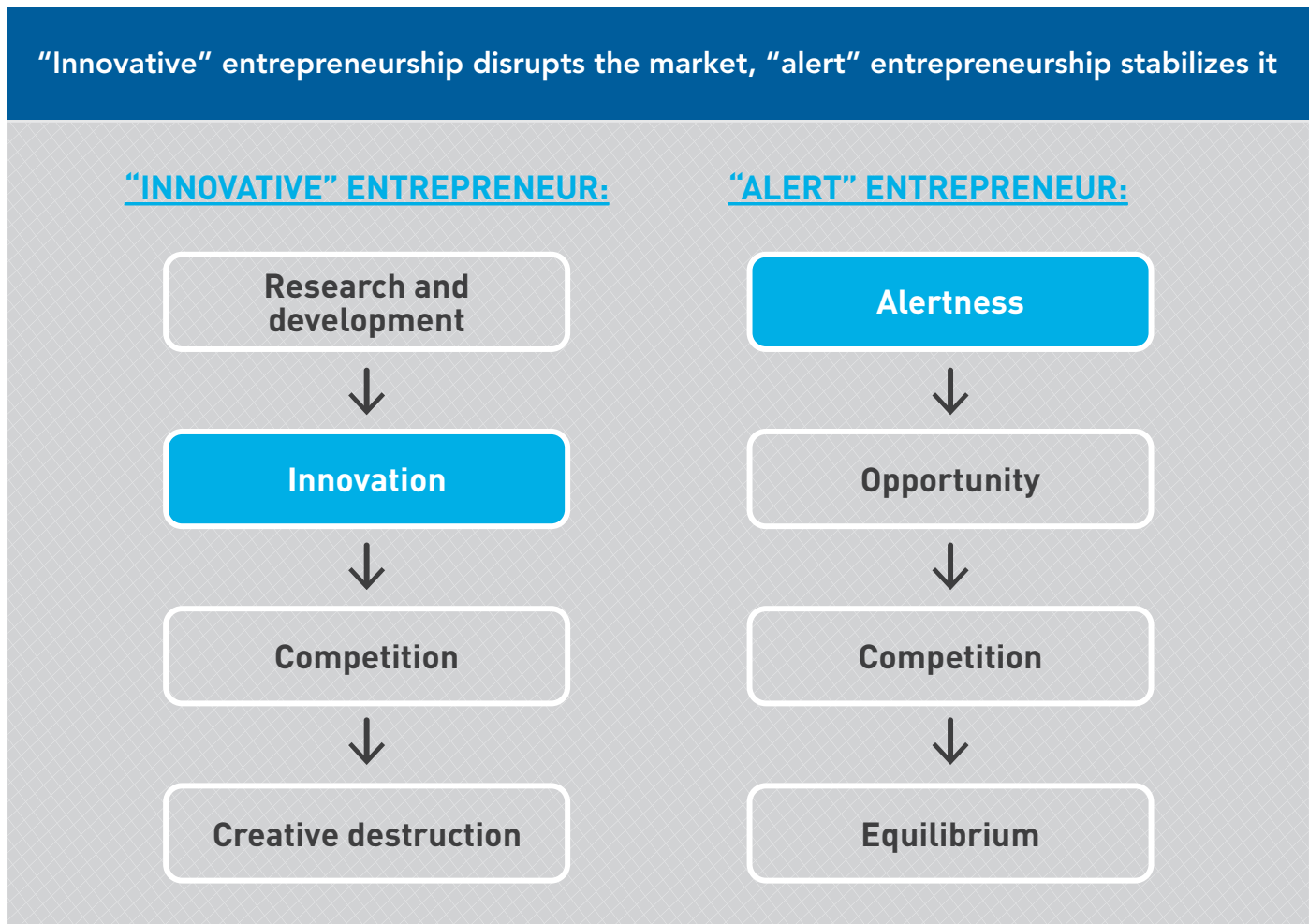
The skill of entrepreneurs resides, according to this theory, in having good judgment in order to make decisions despite the uncertainty that every business or economic project must face. This good judgment means

9. Nicolai J. Foss and Peter G. Klein, “Entrepreneurship and the Theory of the Firm: Any Gains from Trade?” in Sharon A. Alvarez, Rajshree R. Agarwal, and Olav Sorenson (eds.), *Handbook of Entrepreneurship Research: Disciplinary Perspectives*, Springer, 2005; Nicolai J. Foss and Peter G. Klein, *Organizing Entrepreneurial Judgment: A New Approach to the Firm*, Cambridge University Press, 2012.

10. Frank Knight, *Risk, Uncertainty and Profit*, University of Chicago Press, 1921.

11. Richard N. Langlois and Metin M. Cosgel, “Frank Knight on Risk, Uncertainty, and the Firm: A New Interpretation,” *Economic Inquiry*, Vol. 31, No. 3, July 1993, pp. 456-465; Roger Koppl, “Computable Entrepreneurship,” *Entrepreneurship Theory and Practice*, Vol. 32, No. 5, September 2008, pp. 919-926.

Figure 1-1



they have good intuitions, for example in terms of the amount of uncertainty that it is reasonable to expose one's business to.

**"Entrepreneurial innovations in many cases consist of arbitrage, but also include marginal innovations that make slight improvements to existing products."**

When Steve Jobs bet that smartphones with touch-screens costing several hundreds of dollars would become the future of telecommunications, a portion of this gamble was calculated and probabilistic. It is plausible that Apple was aware of how the disposable income of Americans was trending, for instance, as well as the technologies that would soon be at their disposal on the

market. But another huge part of this gamble relied on the intuition of Steve Jobs: How to know if the final product would appeal to consumers? It is this "judgment," which cannot be based on statistics since it is a matter of "radical" uncertainty, that characterizes entrepreneurs in this branch of the theory.

There are thus three broad economic notions of the entrepreneur. It is important to keep in mind that these explanations are not necessarily contradictory, or even mutually exclusive. They must be understood as being complementary, merely highlighting the importance of different ideas or phenomena present in a free market.<sup>12</sup>

12. Israel M. Kirzner, "Creativity and/or Alertness: A Reconsideration of the Schumpeterian Entrepreneur," *Review of Austrian Economics*, Vol. 11, No. 1, January 1999, pp. 5-17.



## Different Types of Productive and Unproductive Entrepreneurship

The entrepreneurial spirit appears to be an anthropological constant. Regardless of the civilization examined, regardless of the part of the world studied, one always finds activities that combine innovation, uncertainty, and problem solving. However, these are sometimes oriented toward other kinds of organizations. Indeed, entrepreneurs are everywhere, not just at the head of companies. According to this notion, entrepreneurship is oriented by the institutional environment in which the entrepreneur is found. Institutions affect the gains associated with different kinds of activities.

Institutions are the different rules of the economic “game.” Some of these rules are formal and others are informal. Formal institutions include codified rules like laws and regulations, whereas informal institutions are made up of culture, customs, and conventions.

Certain institutions make it profitable to run a private company that meets the needs of its clientele. These are institutions that direct entrepreneurship toward productive activities. Another type of entrepreneurship that can be productive is, for example, one that is exercised within non-profit organizations when these are well-managed and meet a real need.

In a context in which entrepreneurs are guided by bad institutions, they can become agents of stagnation and economic decline instead of being agents of growth and progress. This can happen when entrepreneurial activity is directed toward the quest for subsidies and privileges granted by government.

These types of productive and unproductive entrepreneurship are not guided solely by institutions. Entrepreneurs can also try to avoid institutional constraints, or even try to alter institutions. There is thus a difference between being entrepreneurial within the context of existing institutions, while respecting them, and being entrepreneurial in order to have an influence on institutions and modify them. Table 1-2 summarizes the different types of entrepreneurship and gives examples of behaviours that characterize them.

One of the most fundamental institutions that orient the decisions of entrepreneurs is private property.<sup>13</sup> Private property allows commercial exchanges to take place, which allows price formation. Prices in turn allow for

economic calculation, because they provide important information. It is this economic calculation, and information regarding potential profits and losses, that allow productive entrepreneurs to make plans and build their companies.

Conversely, certain businesses devote themselves to “rent-seeking.” It is rent-seeking when a company tries to make money by obtaining a political privilege or a subsidy instead of by contributing to society through economic activity in the market. Rent-seeking is harmful to the economy since in addition to the simple cost for taxpayers, it introduces wasteful distortions by rewarding companies that are connected to those in power, or whose lobbying efforts are well organized, to the detriment of other companies. Society’s resources are thus unduly diverted toward projects that do not produce wealth and that are profitable only thanks to the intervention of political authorities.

**“The skill of entrepreneurs resides, according to this theory, in having good judgment in order to make decisions despite the uncertainty that every business or economic project must face.”**

Profit, when it is the result of market exchange, is a signal indicating that a company’s clientele is satisfied and that the company has been properly managed. In contrast, profit stemming from the political process is disconnected from the satisfaction of consumers. As a result, entrepreneurs who devote their time and effort to lobbying do not pay as much attention to developing their companies’ abilities to satisfy consumers.

## Measuring Entrepreneurship

The fact that entrepreneurship is a more abstract concept than simply being the head of a company, and that there are several notions and kinds of entrepreneurship, does not mean that it is impossible to measure. It just means that it sometimes needs to be observed using indirect data.

There are basically two ways of measuring the level of entrepreneurship in a society. The first is through polls and studies, like the annual *Global Entrepreneurship Monitor* (GEM) report, which measures both the proportion of the working age population that is about to

13. The next chapter focuses on institutions and provides several other examples of institutions and the way in which they influence entrepreneurs.

Table 1-2

Productive and unproductive entrepreneurship			
	RESPECT INSTITUTIONS	AVOID INSTITUTIONS	ALTER INSTITUTIONS
<b>Productive</b>	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.
<b>Unproductive or destructive</b>	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.

create a business, as well as the proportion of those who created one recently, across 60 countries.<sup>14</sup>

The GEM uses the World Economic Forum's classification, which divides countries into three groups representing three stages of economic development. The first group includes economies "dominated by subsistence agriculture and extraction businesses, with a heavy reliance on (unskilled) labor and natural resources." The second group is made up of efficiency-driven economies that have "become more competitive with further development accompanied by industrialization and an increased reliance on economies of scale, with capital-intensive large organizations more dominant." As for the third group, it includes innovation-driven economies in which "businesses are more knowledge-intensive, and the service sector expands."<sup>15</sup>

Figure 1-2 shows that among the countries polled by the GEM, entrepreneurship is perceived positively by adults. Majorities of those polled in each of the country groups agree that entrepreneurship is a good career choice, that it leads to high social status when successful, and that entrepreneurs receive a significant amount of media attention.

Figure 1-3 shows that poll respondents in the first country group see more entrepreneurial opportunities around

them, feel less limited by the fear of failure, consider themselves more capable of creating a business, and have more intention to create one than respondents in the groups of more advanced economies. The more advanced the economy, the less positive the opinion of poll respondents seems to be when it comes to their entrepreneurial capabilities. This could reflect the fact that with more advanced stages of economic development, entrepreneurship involves administrative requirements that are more formalized.

**"Regardless of the civilization examined, regardless of the part of the world studied, one always finds activities that combine innovation, uncertainty, and problem solving."**

The *Global Entrepreneurship Monitor* also publishes a report looking specifically at Canada,<sup>16</sup> which shows that intentions to start a business are very high here, as well as reports focusing on certain provinces. In 2014, for example, four of these provincial reports were published, namely for Alberta, Ontario, Nova Scotia, and

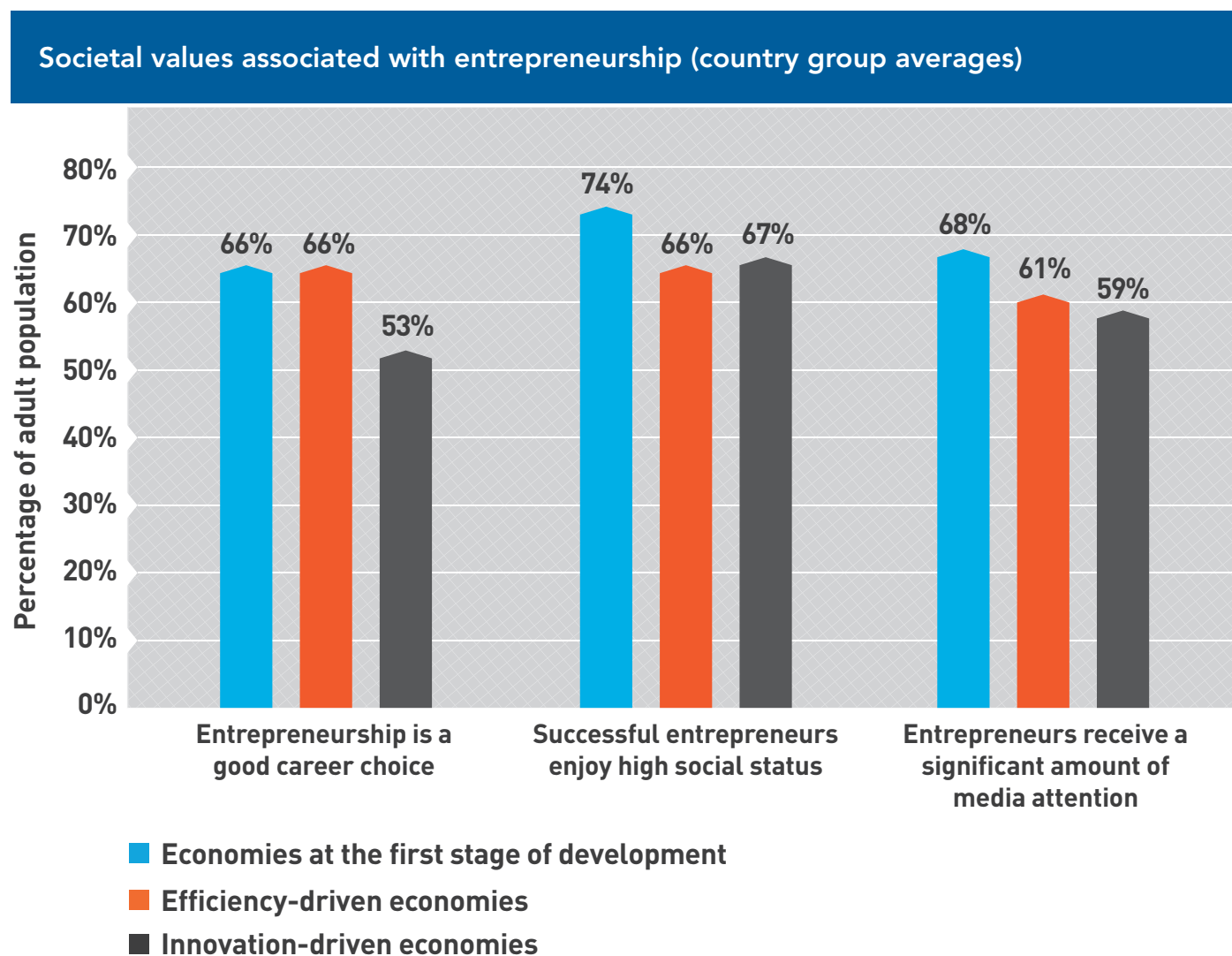
14. Donna Kelley, Slavica Singer, and Mike Herrington, *Global Entrepreneurship Monitor: 2015/16 Global Report*, Global Entrepreneurship Research Association, 2016, p. 7.

15. *Ibid.*, p. 11.

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



Figure 1-2



**Note:** The poll was carried out in 54 countries.

**Source:** Donna Kelley, Slavica Singer, and Mike Herrington, *Global Entrepreneurship Monitor: 2015/16 Global Report*, Global Entrepreneurship Research Association, 2016, Figure 4, p. 15.

Quebec,<sup>17</sup> as well as a report on entrepreneurship among women.<sup>18</sup>

The second way of indirectly measuring entrepreneurship uses data and statistics related to the activities of entrepreneurs. The indirect data used include the rate of

independent or individual workers, the growth rate of the number of private businesses, variations in the volume of requests to register brands or patents, etc. In addition to official sources provided by statistical agencies, the World Bank's *Doing Business* report<sup>19</sup> is an example of a source providing this kind of data. In the United States, the *Kauffman Index of Entrepreneurial Activity* is a particularly rich source for this kind of information.

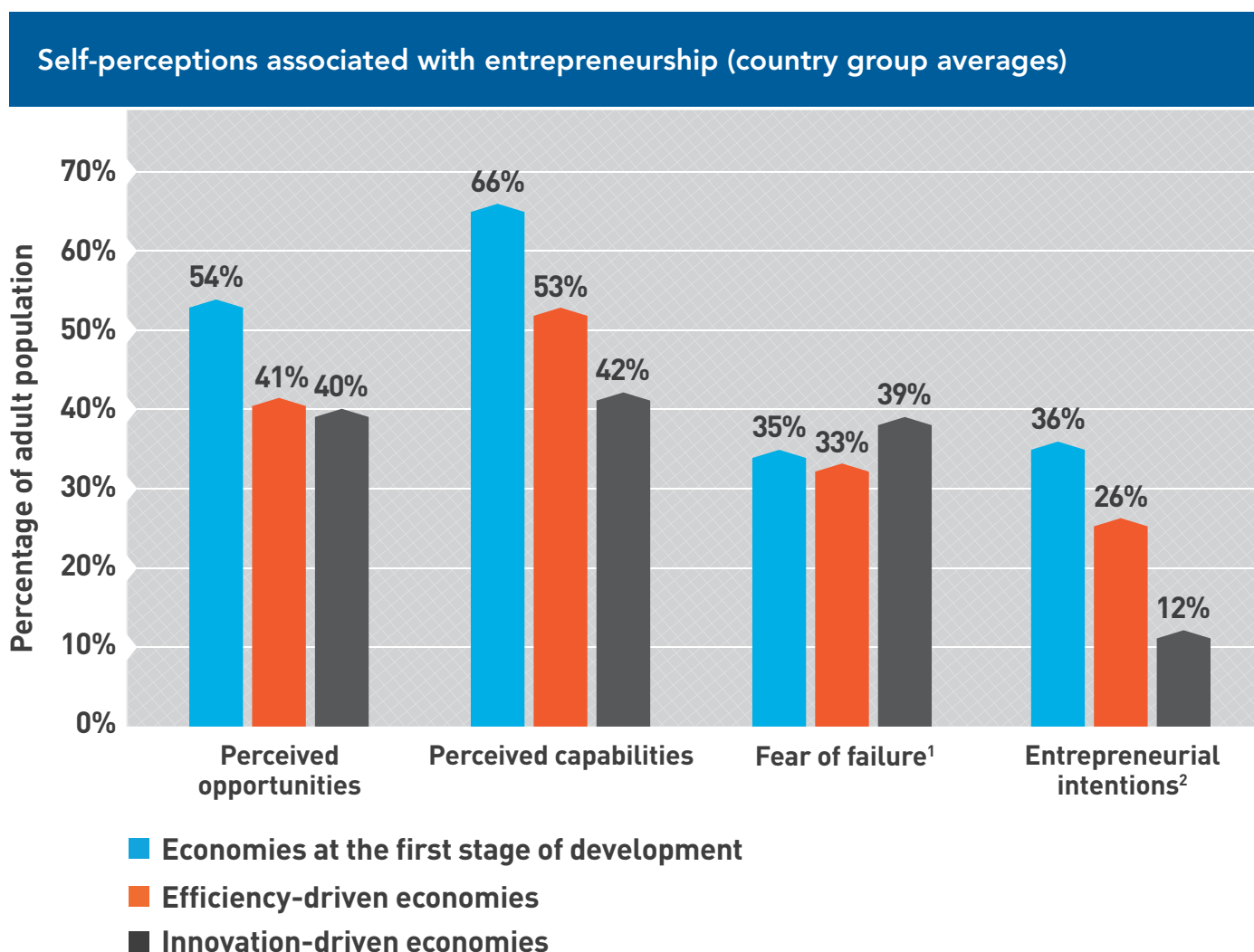
As shown in Figure 1-4, the *Doing Business* report allows for comparisons of new business density in Canada

17. Cooper H. Langford and Peter Josty, *2014 GEM Alberta Report: Driving Wealth Creation & Social Development in Alberta*, Global Entrepreneurship Research Association, 2014; Neil Wolff et al., *2014 GEM Ontario Report: Driving Wealth Creation & Social Development in Ontario*, Global Entrepreneurship Research Association, 2014; Harvey Johnstone, *2014 GEM Nova Scotia Report: Driving Wealth Creation & Social Development in Nova Scotia*, Global Entrepreneurship Research Association, 2014; Étienne St-Jean and Marc Duhamel, *Situation de l'activité entrepreneuriale québécoise*, Global Entrepreneurship Research Association, 2014.

18. Karen D. Hughes, *GEM Canada Report on Women's Entrepreneurship 2013 & 2014*, Global Entrepreneurship Research Association, 2014.

19. World Bank, *Doing Business 2016: Measuring Regulatory Quality and Efficiency*, 2016.

Figure 1-3



<sup>1</sup> : Fear of failure is measured among those seeing opportunities.

<sup>2</sup> : Entrepreneurial intentions are measured in the non-entrepreneur population.

Source: Donna Kelley, Slavica Singer, and Mike Herrington, *Global Entrepreneurship Monitor: 2015/16 Global Report*, Global Entrepreneurship Research Association, 2016, Figure 5, p. 16.

**"In a context in which entrepreneurs are guided by bad institutions, they can become agents of stagnation and economic decline instead of being agents of growth and progress."**

and in certain other OECD countries. Canada is one of the countries where the fewest businesses are created, with 1.28 new businesses created per 1,000 adults aged 18 to 64 in 2014, for a total of 30,904 new limited liability companies. This number is low compared to the United Kingdom, for example, where in 2012 there were

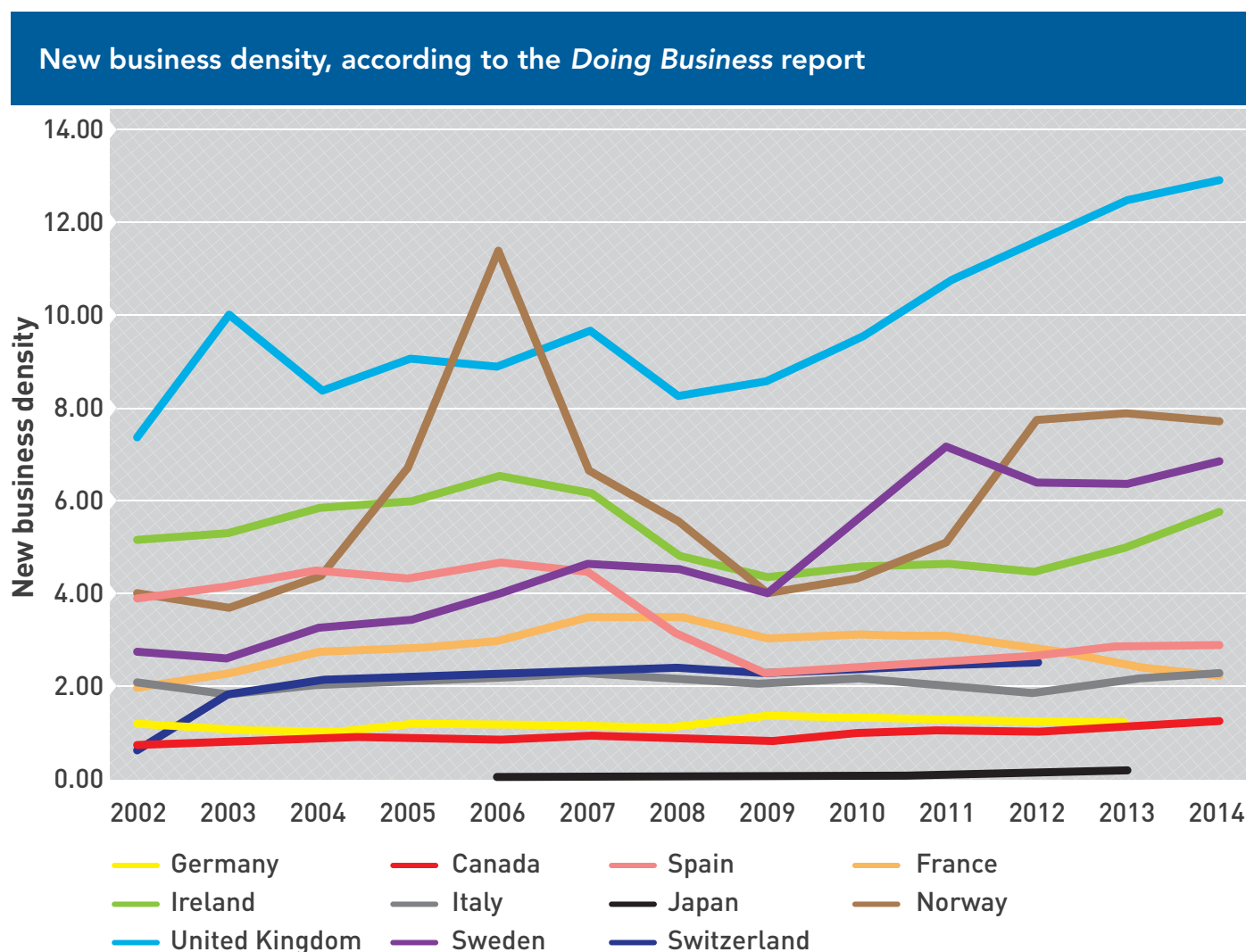
11.62 new businesses created per 1,000 working-age adults, for a total of 479,545 new companies.

## Conclusion

The concept of entrepreneurship refers to more than just the simple fact of creating a business. It also includes the propensity to innovate, to meet an unsatisfied demand, and to take risks.

The fact that entrepreneurship is a more abstract concept than the simple creation of a business does not mean that it is impossible to measure. It can, for example, be measured indirectly through the use of polls or by the number of patents registered, as long as we

Figure 1-4



**Note:** This is the number of newly registered limited liability companies per 1,000 people of working age.

**Source:** World Bank, Doing Business, Entrepreneurship.

keep in mind that these measures do not capture the phenomenon in its entirety.

**"Majorities of those polled in each of the country groups agree that entrepreneurship is a good career choice."**

Moreover, conceptualizing entrepreneurship as an activity, or even as an attitude, implies that entrepreneurship is not necessarily always constructive. Indeed, innovating, meeting a demand, and taking risks can sometimes

describe, for example, criminal activities that are destructive for society.

The next chapter will examine the determining factors that influence the kind of entrepreneurship that is found in a society—which is to say, institutions. Since institutions give rise to different kinds of profit opportunities, they indirectly influence business creation. Institutions that are more favourable to commerce and to the defence of private property, and that expose fewer decisions to political processes, lead to a larger amount of productive entrepreneurship.



## CHAPTER 2

### Defining and Measuring Economic Freedom

In order to be an entrepreneur, one must of course be free to act. Entrepreneurship and economic freedom go hand in hand.

There is a clear connection between the level of economic freedom in a country or region and its economic performance. This link passes through the entrepreneur: More economic freedom entails more entrepreneurial activity, which in turn entails more growth. In other words, more economic freedom leads to a more prosperous society precisely because it entails more entrepreneurial activity.<sup>20</sup>

This chapter examines this notion of economic freedom and the way it is measured. Economic freedom, like entrepreneurship, is a relatively abstract concept that cannot be measured directly. Instead, one must try to measure its constituent elements, namely institutions.

Figure 2-1 illustrates the place of these institutions in the economy. Without institutions to direct entrepreneurship toward market activities and make it profitable, the link between economic freedom and growth would be broken. Economic growth would be anemic.

In the first chapter, we saw that institutions refer to the different rules of the economic game, some of which are formal and some of which are informal. Nobel laureate economist Douglas North defined institutions as “both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights).”<sup>21</sup>

In this chapter, first, the concept of economic freedom will be defined. Then, different measures of economic freedom will be examined, primarily the *Economic*

*Freedom of the World* report published by the Fraser Institute.<sup>22</sup>

### The Concept of Economic Freedom

The main ingredients of economic freedom are individual choice, freedom to trade, freedom to compete, and the protection of persons and of private property. For example, the freedom to make personal choices implies that people can decide how to use their aptitudes to carry out whatever kind of work or production that they like, regardless of whom they compete with.

To be consistent with economic freedom, institutions and public policies must provide “infrastructure for voluntary exchange, and protect individuals and their property from aggressors seeking to use violence, coercion, and fraud to seize things that do not belong to them.”<sup>23</sup>

This is what prevails when legal systems protect property rights and enforce contracts. Access to a stable monetary system also contributes to economic freedom, since it facilitates trade.

**“Economic freedom, like entrepreneurship, is a relatively abstract concept that cannot be measured directly. Instead, one must try to measure its constituent elements, namely institutions.”**

Economic freedom furthermore requires that governments exercise restraint. They should neither interfere with individual choices nor restrict voluntary trade or entrepreneurial freedom. Nor should governments compete with existing businesses already providing certain goods and services. Excessive taxes are contrary to economic freedom insofar as they prevent individuals from using their assets as they see fit. The government limits individual choice when it raises taxes or imposes regulations that unduly restrict voluntary exchange.

Economic freedom, as considered here, is a concept that draws on “negative” liberty, according to the standard

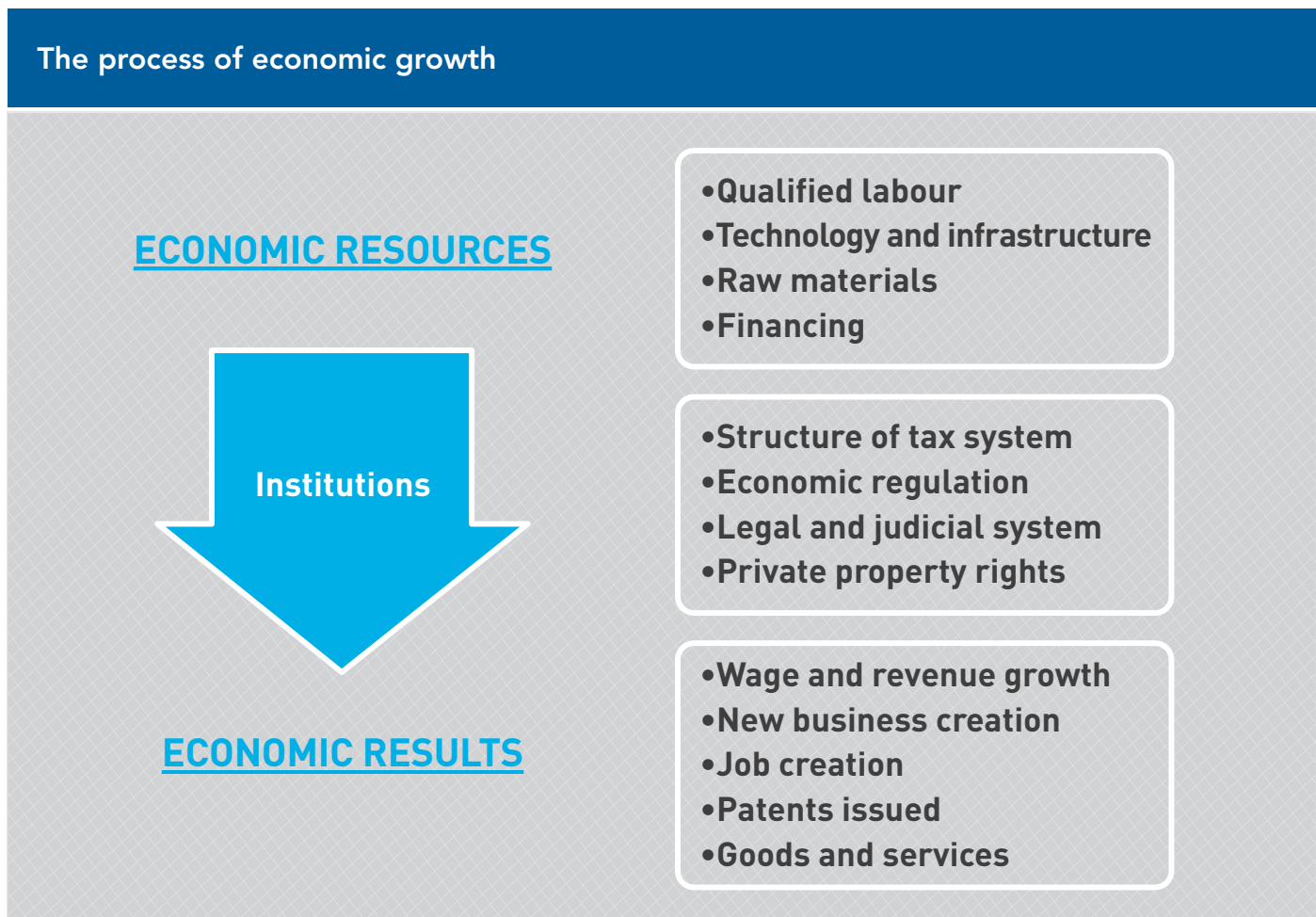
20. Joshua C. Hall and Russell S. Sobel, “Institutions, Entrepreneurship, and Regional Differences in Economic Growth,” *Southern Journal of Entrepreneurship*, Vol. 1, No. 1, March 2008, pp. 69-96; Joshua C. Hall, Russell S. Sobel, and George R. Crowley, “Institutions, Capital, and Growth,” *Southern Economic Journal*, Vol. 77, No. 2, October 2010, pp. 385-405; Steven F. Kreft and Russell S. Sobel, “Public Policy, Entrepreneurship, and Economic Freedom,” *Cato Journal*, Vol. 25, No. 3, Fall 2005, pp. 595-616; Russell S. Sobel, “Testing Baumol: Institutional Quality and the Productivity of Entrepreneurship,” *Journal of Business Venturing*, Vol. 23, No. 6, November 2008, pp. 641-655; Russell S. Sobel, J.R. Clark, and Dwight R. Lee, “Freedom, Barriers to Entry, Entrepreneurship, and Economic Progress,” *Review of Austrian Economics*, Vol. 20, No. 4, December 2007, pp. 221-236.

21. Douglas C. North, “Institutions,” *Journal of Economic Perspectives*, Vol. 5, No. 1, Winter 1991, p. 97.

22. James Gwartney, Robert Lawson, and Joshua Hall, *Economic Freedom of the World: 2015 Annual Report*, Fraser Institute, 2015.

23. James Gwartney and Robert Lawson, “The Concept and Measurement of Economic Freedom,” *European Journal of Political Economy*, Vol. 19, No. 3, 2003, p. 406.

Figure 2-1



**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.

classification system put forward by political philosopher Isaiah Berlin.<sup>24</sup> Negative liberties are those that protect individuals. They protect property rights and the right not to be harmed one way or another. They are opposed to "positive" liberty, which is a right to something that belongs to others, or which imposes a cost on others. For example, claiming a "right to housing" implies a demand that others subsidize you or provide you with housing, which reduces their economic freedom.

There is a well-known formula that takes up this same idea: "One person's freedom ends where another's begins." The same can be said with regard to economic freedom.

Economic freedom is distinct from both political freedom and civil liberties. Political freedom is generally understood to refer to the freedom to participate in an open and democratic political process. Civil liberties generally refer to freedom of expression, freedom of the press, freedom of religion, and so on. These freedoms go beyond the theme of the present *Research Paper*, but they also involve the right to make choices as well as the right to be protected from aggression. Moreover, in certain cases, economic freedom even promotes civil

**"The main ingredients of economic freedom are individual choice, freedom to trade, freedom to compete, and the protection of persons and of private property."**

24. Isaiah Berlin, "Two Concepts of Liberty," in *Four Essays on Liberty*, Oxford University Press, 1969, pp. 118-172. See also Ian Carter, "Positive and Negative Liberty," in Edward N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*, Spring 2016 edition.



and political liberty since the absence of economic freedom often makes real civil and political dissidence (as well as the exchange of ideas) impossible.<sup>25</sup>

## The Different Measures of Economic Freedom

There are several measures of economic freedom, but one of these indices that ranks countries according to their levels of economic freedom stands out from the rest: the *Economic Freedom of the World* report published by the Fraser Institute. This is the primary source that will be used in this *Research Paper*.

### • The ranking of the *Economic Freedom of the World* report

The *Economic Freedom of the World* report is an exhaustive document that divides economic freedom into five components: the size of government, the legal system and property rights, the quality of the monetary system, the freedom to trade internationally, and finally, regulation. Table 2-1 provides a detailed breakdown of these components.

The first component, the size of government, aims to evaluate the extent to which it is the political process rather than the market that determines the allocation of resources and the production of goods and services. According to the report, “When government spending increases relative to spending by individuals, households, and businesses, government decision-making is substituted for personal choice and economic freedom is reduced.”<sup>26</sup> This phenomenon is measured, on the one hand, by a comparison of public spending with a country’s total economic activity, and on the other hand, by the size of transfers and subsidies relative to GDP.

The size of government is also measured by the role of private investment and private enterprise compared to the role of public investment and Crown corporations. The authors explain that:

Governments and state-owned enterprises play by rules that are different from those to which private enterprises are subject. They are not dependent on consumers for their revenue or on investors for capital. They often operate in protected markets. Thus, economic freedom is reduced as government enterprises produce a larger share of total output.<sup>27</sup>

The size of government is also measured by marginal tax rates and the income levels at which these rates come into effect. For example, high marginal tax rates that are applied starting at a low income level signal that a country’s economy is heavily dependent on government. Such tax rates “deny individuals the fruits of their labor.”<sup>28</sup>

The second component of economic freedom studied by the *Economic Freedom of the World* report is the legal system and private property rights. “Protection of persons and their rightfully acquired property is a central element of economic freedom and a civil society.”<sup>29</sup> This component uses nine indicators drawn from the *International Country Risk Guide*, the *Global Competitiveness Report*, and the *Doing Business* report published by the World Bank.<sup>30</sup>

**“The first component, the size of government, aims to evaluate the extent to which it is the political process rather than the market that determines the allocation of resources and the production of goods and services.”**

Next, the report measures whether money and the monetary system are sound. “Money oils the wheels of exchange.”<sup>31</sup> In particular, inflation reduces economic freedom since it makes long-term economic calculation more difficult. This is all the more so when inflation is high and varies a lot. The ease of concluding contracts, which are essential to property rights, is greatly affected by such fluctuations. The freedom to access bank accounts denominated in currencies other than the official national currency is also taken into account.

Economic freedom also encompasses the freedom to trade. According to the report, “freedom of exchange across national boundaries is a key ingredient of economic freedom,”<sup>32</sup> since it is another example of individual choice. This component includes tariffs, quotas, hidden administrative restrictions, exchange rate controls, and limits to the movement of capital.

25. Milton Friedman, *Capitalism and Freedom*, University of Chicago Press, 1962.

26. James Gwartney, Robert Lawson, and Joshua Hall, *op. cit.*, footnote 22, p. 3.

27. *Ibid.*

28. *Ibid.*

29. *Ibid.*, p. 5.

30. PRS Group, *International Country Risk Guide*, several editions; Klaus Schwab, *Global Competitiveness Report*, World Economic Forum, several editions; World Bank, *Doing Business: Measuring Regulatory Quality and Efficiency*, several editions.

31. James Gwartney, Robert Lawson, and Joshua Hall, *op. cit.*, footnote 22, p. 5.

32. *Ibid.*, p. 6.

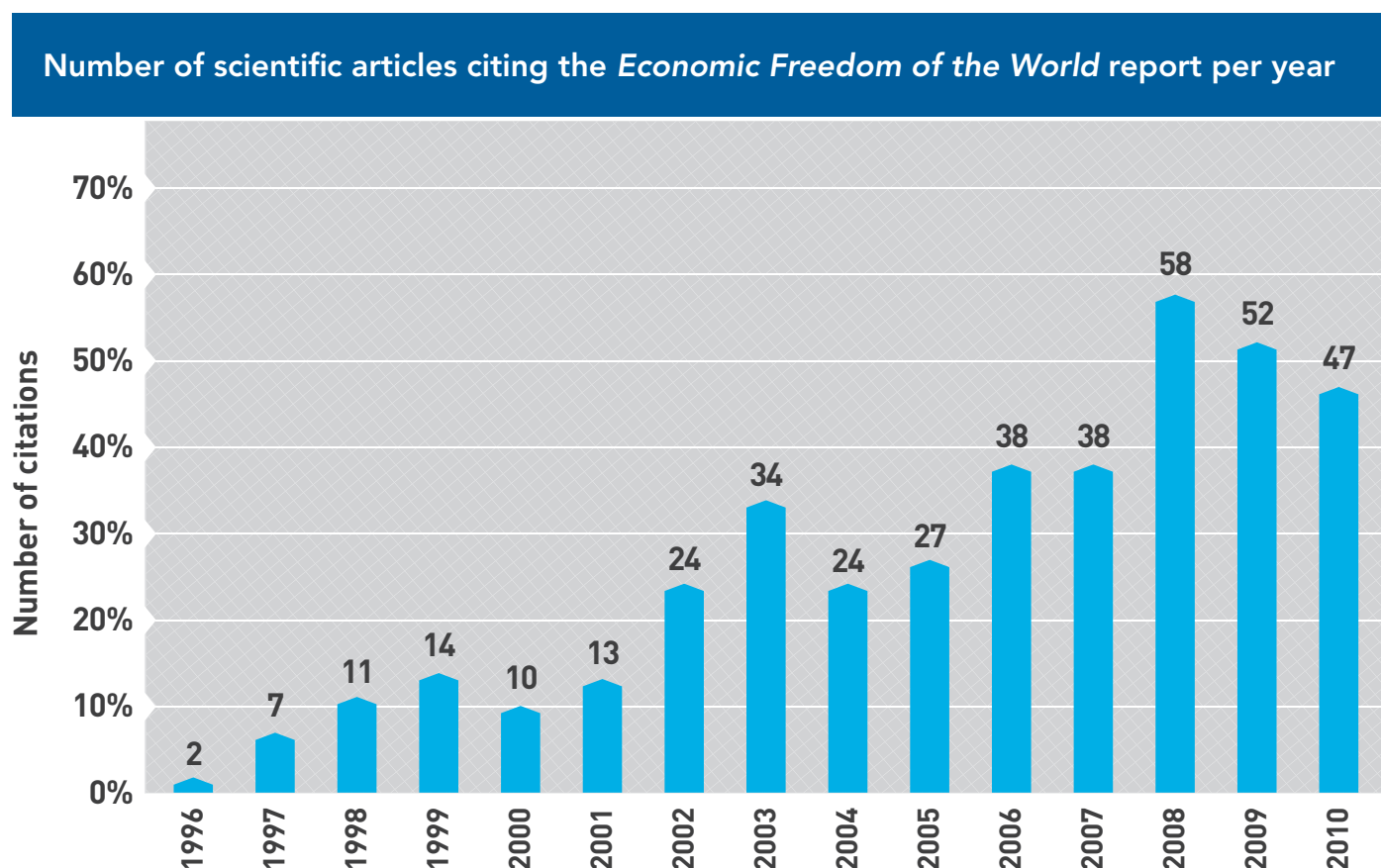
Table 2-1

<b>Components of the <i>Economic Freedom of the World</i> index</b>	
<b>1. SIZE OF GOVERNMENT</b>	
A. Government consumption B. Transfers and subsidies C. Government enterprises and investment	D. Top marginal tax rate (i) Top marginal income tax rate (ii) Top marginal income and payroll tax rate
<b>2. LEGAL SYSTEM AND PROPERTY RIGHTS</b>	
A. Judicial independence B. Impartial courts C. Protection of property rights D. Military interference in rule of law and politics E. Integrity of the legal system	F. Legal enforcement of contracts G. Regulatory costs of the sale of real property H. Reliability of police I. Business costs of crime
<b>3. SOUND MONEY</b>	
A. Money growth B. Standard deviation of inflation	C. Inflation: most recent year D. Freedom to own foreign currency bank accounts
<b>4. FREEDOM TO TRADE INTERNATIONALLY</b>	
A. Tariffs (i) Revenue from trade taxes (% of trade sector) (ii) Mean tariff rate (iii) Standard deviation of tariff rates B. Regulatory trade barriers (i) Non-tariff trade barriers (ii) Compliance costs of importing and exporting	C. Black-market exchange rates D. Controls of the movement of capital and people (i) Foreign ownership / investment restrictions (ii) Capital controls (iii) Freedom of foreigners to visit
<b>5. REGULATION</b>	
A. Credit market regulations (i) Ownership of banks (ii) Private sector credit (iii) Interest rate controls / negative real interest rates B. Labour market regulations (i) Hiring regulations and minimum wage (ii) Hiring and firing regulations (iii) Centralized collective bargaining (iv) Hours regulations (v) Mandated cost of worker dismissal (vi) Conscription	C. Business regulations (i) Administrative requirements (ii) Bureaucracy costs (iii) Starting a business (iv) Extra payments / bribes / favouritism (v) Licensing restrictions (vi) Cost of tax compliance

**Source:** James Gwartney, Robert Lawson, and Joshua Hall, *Economic Freedom of the World: 2015 Annual Report*, Fraser Institute, 2015, Exhibit 1.1, p. 4.



Figure 2-2



**Note:** The year 2011 was omitted from the Figure because of incomplete data, the survey having been conducted in the middle of that year.

**Source:** Joshua Hall and Robert A. Lawson, "Economic Freedom of the World: An Accounting of the Literature," *Contemporary Economic Policy*, Vol. 32, No. 1, January 2014, Figure 4, p. 5.

The fifth and final component of economic freedom in the world taken into account by the Fraser Institute report is regulation that limits the freedom to trade on credit markets, labour markets, and the market for goods and services. "When regulations restrict entry into markets and interfere with the freedom to engage in voluntary exchange, they reduce economic freedom."<sup>33</sup> By its very nature, regulation prevents companies and individuals from making choices they would have made in the absence of regulation.

The *Economic Freedom of the World* report is without any question the most widely-used index of economic freedom in the economics literature, thanks in part to its transparency. A review of the studies that make use of it found that from 1996 to 2011, it was cited by 402 scien-

tific articles, 198 of which used it as an independent variable.<sup>34</sup> According to this same review:

Over two-thirds of the studies [...] found economic freedom corresponding to a "good" outcome such as faster growth, better living standards, more happiness, etc. [...] less than 4% of the sample, found economic freedom to be associated with a "bad" outcome such as increased income inequality.

Figure 2-2 shows the evolution of these citations over time.

In its most recent edition, Canada was ranked ninth among 157 countries, behind Ireland and ahead of the United Kingdom (see Table 2-2). Some of the countries at the top of the ranking, like Singapore or the United Arab Emirates, are known to restrict civil liberties. This

33. *Ibid.*

34. Joshua Hall and Robert A. Lawson, "Economic Freedom of the World: An Accounting of the Literature," *Contemporary Economic Policy*, Vol. 32, No. 1, 2014, pp. 1-19.

Table 2-2

Top ten most economically free countries			
RANK	COUNTRY	RANK	COUNTRY
1	Hong Kong	6	Mauritius
2	Singapore	7	Jordan
3	New Zealand	8	Ireland
4	Switzerland	9	Canada
5	United Arab Emirates	10	United Kingdom

**Source:** James Gwartney, Robert Lawson, and Joshua Hall, *Economic Freedom of the World: 2015 Annual Report*, Fraser Institute, 2015, Exhibit 1.2a, p. 8.

illustrates the fact that this ranking looks strictly at economic freedom, and not at other kinds of freedom, which are just as important from a human point of view. It is nonetheless interesting to point out that, as mentioned previously, a very well-known thesis of Milton Friedman's maintains that economic freedom encourages the emergence of civil liberties.<sup>35</sup>

The index published in the *Economic Freedom of the World* report is a score out of 10, taking into account all of the indicators listed above. Figure 2-3 illustrates the evolution of this index since 1980, both for Canada and for the world as a whole. Its gradual growth suggests that we can be optimistic about economic freedom in the world.

#### • The *Economic Freedom of North America* report

A second ranking, very closely related to the *Economic Freedom of the World* report, is the *Economic Freedom of North America* report, which is also published annually by the Fraser Institute.<sup>36</sup> This one mostly uses the same components as the world report, but adds several indicators likely to vary between the different North American states and provinces. The taxes component, for example, also takes into account property taxes and sales taxes. The regulation component, for another,

takes into account the minimum wage and the unionization rate.

Figure 2-4 shows the ranking of the Canadian provinces as well as their scores on the *Economic Freedom of North America* index, not taking into account the federal government. Alberta stands out clearly as the province with the most economic freedom in Canada, and Quebec is at the bottom of the pack with a score that is far below all the other provinces.

**"Inflation reduces economic freedom since it makes long-term economic calculation more difficult. This is all the more so when inflation is high and varies a lot."**

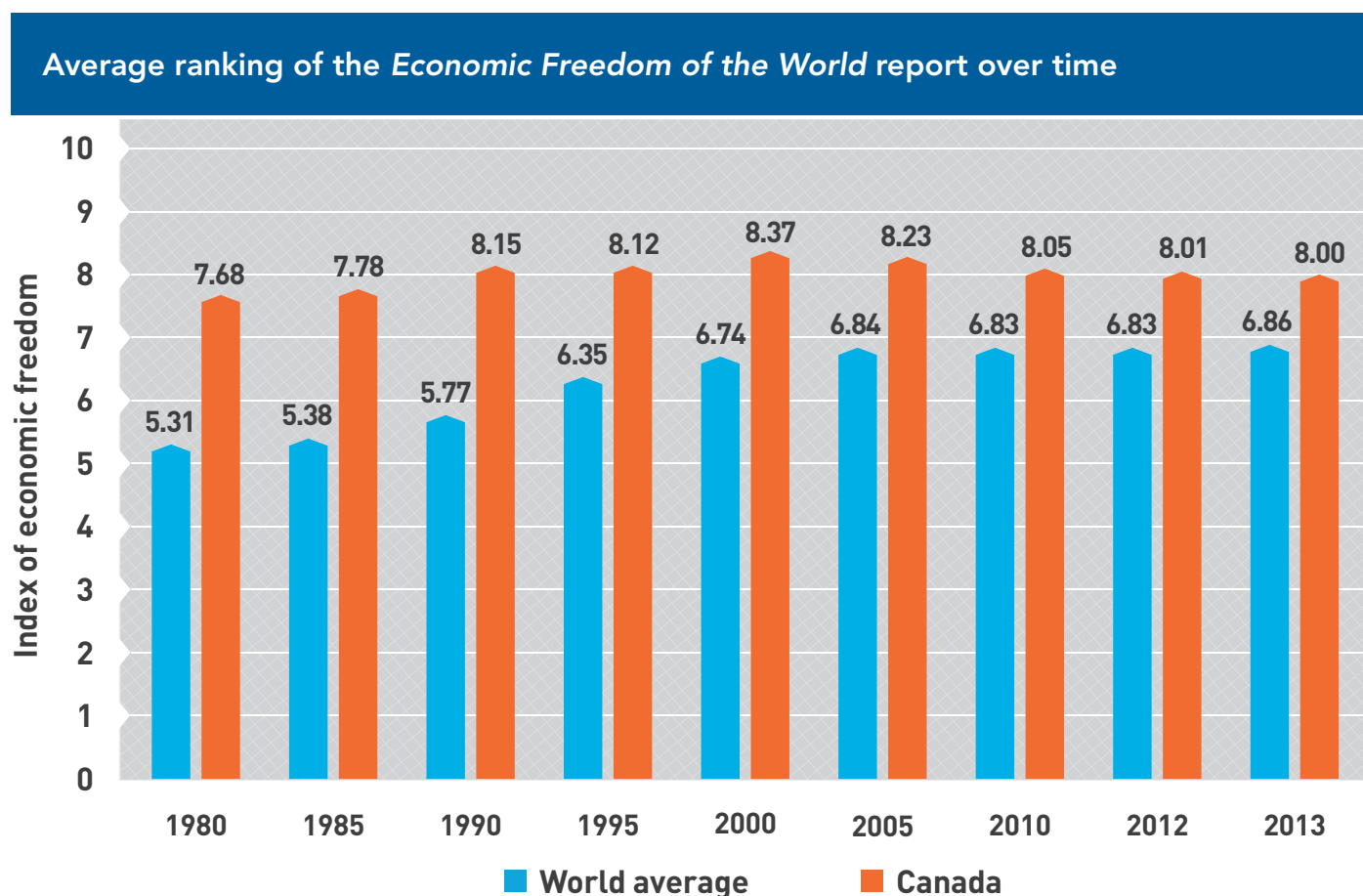
Table 2-3 shows the ranking in North America, if the federal government of each country is also taken into account. The provinces of Western Canada are very highly ranked. Alberta is the province or state with the most economic freedom in North America, while Quebec and Prince Edward Island are tied for 57<sup>th</sup> place.

It is important to note, however, the relatively small gap between Saskatchewan's score of 7.8, for example, in 3<sup>rd</sup> place, and Quebec's score of 7.4. This reflects the way in which the index that includes all levels of government

35. Milton Friedman, *op. cit.*, footnote 25.

36. Dean Stansel, José Torra, and Fred McMahon, *Economic Freedom of North America 2015*, Fraser Institute, 2015.

Figure 2-3



**Note:** This is the chain-linked index. The world average includes the 102 countries with continuous ratings since 1980.

**Source:** James Gwartney, Robert Lawson, and Joshua Hall, *Economic Freedom of the World: 2015 Annual Report*, Fraser Institute, 2015, Exhibits 1.4 and 1.5, pp. 16-17.

**“By its very nature, regulation prevents companies and individuals from making choices they would have made in the absence of regulation.”**

was constructed. It uses the data from the *Economic Freedom of the World* report on the topics of credit market regulation, business regulation, the legal system and property rights, sound money, and the freedom to trade internationally, without recognizing differences between provinces or between states. Including these variables, drawn directly from the country ranking, allows for better comparisons between Canadian provinces and American or Mexican states, at the price of less useful comparisons between the federated units.

Note also that all of the Mexican states, not represented in Table 2-3, score and rank well below all Canadian provinces and all American states.

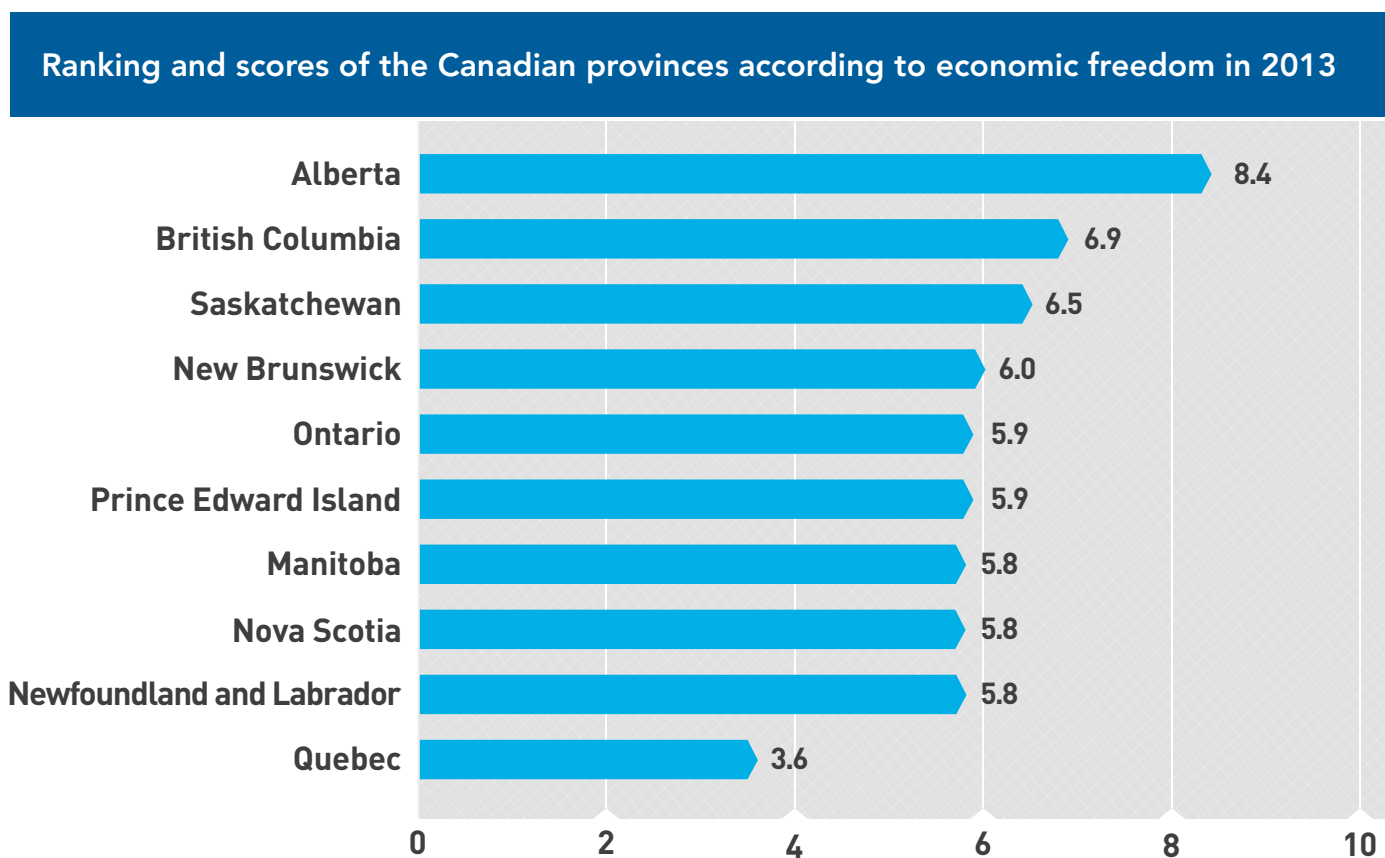
An additional level of detail is now available thanks to *An Economic Freedom Index for U.S. Metropolitan Areas*.<sup>37</sup> It uses numerous indicators, in the same vein as the *Economic Freedom of North America* ranking. Unfortunately, there is not yet an equivalent for Canadian metropolitan areas.

#### • The other indices

There are other indices that rank countries according to their levels of economic freedom. The first of these indices of economic freedom in the world was published by

37. Dean B. Stansel, “An Economic Freedom Index for U.S. Metropolitan Areas,” *The Journal of Regional Analysis & Policy*, Vol. 45, No. 1, January 2013, pp. 3-20.

Figure 2-4



Source: Dean Stansel, José Torra, and Fred McMahon, *Economic Freedom of North America 2015*, Fraser Institute, 2015, Figure 1.2a, p. 6.

economists Gerald W. Scully and Daniel J. Slottje in 1991.<sup>38</sup>

The second in terms of citations is the *Index of Economic Freedom*, published jointly by the Heritage Foundation and the *Wall Street Journal*.<sup>39</sup> It basically measures the same components as the one published by the Fraser Institute. Canada places sixth in this ranking.

Another of these indices is published by Freedom House.<sup>40</sup> Although this organization publishes an annual report on freedom in the world, and several themed reports, it has only published a report on economic freedom once, in 1996. While most of the indicators used refer to private property, this index also uses a few measures that are quite different, including some that are in contradiction with the “negative” economic free-

dom of the other indices. For example, high tax rates do not reduce the score of its “freedom to earn a living”

**“The evolution of this index since 1980 suggests that we can be optimistic about economic freedom in the world.”**

component, even though they clearly limit individual choice. Both the *Economic Freedom of the World* report and the *Index of Economic Freedom* consider that high tax rates reduce economic freedom. Despite these differences, the three indices are highly correlated.<sup>41</sup> Canada ranks as a “free” country in this index.

38. Gerald W. Scully and Daniel J. Slottje, “Ranking Economic Liberty across Countries,” *Public Choice*, Vol. 69, 1991, pp. 121-152.

39. Terry Miller and Anthony B. Kim, *2016 Index of Economic Freedom*, Heritage Foundation and *Wall Street Journal*, 2016.

40. Richard E. Messick, *World Survey of Economic Freedom 1995-1996*, Freedom House and Transaction Publishers, 1996.

41. See Hanson’s critique and Heckelman’s response on the topic of the correlation. John R. Hanson II, “Proxies in the New Political Economy: Caveat Emptor,” *Economic Inquiry*, Vol. 41, No. 4, October 2003, pp. 639-646; Jac C. Heckelman, “Proxies for Economic Freedom: A Critique of the Hanson Critique,” *Southern Economic Journal*, Vol. 72, No. 2, October 2005, pp. 492-501.

Table 2-3

Ranking of the most economically free North American provinces and states		
RANK	PROVINCE OR STATE	SCORE
1	Alberta	8.1
2	British Columbia	7.9
3	Saskatchewan	7.8
	New Hampshire	7.8
5	South Dakota	7.7
	Florida	7.7
	Nevada	7.7
	Oklahoma	7.7
	Texas	7.7
	South Carolina	7.7
	Idaho	7.7
	Kansas	7.7
	Arizona	7.7
	Alabama	7.7
	Tennessee	7.7
16	Ontario	7.6
	Manitoba	7.6
	Newfoundland and Labrador	7.6
	New Brunswick	7.6
	...	
42	Nova Scotia	7.5
	...	
57	Quebec	7.4
	Prince Edward Island	7.4
	...	

Source: Dean Stansel, José Torra, and Fred McMahon, *Economic Freedom of North America 2015*, Fraser Institute, 2015, Figure 1.1, p. 4.

Very recently, Leandro Prados-de-la-Escosura, Professor of Economic History at Charles III University of Madrid, published the *Historical Index of Economic Liberty* (HIEL),<sup>42</sup> which notes the economic freedom of OECD countries from 1850 to 2007 using a dozen indicators. This is a less precise index than the others mentioned above, since it does not take into account, for example, the size of government spending relative to the economy, but solely the size of the budget deficit.

**“Alberta stands out clearly as the province with the most economic freedom in Canada, and Quebec is at the bottom of the pack with a score that is far below all the other provinces.”**

The next chapter will look at how economic freedom stimulates and directs entrepreneurship.

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42. Espacio Investiga, HIEL – Historical Index of Economic Liberty.

## CHAPTER 3

### Does Economic Freedom Explain Variations in Levels of Entrepreneurship?

The previous chapter explained that an institutional approach is required to really understand the nature of economic freedom. Institutions that favour economic freedom allow individuals, on the one hand, to make their own decisions rather than submit those choices to the political process, and on the other hand, to protect their property.

This chapter looks at the institutional determinants of entrepreneurship, and at the effect that economic freedom has. It examines research that identifies connections between certain aspects of economic freedom and the quantity and quality of entrepreneurship that exists. It first looks at studies that use the *Economic Freedom of the World* report and make comparisons between countries, and then at those that use two supplementary indices directly inspired by this report and make comparisons between states, provinces, and metropolitan areas.

#### International Studies

As mentioned in the previous chapter, a large number of studies use the *Economic Freedom of the World* report as an independent variable. A certain number of these look at the impact of economic freedom on entrepreneurship.

The connection between economic freedom and business creation, at the international level, is quite obvious. A simple glance at the raw data confirms the close relationship that exists between these two variables (see Figure 3-1).

Three main studies look into this connection at the country level. The first looks at the connection between entrepreneurship and economic freedom in 29 countries surveyed by the 2001 *Global Entrepreneurship Monitor*.<sup>43</sup> The study demonstrates that size of government is in-

versely correlated with entrepreneurship.<sup>44</sup> This means that the less that government spends, subsidizes, and taxes, the more entrepreneurship there is. The public investment indicator, however, does not seem to have any significant effect on entrepreneurship.

Although this first component of economic freedom (as well as three of its four subcomponents) is correlated with entrepreneurship, the study finds no connection with the quality of the legal system and property rights, the freedom to trade internationally, and the extent of regulation. This could be due to the fact that there is not enough difference between the legal systems, tariffs, and regulations of the countries examined. However, the component concerned with the monetary system does have an effect on entrepreneurship, indicating that the more stable the monetary system is, the easier it is to go into business.

**"Institutions that favour economic freedom allow individuals to make their own decisions rather than submit those choices to the political process."**

A second study uses a similar methodology. It looks at 21 OECD countries surveyed in the 2002 *Global Entrepreneurship Monitor*.<sup>45</sup> Once again, the connection between economic freedom and entrepreneurship is clear.<sup>46</sup> The authors conclude: "Clearly, countries with more economic freedom have a larger amount of productive, private sector entrepreneurial activity."<sup>47</sup> In this study, entrepreneurship is correlated with the overall index of economic freedom, but also with two of its components, namely size of government and regulation.

43. This is a cross-sectional study looking at data collected for certain countries at a given point in time. Christian Bjørnskov and Nicolai J. Foss, "Economic Freedom and Entrepreneurial Activity: Some Cross-Country Evidence," *Public Choice*, Vol. 134, No. 3, March 2008, pp. 307-328. The countries included are: Argentina, Australia, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Hungary, India, Ireland, Israel, Italy, Japan, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Russia, Singapore, South Africa, South Korea, Spain, Sweden, United Kingdom, and United States.

44. This study controls for the following variables: level of development, business capitalization, rate of higher education, the rates of very small, small, and medium-sized businesses, income inequality, the cost of investment, the exchange rate, as well as the employment rate in the agricultural sector compared to manufacturing jobs.

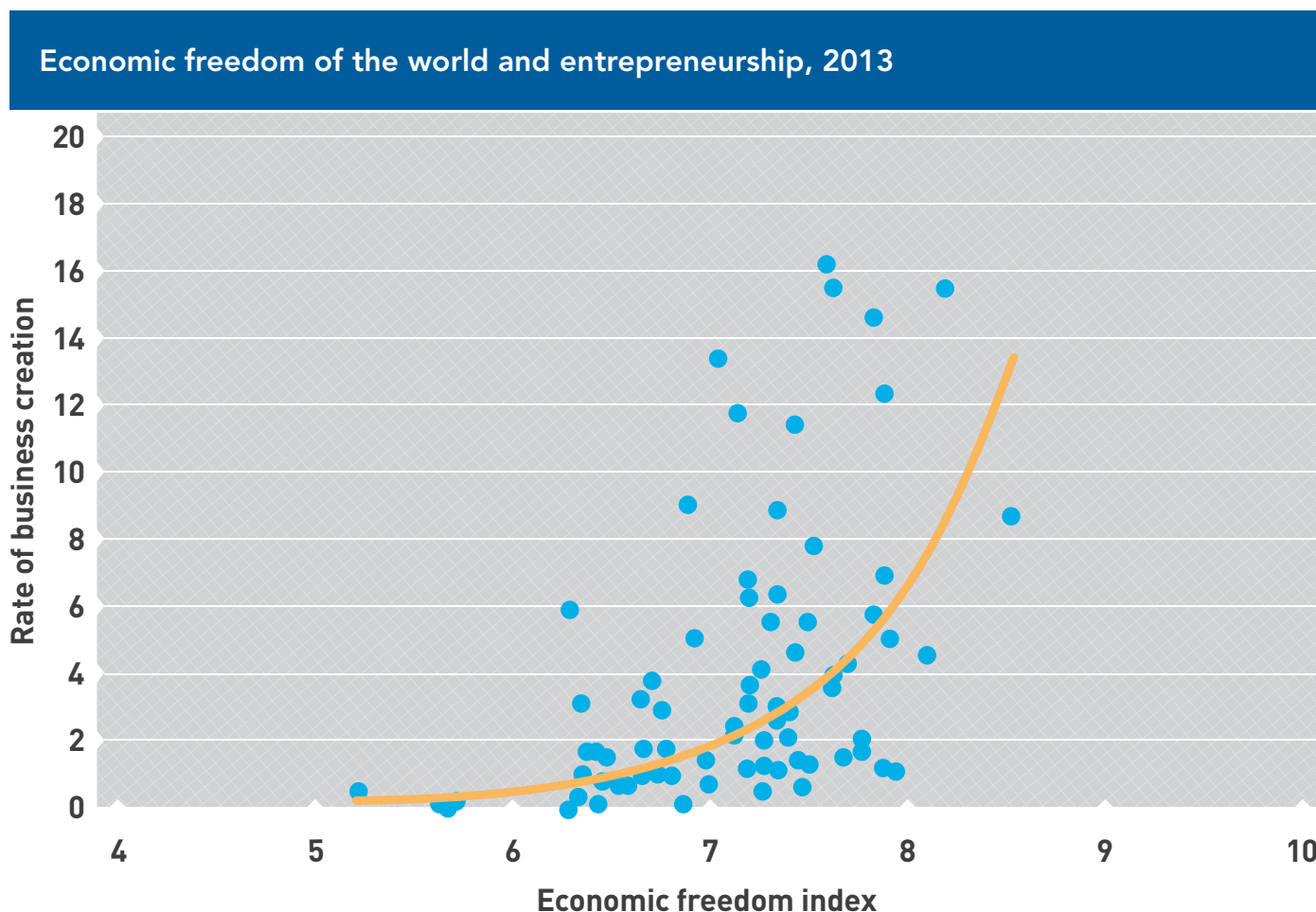
45. Russell S. Sobel, J. R. Clark, and Dwight R. Lee, "Freedom, Barriers to Entry, Entrepreneurship, and Economic Progress," *Review of Austrian Economics*, Vol. 20, No. 4, December 2007, pp. 221-236. The countries included are: Australia, Belgium, Canada, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Japan, Mexico, Netherlands, New Zealand, Norway, Poland, South Korea, Spain, Switzerland, United Kingdom, and United States.

46. This study controls for the following variables: the proportion of the population that is male, the median age of the population, GDP per capita, the unemployment rate, the availability of credit for households, net foreign investment, and an index of political stability.

47. Russell S. Sobel, J. R. Clark, and Dwight R. Lee, *op. cit.*, footnote 45, p. 227.



Figure 3-1



**Note:** The outlying data point corresponding to Hong Kong, the country with the most economic freedom and the highest rate of business creation, was removed so that it would not unduly influence the trend line. Its inclusion made the trend even more pronounced. This modification does not favour the argument defended here.  
**Sources:** James Gwartney, Robert Lawson, and Joshua Hall, *Economic Freedom of the World: 2015 Annual Report*, Fraser Institute, 2015; World Bank, *Doing Business, Data, Entrepreneurship*.

A third study on variations in the level of entrepreneurship between different countries looks at the connection between economic freedom and entrepreneurship in 23 OECD countries between 1972 and 2002, using self-employment as an indicator of entrepreneurship.<sup>48</sup> Three components of the *Economic Freedom of the World* report have a positive effect on entrepreneurship: size of government, the legal system, and regulation.<sup>49</sup>

Table 3-1 summarizes these findings. While they are not identical, this is easily explained. These three studies

**"Size of government is inversely correlated with entrepreneurship. This means that the less that government spends, subsidizes, and taxes, the more entrepreneurship there is."**

use a limited number of countries, due to the availability of data. In addition, the first two are cross-sectional studies focusing on a single year, whereas the third examines the evolution of these variables over a 30-year period.

Differences also exist when it comes to the indicators of entrepreneurship used. The first two studies use the *Global Entrepreneurship Monitor*, which does not focus

48. Kristina Nyström, "The Institutions of Economic Freedom and Entrepreneurship: Evidence from Panel Data," *Public Choice*, Vol. 136, Nos. 3-4, September 2008, pp. 269-282. The countries included are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, and United States.

49. This study controls for the following variables: GDP per capita and the exchange rate.



Table 3-1

Summary of international studies				
INDICATOR OF ENTREPRENEURSHIP	AUTHORS	COUNTRIES STUDIED	EFW REPORT COMPONENT	EFFECT ON ENTREPRENEURSHIP
<i>Global Entrepreneurship Monitor Report</i>	Bjørnskov and Foss (2008)	29 countries	Size of government	positive
			Monetary system	positive
	Sobel, Clark, and Lee (2007)	21 OECD countries	Overall index	positive
			Size of government	positive
			Regulation	positive
Rate of self-employment	Nyström (2008)	23 OECD countries	Size of government	positive
			Legal system and property rights	positive
			Regulation	positive

**Note:** The “size of government” and “regulation” components are calculated inversely, meaning that a better score indicates a smaller government and less regulation, respectively. In other words, the smaller the size of government and the less regulation, the more entrepreneurship there is.

on actual entrepreneurship, but rather on intentions to start a business, and these can end up either bearing fruit or not, while the third study uses the actual, recorded rate of self-employment.

**“The results show that the effect of economic freedom is direct, by giving rise to entrepreneurial profit opportunities that entrepreneurs just need to seize.”**

A second difference between these two indicators is that the first measures a flow whereas the second measures a stock. The stock of entrepreneurs indicates past economic conditions as much as present ones, while a flow is by definition a more dynamic measure that is more likely to be influenced by changes in economic freedom.

A third difference is that the *Global Entrepreneurship Monitor* does not differentiate between formal and informal entrepreneurship, whereas the rate of self-em-

ployment refers solely to formal entrepreneurs. This can explain why studies using the *Global Entrepreneurship Monitor* do not seem to find a correlation between entrepreneurship and the “regulation” component. As shown in the first chapter, institutions influence the decision of entrepreneurs to engage in formal or informal activities. It is therefore possible that regulation has an effect on the type of entrepreneurship that prevails, and pushes entrepreneurs toward informal activities in order to avoid it.

While these differences in the sources and methodologies used do not invalidate the findings, they can lead to certain distortions that explain why the studies do not arrive at the same conclusions.<sup>50</sup>

50. By measuring only intentions to start a business, the *Global Entrepreneurship Monitor* data can in certain cases overestimate entrepreneurial activity. On this topic, see the example of Anders N. Hoffmann, “A Rough Guide to Entrepreneurship Policy,” in David B. Audretsch, Isabel Grilo, and A. Roy Thurik (eds.), *Handbook of Research on Entrepreneurship Policy*, Edward Elgar Publishing, January 2007, p. 146. Moreover, although self-employment is recognized as a good indicator of entrepreneurship, it is not without its problems. There is a certain difference between the definitions of entrepreneurship seen in the first chapter and self-employment, which can be influenced by other institutional, historic, or structural variables related to the labour market in these countries or regions.

## Regional Studies: American States and Metropolitan Areas

Other studies look at differences in the quantity and quality of entrepreneurship between American states. Consequently, these studies do not use the *Economic Freedom of the World* report directly, but rather the regional *Economic Freedom of North America* index described in the second chapter, which is derived from it.

The first of these studies looks at ways in which entrepreneurship is stimulated and channelled by economic freedom in the American states in 2001-2002.<sup>51</sup> To measure entrepreneurship, it uses variables for the number of individual businesses, the number of patents issued, and venture capital investment.<sup>52</sup>

**"A market where few businesses disappear can be a symptom of a lack of competition and of few new entrances into the market, hence a lack of entrepreneurship."**

This study applies several econometric tests. The first ones use the *Economic Freedom of North America* index for all levels of government, which is to say federal, state, and municipal governments. They find that economic freedom is very strongly correlated with entrepreneurship, and that the most important characteristic of economic freedom is the fiscal situation, namely low taxes. If the focus is placed solely on the state and municipal levels, economic freedom is still correlated with entrepreneurship, but the most important variable becomes the flexibility of the labour market.<sup>53</sup> However, the study points out that all of the components of economic freedom interact with each other and are important for stimulating entrepreneurship.

A second study looks at the influence of economic freedom on entrepreneurship in the United States from

1990 to 2001.<sup>54</sup> It takes as an indicator of entrepreneurship the percentage of total firms that are new in each state.<sup>55</sup> Unsurprisingly, economic freedom is once again very highly correlated with entrepreneurship.

The study also looks at the question of whether economic freedom has a direct effect on entrepreneurship, or an indirect one because it increases real income. The results show that the effect of economic freedom is direct, by giving rise to entrepreneurial profit opportunities that entrepreneurs just need to seize.

A third study looks at this connection in the United States and uses the *Kauffman Index of Entrepreneurial Activity* as an indicator of entrepreneurship, examining variations in each state between 2004 and 2005.<sup>56</sup> This index uses the number of US Census respondents who were starting a business and who did not already own one.<sup>57</sup> Once again, a strong connection between economic freedom and entrepreneurship was found.

Another study looks at this connection from 1989 to 2008.<sup>58</sup> This time, the entrepreneurship variables are the rate of business creation, the number of business closures, and the net creation rate (start-ups minus closures). The closure of businesses is an interesting phenomenon which, contrary to our basic intuitions, can in certain cases be considered beneficial. Indeed, significant business renewal can be a sign that the market is healthy. One author uses the example of the restaurant industry: The number of bankruptcies is relatively high almost everywhere in the world, but each failure provides lessons to other restaurateurs who can use these to improve their food and their service.<sup>59</sup> Conversely, a market where few businesses disappear can be a symptom of a lack of competition and of few new entrances into the market, hence a lack of entrepreneurship.

54. Noel D. Campbell and Tammy M. Rogers, "Economic Freedom and Net Business Formation," *Cato Journal*, Vol. 27, No. 1, Winter 2007, pp. 23-36.

55. This study controls for the following variables: real income per capita, annual change in real income per capita, median age of the population, combined proportion of the population of each state that is black or Hispanic, volume of commercial and industrial loans, total population, and total federal tax revenue for each state as well as its annual variation.

56. Joshua C. Hall and Russell S. Sobel, "Institutions, Entrepreneurship, and Regional Differences in Economic Growth," *American Journal of Entrepreneurship*, Vol. 1, No. 1, March 2008, pp. 69-96.

57. This study controls for the following variables: percentage of residents over 25 years of age with at least a bachelor's degree, median age, percentage of the population that is Hispanic, percentage of the population that is male, the unemployment rate, GDP per capita, and population density. The study also took into account the leniency of bankruptcy laws, to see if entrepreneurs who are not worried about losing their homes in the event of failure are more likely to go into business for themselves.

58. Dmitriy Krichevskiy and Thomas Snyder, "U.S. State Government Policies and Entrepreneurship," *Journal of Entrepreneurship and Public Policy*, Vol. 4, No. 1, 2015, pp. 102-110.

59. Nassim Nicholas Taleb, *Antifragile: Things That Gain from Disorder*, Random House, 2012.

51. Steven F. Krefte and Russell S. Sobel, "Public Policy, Entrepreneurship, and Economic Freedom," *Cato Journal*, Vol. 25, No. 3, Fall 2005, pp. 595-616.  
52. This study controls for the following variables: median age, the proportion of the population that is white, the proportion of the population that is male, the proportion with a secondary education, the unemployment rate, the labour force working in the services sector, the property crime rate, and since the study also looks at the effects of inheritance taxes, it also controls for this variable.  
53. Although in recent *Economic Freedom of North America* reports, the "regulation" component for all levels of government rested on regulation of the labour market, of commercial loans, and of business, in the 2005 report used for this study, this same component rested only on regulation of the labour market. Amela Karabegovic and Fred McMahon, *Economic Freedom of North America 2005 Annual Report*, Fraser Institute and National Center for Policy Analysis, 2005.

The study uses as an independent variable the *Economic Freedom of North America* index.<sup>60</sup> The results confirm what the other studies found, with certain caveats, the first being that all of the effects identified are relatively small. Also, contrary to prior research, the overall index of economic freedom in North America is not correlated with the creation of new businesses. However, two of its three components are, when taken individually.<sup>61</sup> Specifically, the size of government and taxation have a direct influence on business creation, while labour market regulation has no effect in this study.

**“Economic freedom has a direct effect in the metropolitan area concerned, but also an indirect effect in neighbouring metropolitan areas.”**

When it comes to business closures, the overall index of economic freedom has no influence, but once again, some of its components do. A smaller government is associated with more business closures, while a more flexible labour market is associated with fewer business closures. These opposing effects probably explain the fact that the overall index has no influence.

A final regional study for the United States uses *An Economic Freedom Index for U.S. Metropolitan Areas* and looks at metropolitan areas in 2002, the only year for which this index is available.<sup>62</sup> As an indicator of entrepreneurship, it uses the variation in the number of individual businesses and in the creation of businesses.<sup>63</sup>

The findings are consistent with those of the other studies, but must be qualified. When all of the data are included, economic freedom does not seem to have a significant effect on business creation. However, according to the author of the study, this is the result of out-

lying values for business creation in certain American states. In a context like this one, again according to the author, it is justifiable to not take outliers into account. When they are ignored, economic freedom is significantly correlated and increases the number of businesses created.

Moreover, a spatial analysis reveals that economic freedom has a direct effect in the metropolitan area concerned, but also an indirect effect in neighbouring metropolitan areas. In other words, when economic freedom increases in a metropolitan area, more businesses are created there and in neighbouring areas. These effects are relatively small, however.

Table 3-2 summarizes the findings of the regional and metropolitan studies for the United States. Once again, the fact that certain studies seem to arrive at different conclusions is normal, given the variety of the different indicators of entrepreneurship used, as well as the fact that certain studies are cross-sectional analyses taking into account only a single year. Moreover, as mentioned above, the components of economic freedom interact with each other and are all important for stimulating entrepreneurship, even though empirical studies have so far had difficulty reflecting this interaction using statistical analysis.

## Regional Comparison: Canadian Provinces

No econometric studies appear to have been carried out to verify if economic freedom can explain differences in the number of businesses created in the different Canadian provinces. Although conducting such a study is beyond the scope of the present *Research Paper*, an analysis of the raw data does reveal a connection.

Figure 3-2 shows the connection between the *Economic Freedom of North America* index for the Canadian provinces and the rate of business creation.<sup>64</sup> Despite a smaller number of data points, there is a clear trend line showing that more economic freedom is associated with a higher rate of business creation.

When this exercise is repeated with the “public spending” and “taxes” components from the *Economic Freedom of North America* index, the results are similar, as can be seen in Figures 3-3 and 3-4.

60. This study controls for the following variables: the unemployment rate, population growth, GDP growth per capita, population density, median home value, and percentage of the population that is over 25 and has at least a bachelor's degree.

61. Contrary to the *Economic Freedom of the World* index, the *Economic Freedom of North America* index, in its regional version (excluding the federal government), includes just three components, namely public spending, taxes, and the regulation of the labour market. In its version including all levels of government, additional indicators are included.

62. Jamie Bologna, “A Spatial Analysis of Entrepreneurship and Institutional Quality: Evidence from U.S. Metropolitan Areas,” *Journal of Regional Analysis & Policy*, Vol. 44, No. 1, 2014, pp. 109-131.

63. This study controls for a total of 24 variables, from percentages of jobs in each industry, to educational level, to demographic variables, as well as certain indicators of criminality.

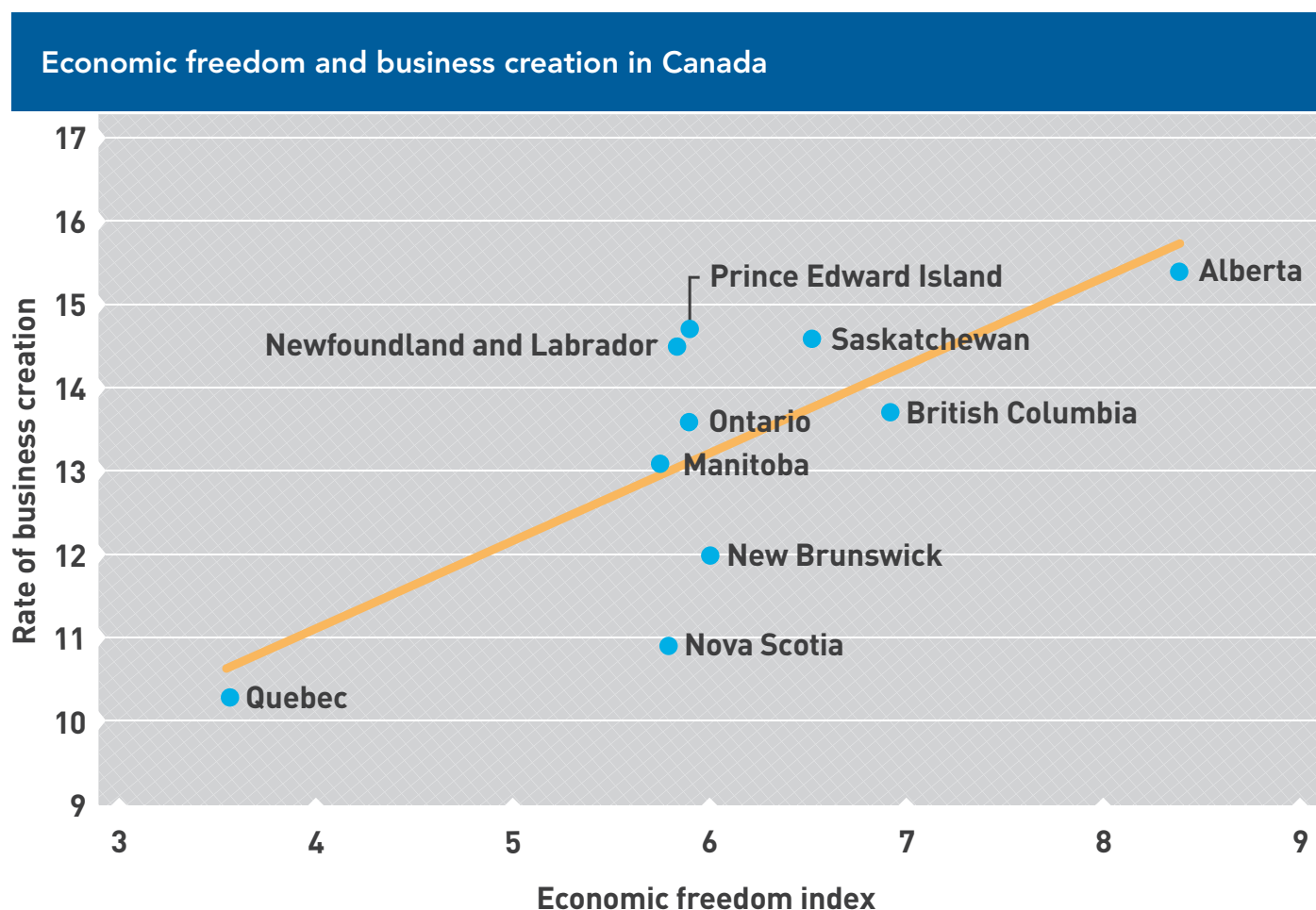
64. The rate of business creation is a measure of the businesses with employees in the current year but none in the previous year, divided by the average number of active businesses in the previous and current years. See Statistics Canada, CANSIM Table 527-0007: Business dynamics measures, note 6.

Table 3-2

Summary of regional studies for the United States			
TYPE OF DATA	AUTHORS	ECONOMIC FREEDOM VARIABLE	EFFECT ON BUSINESS CREATION
Cross-sectional analysis	Kreft and Sobel (2005)	EFNA, all levels of government, overall index	positive
		EFNA, state and municipal, overall index	positive
		EFNA, all levels of government, government spending	not significant
		EFNA, all levels of government, taxes	positive
		EFNA, all levels of government, labour market regulation	not significant
		EFNA, state and municipal, government spending	not significant
		EFNA, state and municipal, taxes	not significant
		EFNA, state and municipal, labour market regulation	positive
	Hall and Sobel (2008)	EFNA, state and municipal, overall index	positive
Longitudinal analysis	Bologna (2014)	Metropolitan index	positive (once outliers are removed)
	Campbell and Rogers (2007)	EFNA, state and municipal, overall index	positive
		EFNA, state and municipal, overall index	not significant
		EFNA, state and municipal, government spending	positive
		EFNA, state and municipal, taxes	positive
	Krichevskiy and Snyder (2015)	EFNA, state and municipal, labour market regulation	not significant

**Note:** The different components (government spending, taxes, and regulation) are calculated inversely, meaning that a better score indicates less government, less taxes, and less regulation, respectively.

Figure 3-2



**Sources:** Statistics Canada, CANSIM Table 527-0007: Business dynamics measures, 2013; Dean Stansel, José Torra, and Fred McMahon, *Economic Freedom of North America 2015*, Fraser Institute, 2015.

**“The components of economic freedom interact with each other and are all important for stimulating entrepreneurship, even though empirical studies have so far had difficulty reflecting this interaction using statistical analysis.”**

On the other hand, using the “labour market regulation” component produces a more dispersed cloud of points, which suggests that the connection may be less significant. This could be indicative of the fact that several tendencies are in opposition; even though it is easier to start a business in an environment in which labour regulation is more flexible, regulation can also often give rise to an entrepreneurship of circumvention, where

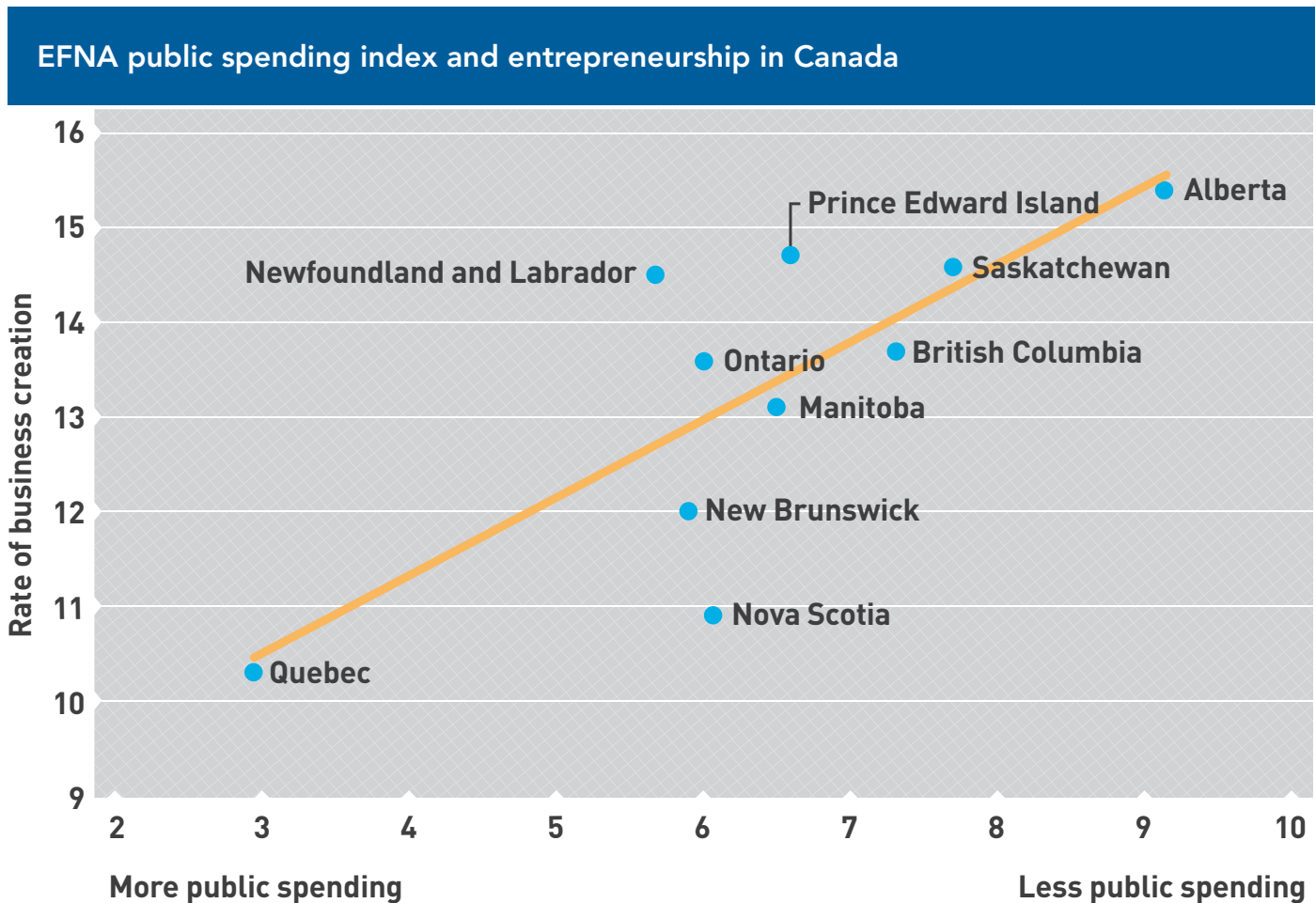
the goal is precisely to avoid certain regulations. Businesses are thus created not for economic reasons but for regulatory reasons. This still leaves open the possibility, however, that a study tracking these variables over several years could find a significant relation, positive or negative.

### Studies of the Different Types of Entrepreneurship

The studies surveyed so far in this chapter make the connection between economic freedom and the quantity of entrepreneurship in a given society or region. This is not the only effect of economic freedom on entrepreneurship. Another of its characteristics, explored in the preceding chapters, is that economic freedom influences the type of entrepreneurship toward which entrepreneurs orient themselves. And indeed, certain types of entrepreneurship are unproductive.



Figure 3-3



**Sources:** Statistics Canada, CANSIM Table 527-0007: Business dynamics measures, 2013; Dean Stansel, José Torra, and Fred McMahon, *Economic Freedom of North America 2015*, Fraser Institute, 2015.

While numerous empirical studies look at the determinants of productive and unproductive entrepreneurship, only three directly examine the connection with economic freedom.

A first study verifies if economic freedom stimulates productive entrepreneurship, but also if the productive entrepreneurship stimulated by economic freedom reduces unproductive entrepreneurship.<sup>65</sup> The data measuring unproductive entrepreneurship in this study come from a survey of the number of political organizations and lobby groups in each American state,<sup>66</sup> as well as an

index of abusive legal proceedings.<sup>67</sup> The origins of these data vary between 1995 and 2002. The index of economic freedom used is the one for 2001 in the *Economic Freedom of North America* report.<sup>68</sup> The findings validate the idea that economic freedom reorients unproductive entrepreneurship toward productive profit opportunities.

A second study uses the same measures of productive and unproductive entrepreneurship, but this time with

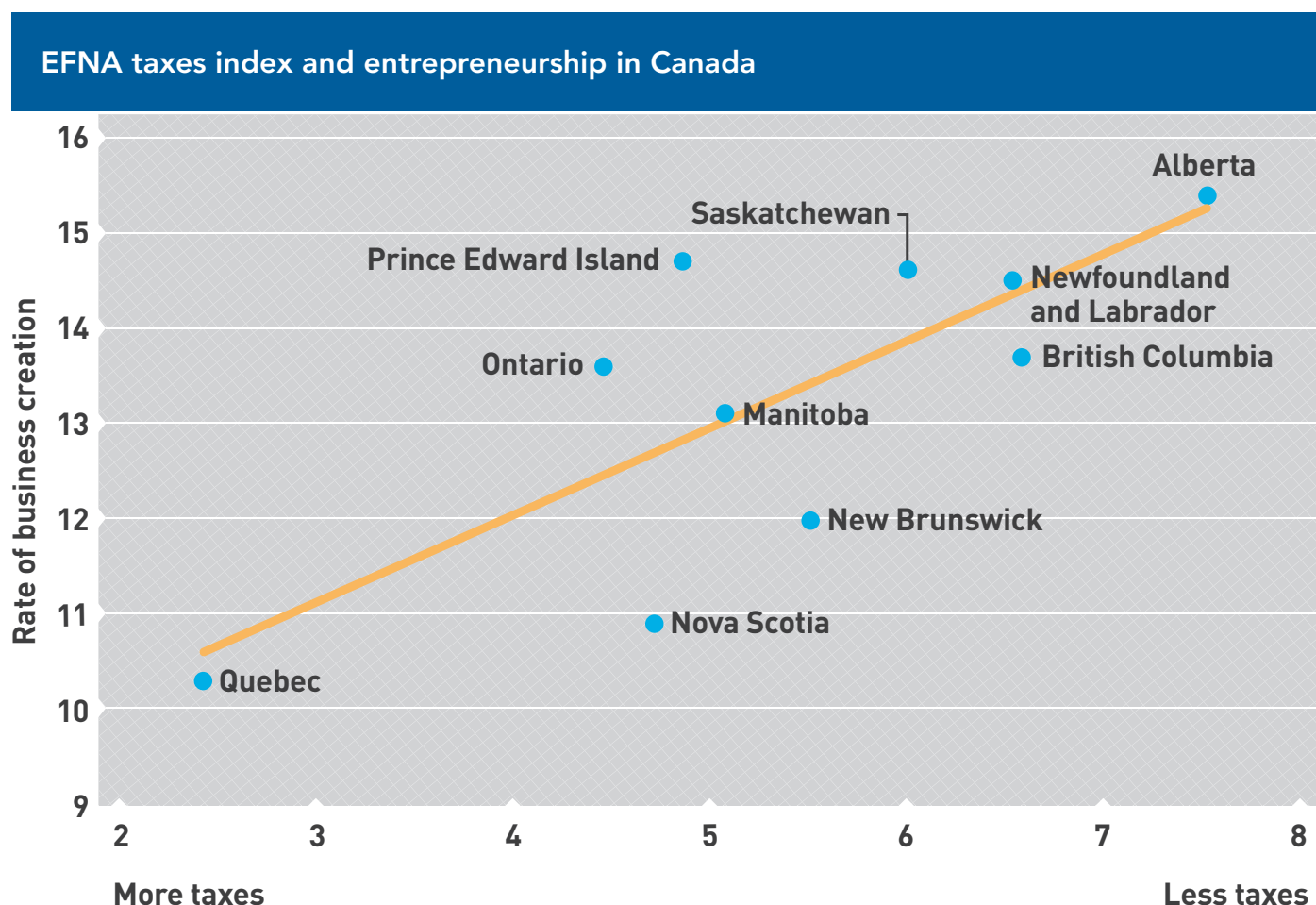
65. Russell S. Sobel, "Testing Baumol: Institutional Quality and the Productivity of Entrepreneurship," *Journal of Business Venturing*, Vol. 23, No. 6, November 2008, pp. 641-655.

66. Russell S. Sobel and Thomas A. Garrett, "On the Measurement of Rent Seeking and Its Social Opportunity Cost," *Public Choice*, Vol. 112, No. 1, July 2002, pp. 115-136.

67. This measure comes from a report published by the U.S. Chamber Institute for Legal Reform, affiliated with the U.S. Chamber of Commerce, sometimes called the *Harris Poll*. The states that score poorly are those in which abusive or unreasonable lawsuits are common, especially when it comes to class actions, medical errors, and workers compensation suits. For the most recent version, see Institute for Legal Reform, *2015 Lawsuit Ranking Survey Ranking the States: A Survey of the Fairness and Reasonableness of State Liability Systems*, U.S. Chamber of Commerce, September 2015.

68. This study controls for the following variables: median age, population density, percentage of the population with a university degree, and percentage of the population that is male.

Figure 3-4



**Sources:** Statistics Canada, CANSIM Table 527-0007: Business dynamics measures, 2013; Dean Stansel, José Torra, and Fred McMahon, *Economic Freedom of North America 2015*, Fraser Institute, 2015.

variables from 1990.<sup>69</sup> The purpose was to see if prior economic freedom explains subsequent entrepreneurship. Their results confirm those of the preceding study.

A final study looks at the connection between economic freedom and the presence of certain American industries likely to provide opportunities for more unproductive entrepreneurship, almost all found in the services sector.<sup>70</sup> The logic that underlies this study is that, for example, the demand for the services of accountants is probably greater in those American states with more

**"The findings validate the idea that economic freedom reorients unproductive entrepreneurship toward productive profit opportunities."**

complicated tax codes. The same phenomenon is potentially present when it comes to legal advice, the health care sector, social services, etc.

Once again, the *Economic Freedom of North America* index is used. The data on the number of firms and the jobs created in the different industries comes from the Office of Advocacy of the U.S. Small Business

69. Travis Wiseman and Andrew Young, "Economic Freedom, Entrepreneurship & Income Levels: Some US State-Level Empirics," *American Journal of Entrepreneurship*, Vol. 6, No. 1, 2013, pp. 100-119. The study controls for the following variables: percentage of the population with a high school diploma, percentage of the population with a bachelor's degree or better, number of federal civil servants per capita, number of local civil servants per capita, and GDP per capita.

70. Stephan F. Gohmann, Bradley K. Hobbs, and Myra McCrickard, "Economic Freedom and Service Industry Growth in the United States," *Entrepreneurship Theory and Practice*, Vol. 32, No. 5, 2008, pp. 855-874.

Administration, from 1991 to 1998.<sup>71</sup> The study finds that employment in certain service industries does indeed grow with the size of government. It shows that economic freedom has an effect on the kind of entrepreneurship that exists.

## Conclusion

The connection between economic freedom on the one hand, and the quantity and quality of entrepreneurship on the other, has been amply verified empirically.

When it comes to the quantity of entrepreneurship, numerous international studies, using the *Economic Freedom of the World* report, confirm this connection. At the regional level, several studies confirm this connection in the United States by using the *Economic Freedom of North America* report and *An Economic Freedom Index for U.S. Metropolitan Areas*. Simple regressions, without control variables, suggest that the same connection exists in Canada between the different provinces.

**"When there is more economic freedom, entrepreneurs start more companies in the business and trade sectors, and fewer in sectors directly related to the search for political privileges."**

As for the quality of entrepreneurship, three studies confirm that economic liberty can reorient entrepreneurship from unproductive activities toward productive ones. When there is more economic freedom, entrepreneurs start more companies in the business and trade sectors, and fewer in sectors directly related to the search for political privileges.

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71. This study controls for the following variables: percentage of the population with a bachelor's degree, number of patents per capita, and a ratio of the distance covered by roads to the land area of the state (as a measure of market access).



## CONCLUSION

Entrepreneurship is influenced by economic freedom, as shown by the numerous studies cited in this *Research Paper*. All of them observe a positive connection between economic freedom and the level of entrepreneurship in a given society, even if certain aspects of the different indices of economic freedom, when taken individually, have no effect. No study finds a negative relationship between economic freedom, or one of its components, and entrepreneurship. The more the institutions of a country, of a province or state, or of a metropolitan area leave economic choices in the hands of individuals rather than submit them to the political process, the more entrepreneurs there are and the more their businesses are devoted to productive projects.

The situation in Canada, in particular, provides a good illustration of the effect of economic freedom on entrepreneurship. At one extreme, Alberta is characterized both by a very high economic freedom score and by a high rate of business creation; at the other extreme, Quebec has little business creation and the worst economic freedom score in the country.

If the studies are so conclusive, why is economic freedom not universally adopted in order to increase entrepreneurship?

In fact, the governments of many countries and regions that want to stimulate entrepreneurship follow the opposite course. The practical applications of economic freedom can be less appealing than other solutions from a political standpoint. While conceptually, economic freedom is easy to understand, the effects of its practical applications are often less so.

For example, governments wanting to promote small businesses can be tempted by the adoption of tax credits that favour certain businesses at the expense of others, by support programs, by subsidies, and by the setting up of structures to help businesses get off the ground. These are solutions whose effects are easy to predict: Individuals will make use of these direct and indirect subsidies to create businesses. These public policies can produce the appearance of leading to business creation, since they are highly visible.

It is more difficult to understand the logical sequence of steps through which these subsidies will eventually have to be financed with taxes, and consequently that the creation of certain businesses was accomplished at the expense of other businesses. The harmful long-term effects of government interventions are always more diffi-

cult to recognize than their immediate visible effects. It is even possible that the net business creation due to entrepreneurship support programs is negative in some cases.

Instead of resorting to more government intervention, which reduces economic freedom, the attitude that should be adopted to increase the quantity and the quality of entrepreneurship is to reduce government intervention. Specifically, this consists of measures as varied as reducing government spending, reducing public investment, reducing internal and external trade barriers, facilitating foreign investment, liberalizing the small business credit market, reducing labour market regulation and the administrative formalities required to create a business, etc. These are public policies that facilitate the creation of any kind of business.

**"Instead of resorting to more government intervention, which reduces economic freedom, the attitude that should be adopted to increase the quantity and the quality of entrepreneurship is to reduce government intervention."**

This does not mean that all government interventions are bad for entrepreneurship. However, instead of wanting to actively come to the aid of entrepreneurs, political debate should be guided by the principle, "First, do no harm." Before calling for a policy whose aim is to promote entrepreneurship, the following basic question should be posed: Does this measure place more responsibility on individuals or on the political process?

Entrepreneurship is about individuals. Letting them make their own choices can only be good for entrepreneurship.



## ABOUT THE AUTHOR



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ISBN 978-2-922687-68-2