# How Income and Wealth are "Earned" Matters in Understanding Inequality

Jason Clemens, Taylor Jackson, and Megan O'Neill

FRASER INSTITUTE

July 2016

# Contents

# Executive Summary

This essay examines a key missing piece of the inequality debate: differences in how income is earned and wealth accumulated that ultimately result in inequality. Put simply, how income is earned or wealth amassed matters with respect to the degree to which citizens should be concerned about inequality.

Individuals can earn income and accumulate wealth in a number of different ways. The first is by serving other people through the creation and provision of demanded goods or services at prices consumers are willing to pay. Individuals, entrepreneurs, and businesses that earn income and accumulate wealth by innovating and providing such goods and services benefit not only themselves and their businesses but also society more generally.

This paper explores several real-world examples that highlight the benefits of such activities. One example is Chip Wilson, founder of Lululemon, who has an estimated net worth of $2.2 billion. As an entrepreneur, Wilson took enormous risks to innovate and develop a line of products that consumers wanted and were willing to pay for. In doing so, he benefitted millions of customers by providing them with something they valued that didn't exist before. He built a company from nothing to one that, in 2015, employed over 8,500 people with sales of roughly $1.8 billion.

There are, however, other methods by which to "earn" income and accumulate wealth that do not provide such social benefits. Individuals can earn great amounts of income and amass wealth by securing special privileges and protection from governments. Such activities are referred to as "cronyism" in this paper; while generally legal, they almost always impose large costs on society for the benefit of a small group of individuals.

For example, Mexico's Carlos Slim used special privileges granted by governments to reduce competition and thereby provide their businesses with monopoly powers. Specifically, the Mexican government placed barriers to competition in the telecommunications market, allowing Slim's companies to charge consumers higher prices than would otherwise have been the case in a competitive market. It is these protections, rather than competitive success, that explain the extraordinary wealth of Carlos Slim.

Another way to "earn" income and amass wealth is through corruption. Unlike cronyism, corruption is generally regarded as an illegal activity. Like cronyism, it imposes enormous costs on the majority of citizens for the benefit of a few. In many cases, corruption involves outright theft from the population. An example discussed in the essay is Indonesia's Suharto family, which reigned for decades, embezzling between US$15 billion and $35 billion in a relatively poor country.

The implications of how income is earned and wealth accumulated can be aggregated up to the country level to better help understand why the "how" is so important in debates regarding inequality. Hong Kong and Haiti have similar levels of inequality. The economic systems in the two countries are quite different though. Hong Kong generally has open, competitive markets with a high level of economic freedom and low levels of corruption. Haiti, on the other hand, has a low level of economic freedom and high levels of corruption. The similar levels of inequality observed in the two countries result from very different types of economic activity. Hong Kong is predominantly characterized by the type of economic activity that benefits society broadly (think Chip Wilson), while Haiti is characterized by cronyism and corruption, which benefit a very few at the expense of the majority.

Understanding the source of income and wealth is a critical yet too often ignored component of the inequality debate. Similar levels of observed inequality can have markedly different sources and thus effects on society.

# Introduction

This essay examines a missing piece of the inequality debate: the material differences in how income is earned and wealth accumulated that ultimately result in inequality. The essay addresses a fundamental conceptual issue related to concerns about inequality that is almost always ignored, namely how the underlying income was earned or the wealth amassed. It is the contention of the essay that the manner in which income is earned or assets are accumulated matters with respect to the degree to which citizens should be concerned about inequality.

The essay is organized as follows. The first section provides some basic background from which the following sections flow. The second section explores the general differences in how income and wealth are earned within the context of inequality and highlights these differences using specific case examples. The third section examines these concepts at the country level to further highlight why differences in how income is earned and wealth amassed matter when discussing inequality.

# Background and Conceptual Issues

It is first worthwhile to consider the meaning of inequality. It is generally used to refer to differences or gaps between the living standards of particular groups, most normally the affluent versus low-income groups. While the principle interest in inequality debates is in differences in the standard of living, the most common measures of inequality pertain to differences in measured income or wealth.[1]

The core issue at the heart of this essay is that how one earns income and accumulates wealth matters in the debate regarding inequality.[2] Put simply, we can observe a variety of jurisdictions with comparable levels of inequality, but it would be a mistake to treat the observed inequality equally across the jurisdictions without understanding how the income was earned and/or the wealth amassed.[3]

More specifically, individuals and families can earn income, and more particularly earn great amounts of income and amass large-scale wealth, by providing citizens with goods or services they demand at a price they're willing to pay. Alternatively, individuals and families can also earn great sums of income and amass wealth by securing special privileges and protections from the government. In addition, there are cases where individuals and families have amassed incredible wealth by effectively stealing from their populations. This latter phenomenon is most often observed in the case of dictators.

All three scenarios reflect situations in which individuals and their families have earned large amounts of income and accumulated great wealth, which influences the level of inequality, but the manner by which these ends were achieved differs significantly. For instance, inequality that results from access to the public treasury for the family and friends of a dictator in a poor country is vastly different from inequality arising from individuals and firms that successfully innovate to provide citizens with new or improved products at prices consumers are willing to pay.[4]

1. For a thorough discussion of the measurement and conceptual issues concerning inequality, see Sarlo, Clemens, and Emes (2015).

2. It is important to understand the basic difference between income and assets. Income is earned through labour efforts, the sale of assets, and/or investing in productive assets. The flow of income earned is received by individuals and firms on a regular basis, whether daily, weekly, or monthly, etc. Wealth, on the other hand, is the accumulation of savings over time in the form of assets. For most people, the single largest source of wealth (i.e., an asset) is their home.

3. Interestingly, a recent paper published by the National Bureau of Economic Research (Gimpelson and Treisman, 2015) concluded that ordinary people across a wide spectrum of countries lacked basic understanding and knowledge about inequality.

4. In many ways, this conceptual approach to inequality mirrors the work of economists Daron Acemoglu and James A. Robinson on frameworks for understanding economic growth. Acemoglu and Robinson argue that inclusive political and economic institutions result in robust economic growth over time, while exclusive political and/or economic institutions result in poorer economic performance. For more information, see Acemoglu and Robinson (2006, 2012, 2015) and Acemoglu, Gallego, and Robinson (2014).

For the sake of readability, this essay will differentiate between *merit-based inequality* and *crony* or *corruption-based inequality*. However, it is critically important to recognize conceptually that the resulting levels of inequality could be the same, irrespective of how the inequality arose.

"Merit" inequality refers to situations where individuals, entrepreneurs, and businesses have provided citizens with a demanded good or service at a competitive price in a competitive market over time. Note the caveats provided to this definition of "merit" inequality. One, the market for the good or service is open to competition and not protected by government intervention such as monopoly charters. Two, the successful firms are providing a good or service that is voluntarily purchased by citizens because they demand it. And three, the success of the firm is judged over time.

Alternatively, "crony/corruption" inequality entails situations whereby individuals and groups gain favours and special treatment from government that benefit them at the expense of the population at large. There are essentially two groups within this broad category. The first pertains to legal acts whereby individuals and firms gain special privileges from government, such as monopoly protection. Such privileges are not illegal, though the costs imposed on society for the benefit of a small group are large. We refer to this phenomenon as "crony capitalism."

There are also, however, illegal acts such as theft whereby individuals, normally dictators, effectively steal income and wealth from their citizens for their own benefit. This is referred to as "corruption." The next section of the essay provides a more detailed analysis including case studies of these conceptual issues.

# How People Earn Income and Amass Wealth Matters for Inequality Concerns

## 1) Merit-based Inequality

In contrast to inequality that results largely from crony capitalism and/or corruption, inequality can also result from other factors, ones which many people might think wholly legitimate sources of inequality, such as differences in hours worked, differences in productivity, differing education attainment, and entrepreneurial risk-taking.

### Inequality that results from investment in human capital

Compensation is ultimately driven by productivity, that is, the ability of individuals and firms to transform inputs into useable outputs (Feldstein, 2008). Differences in productivity lead to differences in compensation, which are ultimately related to inequality. One aspect of merit-based inequality that is often either ignored or misunderstood is the level of inequality linked with differences in educational achievement. As Nobel laureate economist Gary Becker (1962) and many others since recognized, spending on education is an investment in one's future, since it increases skills, knowledge, and expertise, all of which increase one's productivity and thus compensation.

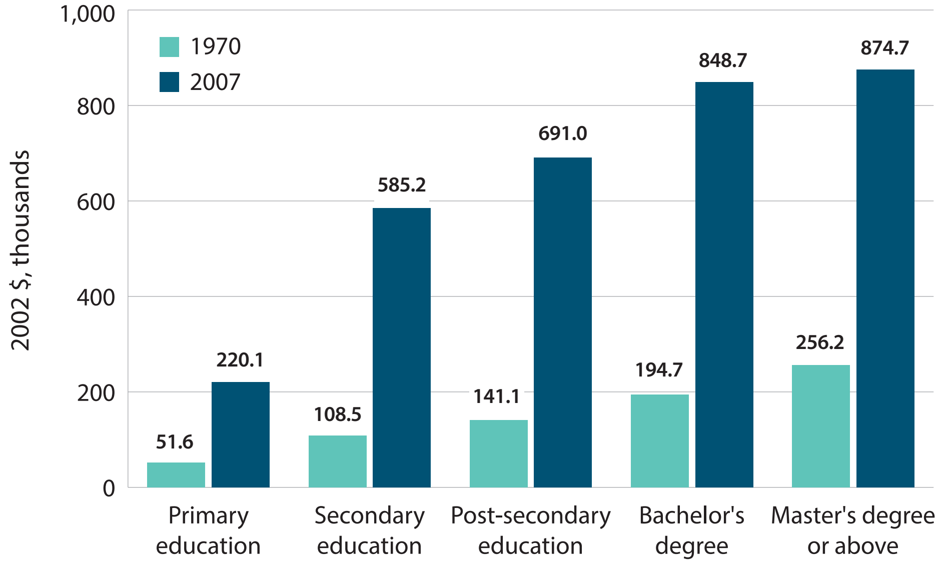
Consider, for example, the lifetime labour (pre-tax) income per person in Canada (**figure 1**).[5] Someone who only completes elementary school would have lifetime labour earnings (in 2002 dollars), on average, of $220,100. Contrast this with the lifetime (average) earnings of someone who completes high school: $585,200, or more than two-and-a-half times higher than the person who did not complete high school.

This pattern of higher average lifetime earnings is consistent, as individuals complete more education. Someone with some post-secondary education will earn $691,000, on average; those with a bachelor's degree will accrue $848,700 worth of income; someone with a Master's degree or above will have total lifetime labour income of $874,700.

The point here is that the investment in education, which improves one's human capital and thus productivity, results in different levels of earnings over time and thus different levels of wealth accumulation. This type of differential earnings and ultimately wealth is categorized as one type of merit-based inequality because it is rooted in differing levels of productivity.

5. We use lifetime labour income per person as it illustrates how the combination of higher education plus employment opportunities and subsequent earnings allow for total lifetime earnings to diverge.

**Figure 1: Average Lifetime Labour Income Per Person By Education Level, 1970 and 2007**




Source: Gu and Wong, 2010.

## Inequality that results from entrepreneurship and business innovation

Beyond the general illustration of how investment in education can lead to inequality, examples abound of inequality that results from business acumen and entrepreneurial risk-taking. Two Canadian case studies demonstrate this conceptual argument.

### *Lululemon Athletica Inc.*

The first Canadian example is that of Lululemon, founded in Vancouver by entrepreneur Chip Wilson. As the founder of snowboard company Westbeach, Wilson had experience in starting a retail company. Wilson recognized an emerging skateboarding and snowboarding market in the early 1980s and built a brand around a particular lifestyle. The company's success resulted in part from its significant investment in research and development and designing the best quality apparel using technical fabrics (Lululemon Athletica, 2014).

Wilson carried with him these strategies and lessons when he started Lululemon in 1998, focusing on a Vancouver market steeped in a culture of health and wellness. Lululemon delivered an innovative line of clothing products that were reinforced by a strong company culture and image. After the first store opened in the Kitsilano area of Vancouver in 2000, the company continued to grow and add new stores based on the strength of their customers' demand for their products.

As of 2006, Lululemon had 27 stores across Canada plus another nine abroad. While still a privately held company, its revenues doubled almost every year since the company's inception, reaching an estimated $120 million in 2006 (Bogomolny, 2006). At that juncture in the company's history, Wilson sold a minority stake (48 percent) of the company to private equity firms Advent International and Highland Capital Partners in order to continue to finance the rapid growth of the company.

Wilson had found a unique way to make yoga-inspired clothing and a targeted brand accessible to the masses. By expanding Lululemon's apparel to include street wear and menswear, the brand's status continued to increase and garner more recognition. Lululemon went public in 2007 through an initial public offering.

Early growth of the share price was mired by Wilson's brief departure from the company; however, upon his return, the share's price once again rose, reaching its to-date peak of US$81.43 in June of 2013 (Lululemon, various years).[6] The share price fluctuation, in part, reflects Wilson's value to the company and how his innovations and creative vision were drivers of Lululemon's achievements. In mid-2013, the company's employee count numbered over 7,600 worldwide, in 254 stores, with revenues of over $1.5 billion. As of 2015 filings, the company owned 302 stores and employed 8,628 people, with revenues of $1.8 billion (Lululemon, various years). The numbers tell the story of a growing company, yet Lululemon was so much more during those formative years. They maintained a strong Vancouver and Canadian identity, while allowing themselves to seek customers in other markets, delivering a product that people sought all over the world.

After years of building Lululemon from the ground up, Chip Wilson sold a major stake in his company to existing partner Advent International for US$845 million, contributing to his current estimated net worth of approximately $2.2 billion (Forbes, 2015). What Wilson's high net worth reflects is the value that Lululemon's customers place on his products. Lululemon pioneered an industry of technical fabric and athletic-styled street wear which people demanded and ultimately consumed, resulting in high returns for Wilson and Lululemon's shareholders. The important takeaway from the example of Wilson's far-from-equal wealth is that he was only able to attain this by offering a product in a competitive market that people chose to purchase.

6. Financial information and annual reports are available from 2007 onward and help illustrate the growth of the company (Lululemon Athletica Inc.)

### *Research in Motion and Blackberry*

A second Canadian example is that of Research in Motion (RIM). RIM was founded in 1984 by Mike Lazaridis and Douglas Fregin of Waterloo, Ontario. Now known primarily for their BlackBerry Wireless Handheld product line, RIM had humble beginnings as a technology developer (RIM, undated). The company's focus on research and development and designing devices for business professionals helped them to attract fellow Canadian Jim Balsillie to the team in 1992 to be a co-CEO and the face of the company (CBC, 2014).

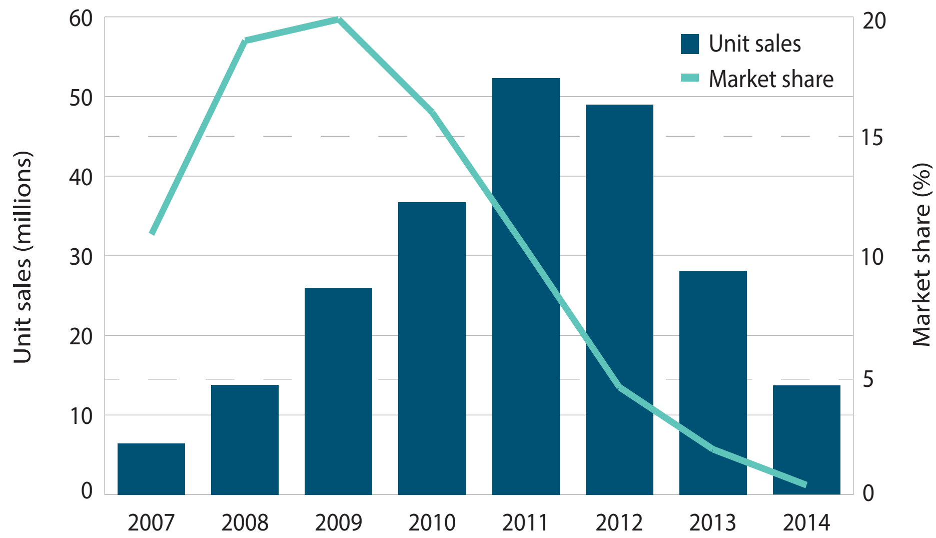
Balsillie's business acumen helped take the company public in 1997, in the wake of a successful year, gaining fame for their innovations. RIM continued to pave the way for mobile technologies and changed the way that people could conduct business, both in Canada and around the world. Countless product announcements throughout the early 2000's reflected the ongoing commitment to creating devices that enabled people to open a full web browser on a smartphone, and type emails and memos using a full keyboard, all backed by RIM's S/MIME Secure Network for government and corporate customers (RIM, undated).

RIM gained success and grew because they delivered a product demanded by consumers at a price they were willing to pay. By 2007, when RIM's share price reached its peak, BlackBerry achieved a market share of 10.9 percent in the telecommunications space (**figure 2**). By 2009, that figure had jumped to 19.9 percent and BlackBerry dominated the ever-expanding market base for wireless devices (IDC, 2015). Even as strong competitors such as Apple, Nokia, and Samsung flooded the marketplace with new devices, no one at the time could deliver what the business clientele wanted as well as Balsillie did with the BlackBerry.[7]

In order to reach this level of success, RIM had to hire new staff, invest heavily in research and development, and, critically, listen and pay attention to consumer demands and trends. Despite revenues of $19.9 billion peaking in 2011, capital markets started signaling concerns about RIM in the form of a significantly lower share price. As BlackBerry's market share declined to 8.1 percent in 2011, products such as Apple's iPhone and Samsung's Galaxy were growing significantly faster than RIM. These companies built on earlier innovations, some of which originated with RIM, to create better, more user-friendly products. While RIM's sales were still growing over this period, they were doing so at a much slower pace than the rest of the market because of the incredible demand for these newer products (IDC, 2015).

7. RIM was penalized for stock option backdating in 2007, resulting in Jim Balsillie stepping down as Chairman. While acknowledging this serious event, the fact remains that RIM achieved a level of success (wealth inequality) due to their merit and innovations during their formative years.

**Figure 2: BlackBerry Unit Sales vs. Market Share, 2007–2014**




Source: Research in Motion Annual Reports, 1998–2014; International Data Corporation, 2015.

The case studies of Lululemon and RIM demonstrate that entrepreneurs who invent and innovate successfully based on consumer demands and preferences can earn incredible sums of income and accumulate wealth. However, the key principle of this illustration is that they only succeeded and amassed wealth by satisfying millions of customers with products and services they demanded at a price they were willing to pay. In other words, these entrepreneurs succeeded by making people better off.

## 2) Cronyism-Corruption Inequality

In contrast to the income earned and wealth amassed by the above examples of entrepreneurial individuals, this section explores two groups of people who generated income and wealth not by satisfying consumers in competitive markets, but rather by securing special privileges and protection from government—or through outright theft. The former may not be illegal but does impose large costs on society for the benefit of a few. The latter, however, *is* illegal, and these two types of inequality will be dealt with separately.

### Cronyism

For readability we will refer to the large category of special treatments and privileges that can be secured by individuals and businesses through government as "crony capitalism." There are numerous other labels that have been used, including favoritism and corporatism. The essence of this category is that governments grant special advantages or privileges to individuals and firms through regulations that restrict competition and favour the firm over both existing and potential competitors. These special treatments or protections allow the firm(s) to charge higher prices than would otherwise be the case, invest less in research and development because of the absence of meaningful competitive threats, and/or pay less attention to their customers in terms of product development and service.

Consider one of the most high profile examples of an individual and his family benefitting from special government privileges: Carlos Slim. Slim is the second richest man in the world with an estimated net worth of US$77.1 billion. He benefited greatly from Mexican government policy that is conducive to regulatory barriers to entry in general and the telecommunications industry in particular (Forbes, 2015), making much of his fortune through Telmex, a Mexican telecommunications company (Forbes, 2015; Padgett, 2014).

As the OECD (2012: 12) noted, Mexico's telecommunications sector is "characterised by high prices, among the highest within OECD countries, and a lack of competition." Of course, it is precisely that lack of competition which leads to those high prices—the Mexican telecommunications market is dominated by a single company owned by Slim (Telmex) "with 80% of the fixed line market and 70% of the mobile phone market."

In addition, existing Mexican companies have an easier time blocking new entrants via the legal system. In Mexico, when regulatory authorities issue a ruling on the side of competition, it can be challenged by a company which has the most to lose. Mexican courts will then suspend the pro-competition directive while it is reviewed, thus extending the life of the cartel or monopoly in question. The OECD labels the role of the courts here as "one of the main barriers to competition," noting how "this system not only encourages legal challenges but provides financial gain for the incumbent." The OECD also points out that "profit margins of the incumbent [are] nearly double the OECD average" (2012: 11–12).[8]

Simply put, the barriers to competition in the telecommunications market in Mexico have allowed Slim and his companies to enjoy higher prices and higher market share than would have been the case in a competitive, open market. These restrictions, therefore, have benefitted Slim and resulted in inequality at the expense of average Mexicans through higher prices for telecom services.

8. One can argue that the Mexican government should have less regulatory apparatus to begin with, and thus fewer institutional barriers to cross for possible new entrants. However, the Mexican regulatory system is not the subject of this essay. The point is merely that the existing regulatory structure and court responses engender crony capitalism, i.e., favouritism by government, which leads to less competition and thus wealth concentration, which contributes to inequality.

## Corruption

Another contributor to inequality is corruption. Transparency International (2015) defines corruption in a general manner as "the abuse of entrusted power for private gain" with "grand corruption" consisting of "acts committed at a high level of government that distort policies or the central functioning of the state, enabling leaders to benefit at the expense of the public good."[9]

Actual corruption is hard to measure—those who are corrupt do not self-report such actions. However, Transparency International measures perceptions of corruption, and this can serve as a proxy to measure states or territories where it is more possible to profit from illegal activities.[10] That in turn means an increased potential for corrupt inequality to flourish.

Unlike crony capitalism—regulatory favours that protect or promote a particular sector or business, but which are transparent—corruption is usually illegal. It can occur in democracies, authoritarian regimes, or in dictatorships; the latter potentially allow for more corruption because there are few if any barriers to a dictator simply enriching himself, his family, and friends directly from the public treasury. A dictatorship by definition and design is a one-person or one-party rule state which brooks no opposition, and thus where institutional checks on power are weak or non-existent.

There is no one list of the world's most perceived corrupt authoritarian leaders and dictators, but various media and other organizations have investigated and attempted to uncover and estimate the personal fortunes of such political and military leaders. Transparency International published a report in 2004 (but not since) that attempted to quantify the ill-gotten gains of various national leaders, some of whom could be described as authoritarian at the very least, though others were democratically elected (**table 1**).

9. The full description of corruption from Transparency International (2015) is as follows: "Generally speaking as 'the abuse of entrusted power for private gain.' Corruption can be classified as grand, petty and political, depending on the amounts of money lost and the sector where it occurs. Grand corruption consists of acts committed at a high level of government that distort policies or the central functioning of the state, enabling leaders to benefit at the expense of the public good. Petty corruption refers to everyday abuse of entrusted power by low- and mid-level public officials in their interactions with ordinary citizens, who often are trying to access basic goods or services in places like hospitals, schools, police departments and other agencies. Political corruption is a manipulation of policies, institutions and rules of procedure in the allocation of resources and financing by political decision makers, who abuse their position to sustain their power, status and wealth."

10. Transparency International's corruption index is constructed based on perceptions of a country by analysts, business people and the general public. The methodology is detailed on their website (Transparency International, 2015).

**Table 1: Examples of Alleged Political Corruption**

| Head of government | Position | Estimate of funds allegedly embezzled* (US$) | GDP per capita (2001 US$) |
|---|---|---|---|
| Mohamed Suharto | President of Indonesia, 1967–98 | $15–$35 billion | $695 |
| Ferdinand Marcos | President of Philippines, 1972–86 | $5–$10 billion | $912 |
| Mobutu Sese Seko | President of Zaire, 1965–97 | $5 billion | $99 |
| Sani Abacha | President of Nigeria, 1993–98 | $2–$5 billion | $319 |
| Slobodan Milosevic | President of Serbia/ Yugoslavia, 1989–2000 | $1 billion | n/a |
| Jean-Claude Duvalier | President of Haiti, 1971–86 | $300–$800 million | $460 |
| Alberta Fujimori | President of Peru, 1990–2000 | $600 million | $2,051 |
| Pavlo Lazarenko | President of Ukraine, 1996–97 | $114–$200 million | $766 |
| Arnoldo Aleman | Presidentof Nicaragua, 1997–2002 | $100 million | $490 |
| Joseph Estrada | President of the Philippines, 1998–2001 | $78–$80 million | $912 |

* Various years; not adjusted for inflation.

Source: Transparency International, 2004: 13.

A flagrant example of an authoritarian leader enriched by his time in office comes from Indonesia, governed by President Mohamed Suharto, *de facto*, from 1966 until he resigned in 1998. Suharto, an army officer, was head of the army's Strategic Command and, in response to an attempted 1965 coup by left-wing guerrillas, acted to crush the insurgency. By 1966, he was effectively the ruler of Indonesia and was officially appointed acting president in 1967 by the People's Consultative Assembly (the national legislature). In 1968, the Assembly appointed Suharto to a five-year term, and re-elected him every five years until he resigned in 1998 (*The Economist*, 1998). Transparency International (2004: 13) estimated that Suharto had embezzled between US$15 billion and $35 billion. Indonesia's per capita GDP was just US$695 (in 2001$).

Other examples abound. The 2004 report from Transparency International listed nine other examples of alleged corrupt political leadership, ranging from Joseph Estrada, president of the Philippines from 1998 to 2001, who allegedly embezzled $78 million to $80 million, to Ferdinand Marcos, also a Philippines president (1972–86), who allegedly stole between $5 billion and $10 billion in public funds during his time in office. Insofar as Suharto, Estrada, or Marcos' pilfering of the public purse enriched them, then the gap between them and their citizens is an example of corruption-based inequality.

In considering inequality, it is critical to be clear about the very different sources for inequality and the substantive effect those sources have on citizens. Inequality that is sourced in crony capitalism results in a less competitive market and higher prices for consumers, as in the example of Carlos Slim. Inequality sourced in corruption, as in the case of Indonesia's Suharto, diverts tax dollars from government treasuries and from legitimate uses, such as hospitals, schools, and other infrastructure and services, in which governments are involved.

Crony capitalism and corruption are thus unlike another source of inequality, the entrepreneur who risks capital, caters to consumers in competitive market, and creates wealth and tax revenues. The end inequality in such cases results from wholly beneficial activity.

# Country-Level Analyses

The source of inequality matters when trying to understand and discuss inequality. The contrasting origins of inequality can have significantly different impacts on the populations within a given country. Below, two different inter-country comparisons demonstrate this effect. The first compares two countries with similarly high levels of inequality, and the second looks at whether a more equal society is better off than one that is more unequal. These comparisons contrast different measures of well-being, including per-capita income, the level of economic freedom, a measure of corruption, and the level of human development within the country. The two comparisons help clarify why it matters whether inequality results from positive economic activity of the sort that creates wealth, employment, and shareholder value, or from activities that add little or nothing to opportunity for others.

## Haiti and Hong Kong

One way to demonstrate why it matters whether inequality results from merit or cronyism-corruption is to compare jurisdictions that maintain similar levels of inequality but arrive at inequality very differently. Such a comparison illustrates how two jurisdictions with similar levels of inequality can be characterized by very different economic systems. In other words, the individual examples above, regarding different ways by which individuals can achieve wealth, can be extended to entire jurisdictions. In addition, these differing economic systems also influence the general prosperity of the respective jurisdictions.

The first comparison is between Haiti and Hong Kong. Like many poor and/or corrupt countries, data availability is quite limited for Haiti, and its integrity is questionable. One of the main methods by which to gauge inequality is the Gini Coefficient. The most recent year for which Gini Coefficient data is available for Haiti is 2001, when inequality there was 59.2 on the Gini scale (0 to 100), indicating a high degree of inequality. In comparison with other countries using more recent data (2010), Haiti would have had the third highest level of inequality, behind only Namibia and Botswana (World Bank, 2015a; CIA, 2015). In 2007, the year of data closest to Haiti's 2001 ranking, Hong Kong was deemed to have a fairly similar level of inequality: 53.7.

Given the similar levels of inequality, it is telling to compare the economic systems and economic performance of the two countries as an illustration of why the method by which people earn income and amass wealth matters when discussing inequality. One of the easiest and most accessible methods by which to gauge the countries' respective economic systems is to compare their economic freedom scores.[11] The annual ranking of economic freedom assesses the economic institutions of individual countries across a number of broad categories, including size of government, the security of its legal system and property rights, access to sound money, freedom to trade internationally, and the regulation of credit, labour, and business.

While data is available for 2013, it is prudent to examine 2001 data given the information available for inequality for Haiti. In the 2003 annual report, which contains data for 2001, Haiti tied for 77th out of 123 countries for economic freedom, with a score of 6.0 out of a possible 10.0. Hong Kong, on the other hand, ranked 1st with a score of 8.6 (**table 2**).[12] Hong Kong, therefore, maintained a comparatively open, competitive market economy while Haiti's was considerably less open and free.

Transparency International gauges corruption at the country level. Their Corruption Perception Index is a composite index which gathers data from 12 different sources including the Economist Intelligence Unit, Political Risk Services International, the World Bank, and the World Economic Forum (Transparency International, 2014). In 2002, the available year closest to the inequality data cited above (2001), Haiti ranked 89th out of 102 countries analyzed. It received a score of 2.2 out of 10, where lower numbers indicate higher levels of corruption. Hong Kong, on the other hand, scored 8.2 and ranked 14th, indicating a fairly low level of corruption.

**Table 2: Haiti and Hong Kong Compared**

| | Gini coefficient inequality score (100 = complete inequality; 0 = complete equality) | Perceived corruption (out of ten; lower score = perceived as more corrput) | GDP per capita, PPP (current international $) | Economic freedom (score [rank]) | Human Development Index (scores range between 0 and 1; higher score = greater human development) |
|---|---|---|---|---|---|
| **Haiti** | 59.2 | 2.2 | 1,368 | 6.0 (77) | 0.433 |
| **Hong Kong** | 53.7 | 8.2 | 27,528 | 8.6 (1) | 0.810 |

Note: Due to data limitations, Haiti's corruption score is from 2002 and its Human Development Index scores are from 2000. Hong Kong's Gini is from 2007 due to data limitations. All other scores for Hong Kong are from the same years as Haiti's in order to ensure comparability.

Sources: World Bank, 2015a, 2015b; CIA, 2015; Transparency International, 2002; United Nations Development Program, 1980-2013; Gwartney and Lawson, 2003.

11. See <www.freetheworld.org> for more information on the Economic Freedom of the World project, its annual report, and the time series data.

12. In the most recent 2014 report, Haiti ranked 92nd (out of 152 countries) with a score of 6.7, while Hong Kong continued to rank first.

In summary, while Haiti and Hong Kong maintained similar levels of inequality, the sources of that inequality were very different. According to the two measurements presented, Hong Kong maintained an open, competitive market economy with very little corruption while Haiti maintained a relatively un-free economy with high levels of corruption.

These structural economic differences resulted in real differences in the economic performances of the two countries. For example, the per-capita income of Haiti in 2001 was $1,368, while Hong Kong's comparable income was $27,528—over 20 times greater.

Another method by which to gauge the performance of the two countries is to examine their comparative Human Development Index (HDI) scores. The HDI measures a country's health and education outcomes as well as its standard of living as a method by which to gauge overall development (United Nations, 1980–2013).[13] In 2000, Haiti's HDI was 0.433, which indicates a fairly low level of development. In the same year, Hong Kong's HDI was 0.810, almost double Haiti's score, reflecting a relatively high degree of human development.

It is not only that the similar levels of inequality in Haiti and Hong Kong originate from very different activities—Hong Kong largely relies on merit for the receipt of income and accumulation of wealth, while Haiti is characterized by corruption and uncompetitive markets—but also that the two countries have experienced stark differences in economic performance because of these structural institutional differences.

## Canada and the Ukraine

It is also useful to examine two countries with differing levels of inequality to further illustrate the point that the source of inequality and the type of economic system matter. In 2010, no country in the world was more equal than the Ukraine based on its Gini coefficient score of 24.8. Comparatively, Canada ranked much further down the list at 33rd, with a Gini score of 33.7. The economic systems of these countries differ greatly, as does the prosperity of their citizens. However, it is not the inequality that is making people worse off, since Canada has higher levels of prosperity.

In 2010, Canada had a much higher level of economic freedom than did Ukraine. Canada's economic freedom score was 8.1, placing them 5th amongst a group of 123 countries (**table 3**). Ukraine, however, had an economic freedom score of 5.9, corresponding to a rank of 107th.

13. The UN's Human Development Index is subject to a number of weaknesses, as noted in Emes (1998).

**Table 3: Canada and Ukraine Compared**

| | Gini coefficient inequality score (100 = complete inequality; 0 = complete equality) | Perceived corruption (out of ten; lower score = perceived as more corrput) | GDP per capita, PPP (current international $) | Economic freedom (score [rank]) | Human Development Index (scores range between 0 and 1; higher score = greater human development) |
|---|---|---|---|---|---|
| **Canada** | 33.7 | 8.9 | 40,055 | 8.1 (5) | 0.896 |
| **Ukraine** | 24.8 | 2.4 | 7,686 | 5.9 (107) | 0.726 |

Sources: World Bank, 2015a, 2015b; Transparency International, 2010; United Nations Development Program, 1980-2013; Gwartney et al., 2012.

Similar disparities exist when corruption is examined. Canada performed much better than Ukraine with a score of 8.9 and a rank of 6th in 2010, based on Transparency International's Corruption Index. At the other end of the rankings was Ukraine, which ranked 134th with a score of 2.4, indicating a high level of perceived corruption.

The source of inequality in Canada appears to be similar to that of Hong Kong. It is based on competitive markets with low levels of corruption, whereas Ukraine appears to be plagued by poor economic institutions and high levels of corruption.

It is telling to examine the relative levels of prosperity between the Ukraine (comparatively equal) and Canada (less equal). In 2010, Ukraine's per capita income was $7,686, while Canada's was $40,055. In other words, Canada's per-capita income was more than five times greater than that of the Ukraine.

The same differences are seen when comparing measures of human development. Ukraine's human development index score was 0.726 in 2010, placing it just above the classification level of medium human development. Contrast this to Canada, which had a very high level of human development in 2010 with a score 0.896. While Canada may be more unequal than Ukraine, this inequality, derived from merit and entrepreneurial undertakings, appears to have resulted in higher levels of prosperity for all Canadians.

Different sources of inequality—whether from merit and markets or cronyism and corruption—have divergent effects on a society's prosperity. More equal societies, such as Ukraine, are not necessarily better off than countries with higher levels of inequality. It is clear that not all inequality is equal, and nor are the outcomes of different societies predicated upon the level of equality within. What such comparisons demonstrate is the fundamental flaw in considering inequality as a simple measurement. The source of the inequality matters.

# Conclusion

A simplified approach to comparing countries based solely on inequality ignores how the sources of inequality can be and often are vastly different in origin. On the one hand, most would agree that gaining wealth and thus furthering inequality through government favouritism or outright theft or corruption results in negative consequences for society. On the other hand, inequality can arise from entrepreneurship, innovation, and diligence that provide enormous benefits to society. This merit-based inequality serves not only the people behind the wealth, but also the consumers and people they are serving, who buy and use their goods and services.

# References

Acemoglu, Daron, and James A. Robinson (2006). *Economic Origins of Dictatorship and Democracy*. Cambridge University Press.

Acemoglu, Daron, and James A. Robinson (2012). *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. Crown Business.

Acemoglu, Daron, and James A. Robinson (2015). The Rise and Decline of General Laws of Capitalism. *Journal of Economic Perspectives* 29, 1 (Winter): 3–28.

Acemoglu, Daron, Francisco A. Gallego, and James A. Robinson (2014). Institutions, Human Capital, and Development. *Annual Review of Economics* 6: 875–912.

Becker, Gary S. (1962). Investment in Human Capital: A Theoretical Analysis. *Journal of Political Economy* 70, 5 (October): 9–49.

BlackBerry (undated). *Financial Documents*. <http://ca.blackberry.com/company/investors/documents.html>

Bogomolny, Laura (2006, April 24). Toned and Ready: Lululemon Transitions. *Canadian Business*. <http://www.canadianbusiness.com/business-strategy/toned-and-ready-lululemon-transitions/>

Central Intelligence Agency [CIA] (2015). *The World Factbook. Distribution of Family Income - Gini Index*. Central Intelligence Agency. <https://www.cia.gov/library/publications/the-world-factbook/fields/2172.html>

CBC News Canada (March 17, 2014). *BlackBerry Timeline: A Tech Titan's Roller Coaster ride*. CBC News Canada. <http://www.cbc.ca/news2/interactives/timeline-rim/>

*The Economist* (1998, May 21). Indonesia Awakes to the Post-Suharto Era. *The Economist*. <http://www.economist.com/node/372117>

Emes, Joel (1998). May Questions and Answers. *Fraser Forum*. <http://oldfraser.lexi.net/publications/forum/1998/may/development.html>

Encyclopedia Britannica (2015). Suharto: President of Indonesia. Encyclopedia Britannica. <http://www.britannica.com/biography/Suharto>

Feldstein, Martin (2008). Did Wages Reflect Growth in Productivity? *Journal of Policy Modeling* 30, 4 (July-August): 591–94.

***All websites retrievable as of December 21, 2015.***

Forbes (July 14, 2015). *The World's Billionaires*. <http://www.forbes.com/profile/chip-wilson/>

Gimpelson, Vladimir, and Daniel Treisman (2015). *Misperceiving Inequality*. NBER Working Paper No. 21174. National Bureau of Economic Research. <http://www.nber.org/papers/w21174>

Gu, Wulong, and Ambrose Wong (2010). *Estimates of Human Capital in Canada: The Lifetime Income Approach*. Statistics Canada. <http://www.statcan.gc.ca/pub/11f0027m/11f0027m2010062-eng.pdf>

Gwartney, James, and Robert Lawson (2003). *Economic Freedom of the World, 2013 Annual Report*. Fraser Institute. <http://www.fraserinstitute.org/research-news/display.aspx?id=12998>

Gwartney, James, Robert Lawson, and Joshua Hall (2012). *Economic Freedom of the World, 2012 Annual Report*. Fraser Institute. <http://www.fraserinstitute.org/research-news/display.aspx?id=18849>

Gwartney, James, Robert Lawson, and Joshua Hall (2014). *Economic Freedom of the World, 2014 Annual Report*. Fraser Institute. <http://www.freetheworld.com/2014/EFW2014-POST.pdf>

International Data Corporation [IDC] (February 24, 2015). *Android and iOS Squeeze the Competition, Swelling to 96.3% of the Smartphone Operating System Market for Both 4Q14 and CY14, According to IDC*. News Release (February 24, 2015). International Data Corporation. <http://www.idc.com/getdoc.jsp?containerId=prUS25450615>

Lululemon Athletica Inc. (August 7, 2014). *Lululemon Athletica inc., Lululemon Founder Chip Wilson and Advent International Announce Stock Sale and Support Agreements*. News Release (August 7, 2014). <http://investor.lululemon.com/releasedetail.cfm?ReleaseID=865209>

Lululemon (various years). *Annual Reports*. <http://investor.lululemon.com/annuals.cfm>

Organisation for Economic Co-operation and Development [OECD] (2012). *OECD Review of Telecommunication Policy and Regulation in Mexico*. OECD. <http://www.oecd.org/sti/broadband/50550219.pdf>

Padgett, Tim (2007). Carlos Slim's Embarrassment of Riches. *Time*. <http://content.time.com/time/business/article/0,8599,1642286,00.html>

RIM (undated). *RIM History*. <http://www.blackberry.com/select/get_the_facts/pdfs/rim/rim_history.pdf>

Sarlo, Christopher, Jason Clemens, and Joel Emes (2015). *Income Inequality Measurement Sensitivities*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/income-inequality-measurement-sensitivities.pdf>

Transparency International (2002). *Corruption Perception Index 2002*. Transparency International. <http://www.transparency.org/research/cpi/cpi_2002/0/>

Transparency International (2004). *Global Corruption Report 2004*. Transparency International. <http://www.transparency.org/whatwedo/publication/global_corruption_report_2004_political_corruption>

Transparency International (2010). *Corruption Perception Index 2010*. Transparency International. <http://www.transparency.org/cpi2010/results>

Transparency International (2014). *Corruption Perceptions Index: In Detail*. Transparency International. <http://www.transparency.org/cpi2014/in_detail>

Transparency International (2015). *FAQs on Corruption*. Transparency International. <http://www.transparency.org/whoweare/organisation/faqs_on_corruption/2/>

United Nations Development Programme (1980-2013). *Human Development Reports, Table 2: Human Development Index Trends, 1980-2013*. <http://hdr.undp.org/en/content/table-2-human-development-index-trends-1980-2013>

World Bank (2015a). *Gini Index (World Bank Estimate)*. World Bank. <http://data.worldbank.org/indicator/SI.POV.GINI>

World Bank (2015b). *GDP Per Capita, PPP (Current International $)*. World Bank. <http://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD>

# About the Authors

**Jason Clemens** is the Executive Vice President of the Fraser Institute. He has an Honors Bachelors Degree of Commerce and a Master's Degree in Business Administration from the University of Windsor as well as a Post Baccalaureate Degree in Economics from Simon Fraser University. He has published over 70 major studies on a wide range of topics, including taxation and entrepreneurship. He has published over 300 shorter articles in US, Canadian, and international newspapers.

**Taylor Jackson** is a Policy Analyst in the Centre for Natural Resource Studies at the Fraser Institute. He holds a BA and an MA in Political Science from Simon Fraser University. Mr. Jackson is the coauthor of a number of Fraser Institute studies, including *Safety in the Transportation of Oil and Gas: Pipelines or Rail?*, and the Fraser Institute's annual Global Petroleum Survey, and Survey of Mining Companies. He is also the coauthor of a book chapter on the past, present, and future of Canadian-American relations with Professor Alexander Moens. Mr Jackson's work has been covered in the media around the world and his commentaries have appeared in the *National Post*, *Financial Post*, and *Washington Times*, among other newspapers.

**Megan O'Neill** was a research intern at the Fraser Institute during the summer of 2015. She has a Bachelor of Science degree in Hotel Administration from Cornell University and is currently studying law at the University of British Columbia, where she is VP of the Law Students' Society.

# Acknowledgements

The authors would like to acknowledge the preliminary work completed by Mark Milke, which formed the foundation for this essay. They also acknowledge the anonymous reviewers for their comments, suggestions, and insights. Any remaining errors or oversights are the sole responsibility of the authors. As the researchers have worked independently, the views and conclusions expressed in this paper do not necessarily reflect those of the Board of Directors of the Fraser Institute, the staff, or supporters.

# About the Fraser Institute

Our mission is to improve the quality of life for Canadians, their families, and future generations by studying, measuring, and broadly communicating the effects of government policies, entrepreneurship, and choice on their well-being.

Notre mission consiste à améliorer la qualité de vie des Canadiens et des générations à venir en étudiant, en mesurant et en diffusant les effets des politiques gouvernementales, de l'entrepreneuriat et des choix sur leur bien-être.

### *Peer review—validating the accuracy of our research*

The Fraser Institute maintains a rigorous peer review process for its research. New research, major research projects, and substantively modified research conducted by the Fraser Institute are reviewed by experts with a recognized expertise in the topic area being addressed. Whenever possible, external review is a blind process. Updates to previously reviewed research or new editions of previously reviewed research are not reviewed unless the update includes substantive or material changes in the methodology.

The review process is overseen by the directors of the Institute's research departments who are responsible for ensuring all research published by the Institute passes through the appropriate peer review. If a dispute about the recommendations of the reviewers should arise during the Institute's peer review process, the Institute has an Editorial Advisory Board, a panel of scholars from Canada, the United States, and Europe to whom it can turn for help in resolving the dispute.

# Publishing Information


### Distribution
These publications are available from <http://www.fraserinstitute.org> in Portable Document Format (PDF) and can be read with Adobe Acrobat Pro® or Adobe Acrobat Reader®, versions 8/9 or later. Adobe Acrobat Reader DC®, the most recent version, is available free of charge from Adobe Systems Inc. at <http://get.adobe.com/reader/>. Readers having trouble viewing or printing our PDF files using applications from other manufacturers (e.g., Apple's Preview) should use Adobe Acrobat Reader or Adobe Acrobat Pro.

### Ordering publications
To order printed publications from the Fraser Institute, please contact:

- e-mail: sales@fraserinstitute.org
- telephone: 604.688.0221 ext. 580 or, toll free, 1.800.665.3558 ext. 580
- fax: 604.688.8539

### Media
For media enquiries, please contact our Communications Department:

- 604.714.4582
- e-mail: communications@fraserinstitute.org.





### Date of issue
July 2016

### ISBN
978-0-88975-382-2

### Citation
Clemens, Jason, Taylor Jackson, and Megan O'Neill (2015). *How Income and Wealth are "Earned" Matters in Understanding Inequality*. Fraser Institute. <http://www.fraserinstitute.org>

# Supporting the Fraser Institute

To learn how to support the Fraser Institute, please contact

- Development Department, Fraser Institute
  Fourth Floor, 1770 Burrard Street
  Vancouver, British Columbia, V6J 3G7 Canada
- telephone, toll-free: 1.800.665.3558 ext. 586
- e-mail: development@fraserinstitute.org

# Purpose, Funding, and Independence

The Fraser Institute provides a useful public service. We report objective information about the economic and social effects of current public policies, and we offer evidence-based research and education about policy options that can improve the quality of life.

The Institute is a non-profit organization. Our activities are funded by charitable donations, unrestricted grants, ticket sales, and sponsorships from events, the licensing of products for public distribution, and the sale of publications.

All research is subject to rigorous review by external experts, and is conducted and published separately from the Institute's Board of Directors and its donors.

The opinions expressed by the author are his own, and do not necessarily reflect those of the Institute, its Board of Directors, its donors and supporters, or its staff. This publication in no way implies that the Fraser Institute, its trustees, or staff are in favour of, or oppose the passage of, any bill; or that they support or oppose any particular political party or candidate.

As a healthy part of public discussion among fellow citizens who desire to improve the lives of people through better public policy, the Institute welcomes evidence-focused scrutiny of the research we publish, including verification of data sources, replication of analytical methods, and intelligent debate about the practical effects of policy recommendations.