

Corporate Governance Practices in Canada and the United States

Aric Wilhau

Jeff Liggett

Vimal Thottapurathu

Craig Haxel

Jonathan Bartlett

Drake University

Subject: International Business

Article Type: Editorially reviewed student paper

When evaluating which G20 country to research we landed on Canada. It felt to us that on initial research there was enough evidence to support covering the similarities and differences between their governance practices compared to the US. We will cover some of the more exciting differences but throughout the theme you will notice is the similarity between their governance practices and the US.

U.S. Executive Compensation

We start by looking at the current structure in the United States. In the US the board of directors determines the pay of the CEO. The board is voted in to their appointment by shareholders, meaning shareholders indirectly affect executive compensation decisions in this way. Say on Pay legislation, as part of the Dodd Frank Act, gives shareholders a more direct way to influence pay. They can directly vote concerning executive pay as a result of that legislation. The board is required to list peer firms in reports provided to investors and regulators. By using these peer firms as a reference guide the board sets what they determine to be an appropriate pay level and composition of pay for the firm executives.

Three mistakes that can be made in executive compensation determination revolve around paying too much, paying too little, or paying in the wrong way. These errors are usually not known until it is too late, meaning the CEO has left for a better paying job if they were undercompensated, the CEO is still there and was paid too generously compared to what their performance or firm performance warranted, or the CEO was enticed by the pay structure to make poor strategic decisions for the firm which only increased their pay.

The interests of the principal and the agent should be aligned and the pay structure can promote this alignment. Shareholders want firm value to be increased or maintained and the CEO must be kept from trying to attain only what is in his own self-interest, as agency theory states. For example, stock options are given to CEO's and the only way these compensation components increase in value for the CEO is if the firm stock increases in value. This would promote the same goal for both principal and agent. To counter this, long term equity incentives are given as an additional payment form to executives ensuring that the long term growth of the firm is not compromised by strategic decisions simply to raise stock price now to make the stock

options pay more. The long term growth must occur for the long term equity incentive to pay out. American business practices have been criticized for promoting short term thinking, strategy, or focus to the detriment of long term, sustainable growth. Restricted stock may be a form of compensation and these stocks cannot be sold until a certain length of time has passed, for example. This restricted stock, too, encourages more of a long term focus on the part of the executive. Executives are given the stock now but cannot profit from it until time has passed, encouraging longer term appreciation of the stock price. The stock options and the combined long term equity incentives with restricted stock in U.S. pay structures should balance these concerns by promoting both short term and longer term stock appreciation.

Other common components of pay structure include bonuses, which are one time performance related cash awards, and the salary which is cash. Bonuses may be awarded due to making it to a certain milestone tenure point or due to performance of the firm or executive being favorable, for example. The salary component will be less than or equal to \$1 million in the U.S., usually. Tax laws in the U.S. only allow amounts less than \$1 million that can be expensed for business tax purposes. This is a way the U.S. government has gotten input into executive pay via the tax laws.

According to "The Role of Stock Liquidity in Executive Compensation" by Sudarshan Jayaraman and Todd T. Milbourn, if a firm has more liquid stock then it will have a higher proportion of stock as part of the pay package, decreasing the cash component. If the stock of the executive's firm is easy to trade in the market, they will receive more company stock relative to cash as a form of compensation. Jayaraman, Sudarshan, and Todd T. Milbourn. "The role of stock liquidity in executive compensation." *The Accounting Review* 87.2 (2011): 537-563.

There are mechanisms upper management could use to receive large compensation packages after a hostile takeover. These include the use of Golden parachutes which are contractual, legal clauses in the employment contract where CEO's receive substantially large payouts as a result of losing their job due to a takeover of the firm by another. Sometimes these agreements are used as a way to deter hostile takeovers as well. A firm would have huge expenses if they acquired an unwilling firm and had to pay a golden parachute as part of an exit package for an outgoing executive. To dispel the executives of the acquired firm would cost massive amounts to the acquiring firm.

A common theme currently in the U.S. is the huge disparity between social classes and their members' net worth or pay. CEO's are typically among the ultra-wealthy and the inequality arguments are often based off their pay compared to the lowest level workers' pay in the same firm. Bonuses paid to executives during the recent financial crisis were a point of recent scrutiny. Since the majority of CEO pay revolves around receiving stock securities and other awards tied to securities, CEO tax rates are another common point of contention in the U.S. It has been noted by high profile people like Warren Buffett that he pays a lower effective tax rate on all of his earnings combined than his secretary, for example. This is due to tax rates differing between pay received for work and pay as a result of securities. Much contention since the financial crisis has revolved around CEO pay and general income inequality in the U.S. It is not uncommon for an executive to receive compensation hundreds of times greater than the average compensation of a lower paid worker in the same organization.

Most theorists believe pay should ultimately be tied to performance. This can be difficult to assess because there is an age-old dispute over how much the executives actually affect stock price or firm performance. Some say stock price is out of the control of the executive and the executive cannot attribute stock price moves to their direct actions. Others say the CEO directly

affects moves in stock price. Stock price is used as a proxy for firm value fluctuations. It is assumed that for creating compensation packages, the CEO does affect firm value. Pay should increase for performance that increased firm value and vice versa. Academic studies have shown that more pay is expected and paid out to executives who are the subject of more intense monitoring.

There is no cap or multiple of how many times the average employee salary a CEO can be paid in America. At the present time, there is no limit for how much a CEO can be awarded in compensation. U.S. CEO's are paid more generously than most CEO's anywhere else in the world. CEO compensations packages in the US are isomorphic and that is why they continue to increase at an alarming rate.

Due to the structure of compensation packages, most American CEO's are paid in stock. This makes them some of the largest individual holders of their employing firm's stock, typically. This gives CEO's a vested interest in the company and encourages them to take acts that will increase firm value because it will increase their own personal net worth. This aligns the interest of shareholders and the top management, which pleases agency theory. Executives are shareholders and also in a position to potentially affect firm value. As a result of them being such large holders of their firm's stock, insider trading must be avoided or monitored. Top executives must disclose their trading activities when trading, buying or selling, their own firm's stock.

In an article entitled, "Executive Compensation: A New View from a Long-Term Perspective, 1936–2005," Carola Frydman and Raven E Saks explain that executive compensation was stable or stagnant from the 40's to the 70's in America. Pay and firm growth were much more strongly correlated from the 70's on. They also report that American pay packages that aim to align shareholder and top management team interests have worked well. Frydman, Carola, and Raven E. Saks. "Executive compensation: A new view from a long-term perspective, 1936–2005." *Review of Financial Studies* 23.5 (2010): 2099-2138.

Canada's Executive Compensation

Canadian CEO's are well compensated. The highest paid CEO's in the country will make on average \$7.96 million in 2014. This is compared to the average income of a citizen in the country of \$46,634. This deviation has created an outcry in the country around the large compensation packages paid to executives of Canadian corporations. Shareholders, Media, and the general public have all expressed this outcry for corporate performance to match the CEO compensation levels. When CEO compensation is compared to a person making minimum wage the disparity becomes even greater. The average minimum wage earner makes only \$20,989.

Academic research has noted several times that Canada is experiencing a "US Effect" when it comes to their executive compensation. Essentially the conclusion that scholars are drawing is because Canada's best CEO's often compete with the US they must compensate them similar to US executives. If that does not happen most CEO's would leave the country for greater opportunity in the US. In an article published in the *Canadian Journal of Economics*, Michael R. Veall, showed a graphing of the similarities of compensation between the US CEO and a Canadian CEO. Although the US pay from 1985 to 2010 was slightly more aggressive both countries followed the same trending.

Veall also discussed some possible reasons why the Canadian CEO Compensation curve was less than the US, essentially because the US has two corporate structures the C and the S they are taxed differently. The S Corp does not pay corporate taxes so they are less likely to pay large CEO compensation packages. The C Corp. pays a corporate tax rate on revenue, but compensation is taxed to the individual through personal income taxes. Canada has a tax structure on their corporations very similar to the US C Corp. this is called the Canadian-Controlled Private Corporations (CCPCs). Veall estimates that this deviation between tax structures may be overstating the US compensation and understating the Canadian compensation creating an identical trending.

Corporate Governance Guidelines were put in place by the Ontario Securities Commission (OSC) that mandated certain governance structures occur. These guidelines deal primarily with internal structure and as of 2004 have been rolled to all territories in Canada. They include guidelines on Composition of the Board, Board Mandate, Position Descriptions, Education Requirements, Code of Ethics Requirements, Nomination of Directors, Compensation, Board Assessments, and Defining Independence in the board. The governance measures appointed in this document surrounding compensation are very similar to those you find in the US.

- The Board shall appoint a compensation committee
- Compensation committee must have a charter
- Compensation committee will create CEO Compensation package
- Evaluation standards must be established
- Compensation Committee must make recommendations to the board on pay

Ultimately the Board of Directors will have the final vote on the compensation used for the CEO but the compensation committee will create the best approach possible.

What has been generated from the compensation committee since its mandate in 2004 has significantly changed the overall composition of pay in Canada. In an article titled "Internal versus External CEO Choice and the Structure of Compensation," Frederic Palomino and Eloi Peyrache break down the changing structure in pay for various countries. There are three main categories that compensation may be generated for executives. That is a base guaranteed salary, a bonus, and finally an equity payment.

In 1998 Canada had compensation that had a base pay and the remainder of CEO pay was paid 35% in bonus and 28% in equity payments. This changed drastically by 2005 with a significant increase in the amount of equity compensation paid to an executive which jumped to 85% of compensation packages. This is certainly not as drastic as what has happened in the US, which is using an even larger portion of their compensation packages in equity payments, but still a significant change. Palomino and Peyrache state this is because of the increase in outsiders being brought into organizations and will effectively reward them for the value they give to the shareholders.

Currently Canada has a voluntary Say on Pay rule, which allows shareholders to vote on the compensation packages being offered to key executives. 80% of the 60 largest companies have decided to participate. The main reason for participation is because compliance with the vote is voluntary based on the fact that the vote is non-binding. The most recent information shows that 90% of all votes approve the compensation packages. A trend starting to emerge is that investors are becoming more confident in their voting and an increasing rate of disagreement with the packages is beginning to occur. This is in the early phases and will be very interesting to see where the next few years take the Say on Pay rules.

Lastly, female executive compensation is low mainly because females don't hold a significant number of executive spots in the country. Only one female CEO ranks in the top 100 highest paid CEO's. Additionally, only 6.2% of the top earning executives are female. This is further compounded by the fact that only 35.4% of all management positions are held by women and 22.9% of those are senior management positions. Canada is supporting increasing diversity and compensation through various state sponsored diversity awareness campaigns.

Boards of Directors

Canadian Board of Directors Overview

Canada has an extensive list of requirements as well as guidelines for how corporations that are both for profit, and not for profit, must operate. To begin with, we will go over the for-profit companies that operate in Canada and what the Canadian government directly says about them. The Canadian government mandates that a director must have the prerequisites that follow:

First, a person who is going to sit on the board has to be of legal age, which in this case is a minimum of 18 years. Second, the individual must be of sound mind. This means that the individual is "not a person a court has determined to be of unsound mind" ("Organizing your Corporation," 2011). Third, the director must be a singular person, and cannot be a corporation or group of people. Finally, the individual must not be in bankrupt status. This essentially indicates they can run their personal finances. Something unique about Canada is that they require "at least 25 percent of the directors of a corporation must be resident Canadians" ("Organizing your Corporation," 2011). They do have a caveat to that rule which states that if the company has less than 4 directors, then at least 1 of the directors must be a resident of Canada. Another unique Canadian stipulation is the requirement for corporations "operating in sectors subject to ownership restrictions... [Airlines] or corporations in certain cultural sections" to have a majority of their directors be resident Canadians ("Organizing your Corporation," 2011).

In Canada, directors may stay in their position for terms of up to three years. "The length of the mandate of the directors can be set out in the by-laws" ("Organizing your Corporation," 2011). If a person is nominated to be a director and is at the shareholders meeting, it is implied that they agree to serve as a director, unless they state that they are not willing. If they are nominated and not present, the individual would need to consent to their election within ten days. In Canada, directors may conduct business through "signed resolutions instead of meetings," but if that happens, all of the directors must sign off on it for it to be mandated.

The BOD's have the power to create, remove, and change the by-laws of the corporation unless the company's by-laws prohibit it. However, any of these changes require approval of the shareholders after the directors pass the new law. "Because the scope of authority of the corporation's management is so broad, the law imposes a wide range of duties and liabilities on them" ("Organizing your Corporation," 2011). Usually, these duties go along with the position they were elected to and match the capabilities and talents they possess. One of the directors' most important duties in a Canadian company is duty of care. This means that while doing their duties and job descriptions, they must do it with at least as much care and diligence as a normal person would in a similar situation, while acting honestly and putting the best interest of the company above their own interests.

The Canadian Business Corporations Act (CBCA) is a law that helps to regulate Canadian businesses and corporations. It helps to provide corporate governance framework for companies operating in the country, and over two hundred thousand companies are

incorporated under the CBCA. One of the goals of the CBCA is preventing conflicts of interest for corporations and directors. Canadian directors must reveal any personal interest they might have in the company they are helping to run. The act also inflicts some liabilities on directors of corporations in specific events. "In certain circumstances, directors are liable for up to six months' worth of unpaid wages to employees of the corporation, as well as any unpaid source of deductions" ("Organizing your Corporation," 2011). As a result of this, it is very interesting that the Canadian government provides some suggestions on steps to take as a new company or even an existing one. In order to help protect some directors and officers, they suggest that a company purchase insurance to protect them while they "exercise...their duties", pay back directors for any losses they incur while doing their duties, and sometimes to give the directors an advance to help pay for attorney fees and defending themselves.

A segment important to the economy is non-profit companies, which in Canada have mostly the same guidelines/restrictions laid out for them by the government, with a few differences. Like the CBCA, they have the Not-for-Profit Corporations Act (NFP Act) which sets up guidelines for corporations that are not seeking to capitalize on profit. One area in which they are different is in the directors themselves, where "the board may appoint one of its members to act as a managing director or a number of directors to act as a committee of directors" ("The Directors," 2013). Generally a NFP corporation is mandated to have at least one director, but a soliciting corporation "must have a minimum of three directors, at least two of whom must be officers or employees of the corporation or its affiliates" ("The Directors," 2013). The directors of NFP companies are also subject to some liability in certain situations. An example would be that a director could have to repay a payment made to a member or a director that is "contrary to the NFP Act."

For Canada, a diverse board of directors for a corporation is something that should be valued. In the 2011 Canadian Institute of Corporate Directors report, "Diversity in the Boardroom," directors from across the country were surveyed about corporate governance, specifically in regard to the makeup of the board of directors. Over 90% of the directors agreed that diversity on the board is an important governance issue, and 80% believe that board diversity leads directly to better decision making. Despite the fact that it is clearly recognized by directors in Canada, diversity is not being taken as seriously as they are acknowledging. "According to a 2012 survey by the Toronto-based Canadian Board Diversity Council, only 22% of the companies surveyed had written board diversity policy" (Wensley). The survey also showed that 59% did not have a policy, and 19% of the directors had no clue what their diversity policy was, or if they had one. The report makes a strong statement to Canadian progress by saying "It's plain to see that there isn't a lack of initiative and ideas within Canada. What is lacking is a common governance protocol on gender diversity among public companies" (Wensley). The research done by others clearly show that diversity results in better decisions being made as a company. This can be a factor in resource dependency theory because directors can be seen as resources. When you have a homogeneous board, there are not a lot of new resources that are being accessed to gain an advantage, but when you spread out diverse directors, you have new avenues to goods and services.

The Canadian Spencer Stuart Board Index (CSSBI) is published once a year to talk about board trends of Canadian companies. The index only tracks 100 publicly traded companies in the country that have over \$1 billion in revenue, operations in Canada and at least 30% of directors who are Canadian. The CSSBI reported in 2012 that the number of women on Canadian boards was growing, up a percentage point or two from the previous year, and that accounted for a high for the second year in a row. Of the Big 5 banks in Canada, they have an average of

30% of women on their boards, keeping consistent with the growing trend. Very interestingly, a report noted that expectations had been "changed" and "it would now be embarrassing for the CEO if their bank did not have at least 4 women board members." (Wensley) This is in large contrast to the rest of Canadian companies, which average around 15% of women on boards.

According to a report put out by TD Economics, Canada is falling behind other countries. Canada has fallen to 9th place among "industrialized economies" in the percentage of women on boards. However, Canada is improving and trying to take steps to create diversity not only in policy, but because they are starting to see the value it can bring to their company. Organizations have been started like the Canadian Institute of Corporate Directors and the Canadian Board Diversity Council. The Canadian Institute of Corporate Directors website is a great resource of current and aspiring directors. The website offers courses, continuing director education, a full resource center with a governance library and audit tools as well as section about how to get on a board of directors. The Canadian Board Diversity Council is a leading organization that pushes for diversity among boards in the country. They conduct research on the progress being made in diversity for the country, provide governance education, and help to build a network of future leaders and board members. The diversity council also produces an annual "report card" for the company that "established the first-ever baseline on the representation of women, visible minorities, aboriginal peoples and persons with disabilities on the boards of Canada's 500 largest organizations..." (CBDC).

U.S. Board Structure

Corporate governance is implemented around the globe and has similar structures as corporations of the United States. However, the composition, roles, and responsibilities can vary from country to country. Corporate governance in the United States is made up of three main players: the top management team, board of directors, and shareholders. The board of directors consists of a group of individuals, appointed by the shareholders, whose job is to ensure the interests of the shareholders. This primarily involves making sure the interests of the executives of the company, also known as the top management team, align with the interests of the shareholders. The structure of corporate governance in the United States is very similar to the structure of the United States government. If the CEO and the top management team are considered the executive branch, then the board of directors can be seen as Congress who is there to represent the shareholders of the company as Congress represents the citizens of the country.

As mentioned before, board is comprised of individuals known as directors appointed or elected by the shareholders for multi-year terms. The minimum number of members on the board of directors in the United States is five, while the average is about eleven members. In the United States, a board size of about 7-11 members are ideal. A board with less than seven members may be too small to be able to oversee a company, and board greater than eleven may not be workable when it comes to decision making. In order to ensure the best interests of the shareholders and avoid agency problems, the majority of the board (greater than 50 percent) is required and typically comprised of independent outsiders. Independent outsiders are directors who have no relation to the company in the past, present and future. This makes certain that the board stays objective, and has no obligation to the executives and the company that will deter the board from looking out for the company's shareholders.

There are a few types of independence that a majority of directors should possess from the executives. One of which is conventional independence, which means that the director has no social relationship with the company or the executives. Another type is social independence,

which means the director does not share any social background with the company or its executives. Examples of sharing social backgrounds would include being in the military together, graduating from the same university, same industry of primary employment, etc. However, not all boards are solely made up of independent outsiders. Although on average the majority of boards in the United States are mostly comprised of independent outsiders, boards can include insiders and grey directors. Insiders are directors who have a strong relation to the company, and most of the time they are employees on payroll or other top executives of the company. Grey directors are members of the board who have some kind of relationship with management of the company, whether it was in the past, present, or the future. Some grey directors may look independent of the company, but they are not purely independent and may have some interests that align with the top management team. This can also lead to potential agency problems. An example of a grey director may be long-time consultant for the company who is appointed to the board of directors.

The leader of the board of directors is known as the chairman of the board. To avoid agency problems, the chairman of the board should be an independent outsider. However, in the United States this is not true. This leads into one of the possible issues with boards of directors in the United States, which is duality. Duality is where the Chief Executive Officer (CEO) of a company is also the chairman of the board of directors for the same company. In fact, about 63 percent of companies in the United States have the CEO and the chairman of the board as the same person. Although there has not been any evidence stating that duality is better or worse for a company, agency theory states that duality can cause agency problems because the CEO would be obligated to look out for his or her own interests as the chairman of the board than the interests of the shareholders.

Another major part of board of directors in the United States is the different committees that are involved in regulating and monitoring the company and the top management team. All board committees' members should be comprised of all independent outsiders according to the SEC. The major committees include the remuneration committee, audit committee, and the nominations committee. The remuneration committee, also known as the compensation committee, is the committee in charge of determining base compensation, bonuses, and stock options for the executives of the company. The committee generally consists of at least three members from the board of directors, all of which must be independent. The audit committee is responsible for ensuring that the company's financial statements are accurate, and that false and unreasonable estimates are not used. The audit committee also generally consists of at least three independent members from the board of directors. Internal auditing is one the most important responsibilities of the board, and within the last two decades there have been many faults with internal auditing which lead to corruption of major companies. As a result there have been a number of stricter policies and reforms put in place to prevent corruption. One of the major changes in regulations was the Sarbanes-Oxley Act of 2002, which mandates strict reform in order to better protect investors from accounting fraud (sec.gov). The third major committee is the nominations committee that is in charge of reviewing and selecting the nominees for the board of directors. This committee has been important in making sure the new members of the board of directors are qualified individuals have the best interests of the company and the shareholders in mind.

Other aspects of board of directors in the United States include the affiliations directors may have with other companies. One example of this is called director interlocks, which is when a director, or outsider, of one company is also an executive, or insider, of another company. Another example is when a director serves on more than one board for different companies. When a director serves on three or more boards they are considered a busy director, and when

a board consists of majority of busy directors it is considered a busy board. There are positives and negatives to both types. Interlocking and busy directors can bring experience, and broaden networks for the companies. In contrast, however, there are concerns that these directors may not be able to serve the company properly because of other important commitments with other companies.

Another important aspect when it comes to the board of directors in the United States is known as the Business Judgment Rule (BJR). This case law states that “when a director or officer acts in good faith and with prudence in her determinations and actions, then there will be no liability implied by the court for resultant changes in the company’s circumstances or loss of value.” (nationalparalegal.edu). As long as a director makes educated and well-informed decisions for the company in the best interest of the company and the shareholders, they will not be held liable for any negative consequences that result from the decisions made.

Canada’s Sustainability Practices

Canada and the United States devote a large amount of money to their environmental protection agencies. Canada provides a nearly one billion dollars towards environmental regulation. The United States provides close to \$8.2 billion (Barnes). These figures for 2014 explain how much of a concern that environmental sustainability is to these two countries. Each country provides a large budget for environmental regulation, but there are many ways that money can be allocated to this large responsibility.

Before sustainability practices can be compared, an understanding of each country’s environmental standing needs to be addressed. There are many different areas of environmental concerns which researchers all over the world measure and rank various countries performance. Some of the areas with the most concern would include each country’s carbon emissions, waste, and energy usage.

Canada and the United States have very different overall levels of carbon emission. In 2012, the United States contributed 5.2 billion tons of CO₂, while Canada only contributed 560 million tons, per year. In perspective, this ranks the United States and Canada second and eighth for overall contributions to carbon emissions. Their overall contributions together make up about twenty percent of all carbon emissions produced in the world (Oliver).

The gap between the United States and Canada’s contribution is quite large, but it does not allow a good comparison between the two countries, due to a large difference in population. Canada only has a population around 35 million while the United States has a population closer to 315 million. When population is considered compared to the emissions, the average per capita emissions sits at 16.4 and 16 tons of CO₂ a year for the United States and Canada, respectively. This average contribution per person allows for a better understanding of how close they are in regards to emissions. Based on these per capita emission rates, the countries are evenly matched in regards to emissions. If Canada held the same population that the United States does, its overall contribution would only be slightly less than the contribution of the United States (Oliver).

Municipal waste is another factor that is considered in environmental analysis. It considered the amount of trash thrown out per person in each country. It is important due to its contribution to other environmental problems, such as habitat destruction, ground pollution, and water contamination. Canada in this area of study actually ranks slightly worse than the United States. Canada averaged close to 800 kilograms per capita of municipal waste, while the United States only average closer to 750 kg. This puts both countries in last place behind many different

countries in terms of waste. The average waste for all countries is 578 kg per capita, which shines negative light on both countries. It was only recently, around 2008, that Canada surpassed the United States (How Canada Performs).

Energy intensity relates to the consumption of crude oil, coal, water, natural gas, and other natural resources within a country. It is also best broken down per capita to be more easily compared to other countries. One of the better units of measurement is kilogram of oil equivalent (kgoe), or in basic terms, amount of energy that could be extracted from one kilogram of crude oil. Like waste management, Canada ranks worse than the United States. Canada ranked as the ninth worst country at about 7,300 kgoe while the United States ranked right behind them at about 7000 kgoe. One reason for this may be that Canada sits further north than the United States and needs more energy to stay warmer during the colder months (The World Bank).

Overall, Canada and the United States are in similar standing in many areas of environmental impact. Both consume more than most countries, per capita, and are ranked worse because of it. Environmental impact is always somewhat of a concern for all countries, but it is a major concern for these two countries that actually contribute a lot to environmental issues.

The United States and Canada have several things in common when it comes to environmental sustainability. First, they both have an agency overseeing environmental standards. Canadians rely mainly on Environmental Canada (EC), while the United States relies on the Environmental Protection Agency (EPA). They were founded only a year apart, with the EPA founded first in 1970 (Mausbery).

Besides both having an agency, the two countries actually work together on several issues. There are three main areas of focus that the EPA and EC work together to regulate. The first was signed in 1909 and it was the Boundary Waters Treaty. It covers the regulation of waters, including the Great Lakes, between the United States and Canada. Basically this is an agreement that neither country will take part in polluting the large amount of water between them (Barnes).

A second focus that has stemmed from the Boundary Waters Treaty is the Great Lakes Water Quality Agreement (GLWQA). This extends the Boundary Waters Treaty to cover protecting the ecosystem of the Great Lakes. Beyond just agreeing to avoid polluting the waters, this agreement takes it to the next level to proactively use science to determine chemicals of concern. It reaches for a better understanding of habitats and species within the Great Lakes to improve policies to strive for increased wildlife numbers. The agreement even goes to the point of researching climate change in the areas to improve understanding of reasons of climate fluctuation (Binational).

A final focus that is shared between the EPA and EC is air quality. The U.S.-Canada Air Quality Agreement was signed in 1991 and incorporates air pollution contributor standards. The plan was derived from the idea that air pollution from either country affects the other due to sharing a border. Specific objectives must be determined by each country to try and reduce emissions of carbon, nitrogen oxides, and sulfur dioxide. Under this agreement, each country agrees to create a committee that will ensure objectives are carried out, with results to be reported to the International Joint Commission (IJC). The main purpose of the IJC is to call for comments on the reports and then release a yearly synthesis based on the data collected (Barnes).

The U.S.-Canada Air Quality Agreement air quality objectives are not drafted to necessarily be the same based on this agreement, but in 2009 Canada committed with the United States to reduce greenhouse gas emissions by 17% by 2020. The aligned Canada-United States regulatory approach is expected to reduce greenhouse gas emissions by 162 million tons between the years of 2017 and 2025. Estimated before-tax fuel saving is around \$33 billion. Since these emissions are highly associated with the energy consumption of the two countries, efforts to reduce the emissions is very important. These aggressive targets are aimed to improve the large environmental impact both countries have in comparison to the rest of the world (Gazette).

Besides having aspects in common, the United States and Canada also have several major differences. The organizational structure of the EPA and EC is one example. In the United States the environmental powers are centralized to the federal government, while Canada has a more decentralized structure. The reason for this is that governing bodies outside the capital in Canada own more land than the central government; whereas the opposite is true for the United States (Breton).

Waste management practices are also different between the United States and Canada. The United States focuses more on a federal derived statutory requirement for waste disposal, while Canada focuses more on a decentralized regulatory model. The United States also focuses more on recycling and collection in regards to separate branding entities. Canada aims to incorporate more of a collective responsibility by having eco-fees from multiple brand owners going towards organizations developed to monitor waste management. Overall, Canada has a less legally-oriented policy on environmental regulation (Hickle).

In conclusion, the United States and Canada both have strong agencies assessing and enforcing situations involving environmental issues. The countries include the agencies in the budget due to the amount of pollution and energy use the countries contribute to the world. Overtime, the continued effects at decreasing pollution should be noticeable as these two agencies remain.

References

Barnes, Ella. *United States Environmental Protection Agency*. EPA. Web. 19 Apr. 2014.

<http://www2.epa.gov/planandbudget/budget>

<http://www.epa.gov/oia/regions/na/canada/>

<http://www.epa.gov/airmarkets/progsregs/usca/agreement.html#aqa>

Binational. United States EPA; Environmental Canada(EC), 2012. Web. 19 Apr. 2014.

<http://binational.net/priorities-science-action/index-en.html>

Mausbery, Burkhard. Pollution Issues. Canadian Government. Web. 19 Apr. 2014.

<http://www.pollutionissues.com/Ec-Fi/Environment-Canada.html>

<http://www.pollutionissues.com/Te-Un/U-S-Environmental-Protection-Agency.html>

Canada Gazette. Volume 146, No. 49. Government of Canada, 8 Dec. 2012. Web. 19 Apr. 1991.

<http://www.gazette.gc.ca/rp-pr/p1/2012/2012-12-08/html/reg1-eng.html>

Breton, Albert; Scott, Anthony; Frascini. "Explaining differences in environmental governance patterns between Canada, Italy, and the United States." Department of Public Policy and Public Choice (2007).

<http://polis.unipmn.it/pubbl/RePEc/uca/ucapdv/fraschini96.pdf>

Hickle, Garth T. "Comparative Analysis of Extended Producer Responsibility Policy in United States and Canada." Journal of Industrial Ecology 17.2 (2013). Web.

<http://eds.a.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=0b52becc-cf79-41af-944e-e4cf3c866479%40sessionmgr4002&vid=2&hid=4110>

How Canada Performs. The Conference Board of Canada, Jan. 2013. Web. 19 Apr. 1991.

<http://www.conferenceboard.ca/hcp/details/environment/energy-intensity.aspx>

The World Bank. International Energy Agency, 2012. Web. 19 Apr. 1991.

<http://data.worldbank.org/indicator/EG.USE.PCAP.KG.OE>

Oliver, Jos G.J; Janssens-Maenhout, Greet; Muntean, Marilena; Peters, Joroen A. H. W. "Trends in Co2 Emissions." PBL Netherlands Environmental Assessment Agency (2013). Web.

http://edgar.jrc.ec.europa.eu/news_docs/pbl-2013-trends-in-global-co2-emissions-2013-report-1148.pdf

Corporations Canada, Business Corporations. (2011). Organizing your corporation: The directors. Retrieved from Government of Canada website: <https://www.ic.gc.ca/eic/site/cd-dgc.nsf/eng/cs04848.html>

Corporations Canada, Not-for-Profit Corporations. (2013). The directors. Retrieved from Government of Canada website: <https://www.ic.gc.ca/eic/site/cd-dgc.nsf/eng/cs05004.html>

Wensley, Karen. "Gender Diversity of Boards of Directors of Canadian ICT Companies." Information Technology Association of Canada . Information Technology Association of Canada , 01 07 2013. Web. 20 Apr 2014. <<http://itac.ca/wp-content/uploads/2013/07/Gender-Diversity-of-Boards-of-Directors-of-Canadian-ICT-Companies-July-2013.pdf>>.

"boarddiversity.ca." Report Cards. Canadian Board Diversity Council, n.d. Web. 27 Apr 2014.
<http://www.boarddiversity.ca/report_card>.

"Audit Committees and Auditor Independence." Sec.gov. Web. 20 Apr. 2014.

"Federal Securities Laws." SEC.gov. Web. 27 Apr. 2014.

"The Business Judgment Rule." The Business Judgment Rule. Web. 27 Apr. 2014.

"Chief Executive Officer (CEO) Salary (Canada)." Chief Executive Officer (CEO) (CA) Salary.
N.p., n.d. Web. 28 Apr. 2014

Canada's CEOs Ring in New Year with a Bang." Canada Newswire,, 02 Jan. 2015. Web.

"Canada: Changes to Executive Compensation Disclosure in Canada." Changes to Executive
Compensation Disclosure in Canada. N.p., n.d. Web. 28 Apr. 2014

"Only One Woman among 100 Highest Paid CEOs in Canada | Toronto Star." Thestar.com.
N.p., n.d. Web. 28 Apr. 2014.

"Knowledge Center." Catalyst. N.p., n.d. Web. 27 Apr. 2014.