The Political Economy of Gold Mining:
An Analysis of Canadian Gold Mining Transnational Corporations’ Dominance in Latin America in Relation to U.S. Mining Corporations

A Research Paper presented by:

James Alejandro Artiga-Purcell
(United States of America)

In partial fulfilment of the requirements for obtaining the degree of
MASTER OF ARTS IN DEVELOPMENT STUDIES

Major:
Governance, Policy and Political Economy
(GPPE)

Specialization: IPED
International Political Economy of Development

Members of the Examining Committee:
Karim Knio
Rosalba Icaza Garza

The Hague, The Netherlands
December 2013
Disclaimer:

This document represents part of the author’s study programme while at the Institute of Social Studies. The views stated therein are those of the author and not necessarily those of the Institute.

Inquiries:

Postal address:
Institute of Social Studies
P.O. Box 29776
2502 LT The Hague
The Netherlands

Location:
Kortenaerkade 12
2518 AX The Hague
The Netherlands

Telephone: +31 70 426 0460
Fax: +31 70 426 0799
Contents

List of Acronyms........................................................................................................ v

Abstract.................................................................................................................... vi

Chapter 1 : Introduction................................................................. 7
  1.1 The Problem ........................................................................................................ 7
  1.2 Research Question and Argument ...................................................................... 7
  1.3 Justification of Research ..................................................................................... 8
  1.4 Scope and Limitations ........................................................................................ 8
  1.5 Organization of the paper ................................................................................... 8

Chapter 2 : Background and Historical Context ......................... 10
  2.1 The Mining Boom ............................................................................................... 10
  2.2 The Case of Latin America ................................................................................ 10
  2.3 The Role of Canada ............................................................................................ 11
  2.4 The Role of the U.S. ........................................................................................... 12

Chapter 3 : Exploring Mainstream Explanations ..................... 14
  3.1 A Transaction Cost Economics Approach ....................................................... 14
    3.1.1 A TCE Explanation ....................................................................................... 15
  3.2 A Path Dependency Approach ......................................................................... 16
    3.2.1 A Path Dependency Explanation ................................................................ 17
  3.3 A Varieties of Capitalism Approach ............................................................... 19

Chapter 4 : Theoretical Framework, Methodology and Method....... 20
  4.1 Theoretical Framework: An Overview of Régulation Theory ....................... 20
    4.1.1 Regime of Accumulation (RoA) ................................................................... 21
    4.1.2 The Mode of Régulation (MoR) ................................................................... 21
  4.2 Methodology: Benefits of Régulation Theory ............................................... 22
    4.2.1 Limitations of Mainstream Explanations ................................................... 22
    4.2.2 Further Value of Régulation Theory and the MoR ..................................... 23
    4.2.3 Critiques and Confirmation of a Régulation Theory Approach ............... 24
  4.3 Method .............................................................................................................. 24
    4.3.1 The Form of the State .................................................................................. 25
    4.3.2 Insertion of the State into the International Regime ............................... 25
    4.3.3 Form of Competition ............................................................................... 26
    4.3.4 Form of Competition ............................................................................... 26
    4.3.5 Wage-Labor Nexus and the Monetary Regime ........................................ 26
    4.3.6 Data Selection and Collection .................................................................... 27

Chapter 5 : A Régulation Theory Explanation ......................... 28
  5.1 The Gold Mining Sector .................................................................................... 28
  5.2 Explaining why Latin America ....................................................................... 28
    5.2.1 The Guatemalan Illustration .................................................................... 28
    5.2.2 The Peruvian Illustration .......................................................................... 31
    5.2.3 Explaining the Mining Boom in Guatemala and Peru ............................. 33
  5.3 Explaining Canadian Domination in Relation to the U.S. ............................ 34
    5.3.1 Why Canada? ......................................................................................... 37

Chapter 6 : Conclusion ........................................................................ 41

References.............................................................................................................. 43
Appendices

Appendix A: Exploration Trends .................................................. 50
Appendix B: Trends in FDI .......................................................... 52
**List of Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIT</td>
<td>Bilateral Investment Treaty</td>
</tr>
<tr>
<td>CAFTA-DR</td>
<td>Dominican Republic-Central America Free Trade Agreement</td>
</tr>
<tr>
<td>CIA</td>
<td>Central Intelligence Agency</td>
</tr>
<tr>
<td>CIDA</td>
<td>Canadian International Development Agency</td>
</tr>
<tr>
<td>CIT</td>
<td>Corporate Income Tax</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>FTA</td>
<td>Free Trade Agreement</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>IFIs</td>
<td>International Financial Institutions</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>ISI</td>
<td>Import Substitution Industrialization</td>
</tr>
<tr>
<td>ISS</td>
<td>Institute of Social Studies</td>
</tr>
<tr>
<td>MNE</td>
<td>Multinational Enterprise</td>
</tr>
<tr>
<td>MoR</td>
<td>Mode of Regulation</td>
</tr>
<tr>
<td>NAFTA</td>
<td>North American Free Trade Agreement</td>
</tr>
<tr>
<td>NMA</td>
<td>National Mining Association</td>
</tr>
<tr>
<td>OAS</td>
<td>Organization of American States</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OLI</td>
<td>Ownership, Location, and Internalization</td>
</tr>
<tr>
<td>RoA</td>
<td>Regime of Accumulation</td>
</tr>
<tr>
<td>SAP</td>
<td>Structural Adjustment Policies</td>
</tr>
<tr>
<td>TNC</td>
<td>Transnational Corporation</td>
</tr>
<tr>
<td>TSX</td>
<td>Toronto Stock Exchange</td>
</tr>
<tr>
<td>TSXV</td>
<td>Toronto Venture Stock Exchange</td>
</tr>
<tr>
<td>U.S.</td>
<td>United States of America</td>
</tr>
<tr>
<td>VoC</td>
<td>Varieties of Capitalism</td>
</tr>
</tbody>
</table>
Abstract

This paper explores the Political Economy of gold mining and particularly, the prevalence of Canadian mining firms in Latin America in relation to U.S. firms. In order to understand how and why Canadian TNCs have become so dominant, this research examined mainstream explanations from Transaction Cost Economics and Historical Institutionalism perspectives. The study argues that such explanations are limited due to their underlying biases and assumptions that produce reductionist analysis of complex phenomena. In an effort to improve upon such reductionist analyses, the current paper applies French Régulation theory and its concept of ‘mode of régulation’ (MoR) in order to analyze how distinct, yet interconnected ‘Institutional Forms’—mainly the ‘form of state’, ‘form of competition’, and the ‘insertion of the state into the international regime’—characterize Latin America’s gold mining industry. Using Guatemala and Peru as illustrations, the findings suggest that an analysis of the MoR of the gold mining industry provides a more holistic and systematic (yet not deterministic) explanation than TCE and Historical Institutional explanations, that acknowledges the totality of relevant actors and the confluence of historically situated political, social and economic forces that shape the gold mining industry, and Canadian firms’ place within it.

Relevance to Development Studies

This research is relevant to Development Studies as it links local and national processes with broader, international forces that, in conjunction, influence development. It does so through an examination of the gold mining industry in Latin America, which, while responsible for profound environmental, social and economic impacts at a local and national level, is also influenced by international processes motivated by both economic and political interests.

Keywords

Large-scale gold mining, foreign investment, Canadian and U.S. TNCs, Guatemala, Peru, French Regulation Theory, mode of régulation, Transaction Cost Economics, Path Dependency
Chapter 1: Introduction

1.1 The Problem

‘Pick almost any country in the Global South – from Papua New Guinea to Ghana, Ecuador and the Philippines – and you will find a Canadian-run mine that has caused environmental devastation or been the scene of violent confrontations.’

--Yves Engler (2012)

In its current form, large-scale gold mining is one of the most environmentally and socially unsustainable industries in the world. Yves Engler’s description of the more general global mining industry powerfully illustrates the grave repercussions of current and widespread mining practices, and openly acknowledges the main perpetrators responsible for such conflicts: Canadian transnational mining corporations. However, Engler’s observation only scratches the surface in characterizing the current global mining industry, and Canada’s role within it. The prevalence of metal mines throughout the Global South testifies to the ‘mining boom’ of the past two decades, during which mining investment has soared to record heights. A driving force behind this ‘boom’ has been the rush for one metal in particular: gold. While Canadian corporations are major players in mining in general, their influence has been most strongly felt in the gold mining industry. Canadian mining corporations have been at the forefront of gold mining’s unprecedented global expansion since the 1990s, and have led the charge to invest in the untapped resources of the Global South. Nowhere have Canada’s exploits been more apparent and hard-felt than in Latin America.

When considering these global and national trends, an important question arises: how and why have Canadian corporations come to dominate\(^1\) the gold mining industry in Latin America? This is a relevant question considering that, although present in the region, corporations from other historical mining nations like the U.S., for example, do not even approach the high levels of investment undertaken by Canadian corporations in Latin America. This is somewhat perplexing given that, at least on the surface, these two countries are both large, mineral-rich territories with mining histories dating back to the 1840s Gold Rush. Adding further intrigue is the history of the U.S., rather than Canada, as the most powerful and influential foreign presence in Latin American politics and industry.

1.2 Research Question and Argument

The problem this research addresses—explaining Canadian firms’ dominance in Latin America’s gold mining industry in relation to U.S. firms—is not new, but rather empirical. However, empirically, it has been conceptualized in many ways. Most mainstream explanations, focusing on theories of the multinational corporation or transaction cost economics, ground their arguments in the doctrine of neoclassical economics, which, due to a plethora of theoretical and ideological biases and assumptions, provides an under-complex

\(^1\) ‘Dominance’, describes the empirical fact that Canadian gold mining corporations are much more prevalent in Latin America than mining firms from other countries.
and unsatisfactory analysis. Even more critical accounts like Historical Institutionalism and path dependency, provide exceedingly deterministic explanations that undervalue human agency and overestimate institutions as promoters of change. This paper takes issue with these reductionist explanations within the current literature, and hopes to contribute a more detailed and accurate understanding of the problem. Specifically, the research question examined here is: why and how are mainstream explanations regarding Canadian gold mining corporations’ prevalence in Latin America in relation to U.S. corporations limited, and how can they be improved upon? In answer, this paper proposes an alternative explanation and conceptualization of the problem via the lens of French Régulation theory and its concept of ‘Mode of Régulation’, which overcomes the limitations of reductionist theories by providing a more holistic, complex and systematic analyse that acknowledges the historically situated economic, social and political interactions among numerous actors.

1.3 Justification of Research

The justification and relevance of the present research are twofold. First, responsible and effective activism that seeks to expose let alone challenge the unsustainability of large-scale gold mining and its deleterious impact on people and the planet requires a fuller, holistic understanding of the political, economic and social history, structures and policies that have produced Canada’s corporate mining dominance. Case-by-case analyses of conflicts inflicted on specific localities and communities – of which there are many – are imperative, but must be supplemented by systematic analysis of the international political, economic and social structures that underlie such conflicts. Second, what scant analysis exists examining these issues tend to provide reductionist depictions of real world phenomena. This paper attempts to overcome these limitations and provide a better understanding of the current gold mining industry.

1.4 Scope and Limitations

To reach a fuller understanding of Canadian dominance—as opposed to U.S. dominance—in the gold mining industry in Latin America, this paper examines Canadian and U.S. gold mining practices in Peru and Guatemala. Although Latin America is an immensely diverse region in terms of histories, cultures, political regimes, economies and geographies, the scope is limited to these two countries due to the constraints of time and space, and their particular importance in Latin America’s gold mining industry.

Another limitation of this research is the incomplete application of the Régulation theory approach. Due to a lack of time, space and access to data, I was only able to apply three of the five Institutional Forms that codify a MoR. Several key documents and primary sources were inaccessible, notwithstanding repeated and various attempts to access documents, corporate officers and government officials.

1.5 Organization of the paper

This paper is divided into five main parts. Chapter two provides a detailed contextual background and overview of the current large-scale gold mining industry in Latin America,
including empirical data depicting the relative roles of Canadian and U.S. mining
corporations in the region. Chapter three explores current mainstream explanations of
Canadian corporations’ dominance in Latin America. Specifically, I analyze Transaction Cost
Economics and Historical Institutional theories, examining their usefulness and limitations.
Chapter four describes the theoretical framework, methodology and method used in the
current research. In this section I provide an overview of Regulation Theory, and explain
why it is useful to the study of the political economy of Canadian gold mining. Chapter five
provides a Régulationist explanation to answer the research question. This section provides
an in depth analysis of the MoR of the gold mining industry, specifying how three distinct
yet inextricably linked institutional forms cut across the different actors and domains in an
organizational field over the specified timeframe, between 1990 to the present. The
concluding chapter summarizes the findings of this study and offers different avenues
through which current research may be furthered and improved upon.
Chapter 2: Background and Historical Context

2.1 The Mining Boom

In the past two decades, there has been a dramatic increase in large-scale gold mining throughout the world. The industry’s unprecedented rise is due to a variety of factors. First, the widespread implementation of neoliberal policies—exemplified in the radical jump in Free Trade Agreements, Bilateral Investment Treaties, and new Mining Codes (among others)—has generated more favourable conditions for foreign direct investment (FDI) by opening borders to trade, reducing royalty and tax rates and lowering environmental and social standards (Gordon & Webber 2008: 66). These policy changes have been especially influential for the mining sector, because, as extractive industries necessarily consume their finite resource base during production, acquiring rights to land and new mineral deposits is the primary means by which firms establish their competitive position (Bridge 2004: 407). Consequently, as Bridge explains, ‘…increasing the supply of land available for exploration and development, liberalization during the late 1980s and early 1990s fuelled a rush to identify, acquire the rights to, and, in some cases, develop “word class” (i.e., long-life, large-volume, relatively low-cost) mineral deposits during the mid-1990s’ (2004: 407).

A second factor contributing to gold mining’s rise has been technological. Innovations in mining technology have improved extraction and processing techniques making gold recovery easier and more efficient. More specifically, these innovations include the introduction of carbon-in-pulp milling technology, improved large-scale bulk earth-moving vehicles, and other mining techniques, including constant innovation and increased use of open-pit mining and the cyanide leaching process, which enable the processing of vast amounts of soil in order to retrieve finely disseminated gold from the ore (Mudd 2007: 50-51).

Finally, the turn of the century has witnessed an historic increase in global gold prices as a result of rising demand for precious metals in emerging economies (particularly in East and South East Asia) (Bebbington et al. 2008: 898). The global price of gold more than sextupled between 2001 and 2011, starting at under $US 295 per ounce and peaking at a record high of around $US 1,900 per ounce in August 2011. The current price has fallen somewhat, hovering around $US 1,300 per ounce (Kitco: Gold Historical Data).

2.2 The Case of Latin America

Collectively, these processes of neoliberalization, technological innovation, and rising gold prices have fuelled a modern day gold rush by making previously unavailable or unattractive resources (because of political or economic risks) more accessible and financially appealing. Profit margins for mining investment have reached historical heights as the

---

2 The number of BITs and FTAs signed in the past two decades worldwide has more than doubled since 1995 (Anderson & Perez-Rocha 2013: 4). Since 1985, over 90 states have adopted new mining laws to increase FDI in the sector (Bridge 2004: 407).

3 The demand for gold in China rose 13% a year over the past five years (Stothart 2011: 37).
rewards now outweigh the risk by more than ever before. According to Bridge, ‘This repatterning of risk/reward ratios following liberalization has driven firms to reevaluate the geographical location (and diversity of locations) in which they invest’ (2004: 408). Consequently, ‘…Canadian…and American mining firms have increasingly sought to internationalize production by investing outside the traditional home region’ (Bridge 2004: 408). In fact, while mining investment in North America remained relatively stable throughout the 1990s, investment in Latin America, Africa and Southeast Asia skyrocketed (Ibid: 411-412). Nowhere was this more the case than in Latin America, where investment rose by 400% between 1990 and 2001 (Whalen 2011). By 2003, Latin America was, ‘…by far the leading region for mining projects…’ and remains the leading destination for global spending, attracting 25% of worldwide investment4 (Gordon & Webber 2008: 68; SNL Metals Economics Group 2013: 1). Data for 2003 showed that gold attracted roughly 66% of the total exploration activity in Latin America (Gurmendi et al. 2003: 1.5). Today, ‘Gold [remains] the top Latin American exploration target for the third consecutive year…’ (SNL Metals Economics Group 2013: 1).

A country-specific analysis shows that Peru and Guatemala are prime examples of the increase in gold production within the region. For example, while ranked 20th internationally in gold production in 1990, by 2012, Peru became the sixth largest gold producer in the world (and largest in Latin America) and now has the world’s second ranked gold mine—the Yanacocha mine (Gold Investing News 2013; Gurmendi et al. 2003: 1.10). While smaller in geographical size, population and comparative gold production, Guatemala’s mining industry has become an important sector in the country. Guatemala’s 29 metal mining licenses and 121 metal exploration licenses have increased by 1,000% since 1998, and Guatemala has become the largest producer of gold in Central America, producing more than all the other countries in the region combined (Dougherty 2011: 3; GMT 2012: 1).

2.3 The Role of Canada

Historically, and to some extent currently, TNCs from relatively few countries—most notably, Canada, the U.S., Australia, South Africa, and Russia, and increasingly China, Indian, Brazil and Southeast Asia—have made up the gold mining industry (Bebbington 2009: 8). However, from this elite group of mining countries, Canada has become by far the most dominant and influential, as it boasts the largest mining industry in the world (Gordon & Webber 2008: 70). This is evidenced by the sheer number of Canadian mining corporations in relation to other countries. Canada has five of the ten largest gold-producing mining corporations in the world.5 In contrast, the U.S., another historically big mining nation, has just one (Brown 2013). Moreover, in 2010, 298 of the 618 (over 48%) mining companies (not just gold) with explorations budgets of at least US$3 million—and roughly 75% of all mining and exploration companies—were Canadian, more than any other country (Drohan 2010: 5; Drake 2012). Canadian corporations’ dominance of the mining industry is

4 Mexico, Chile, Peru, Brazil, Argentina, and Colombia accounted for the majority of investment.

particularly evident in gold mining. Taken together, the 298 large Canadian mining corporations allocated 64% of their budgets to explore gold (Drake 2012).

In addition to their superiority in number, Canadian mining firms also have a ‘much greater outward orientation’ than companies based in other countries. The past two decades have witnessed Canadian corporations’ FDI in non-OECD and non-EU countries rise substantially as firms seek to invest ‘…where reserves are relatively unexploited, governmental intervention minimal and environmental labor regulations weak’ (Özkaynak & Rodriguez-Labajos 2012: 7). In particular, ‘…after Canada, Latin America has become by a wide margin the region of the world in which Canadian companies are most active in mining exploration and development, where they spend roughly one-third of the total value of exploration in the region’ (Gordon & Webber 2008: 70). Not only did Canadian investment into non-NAFTA countries in Latin America sextuple from 1990 to 2002, but also, throughout the past decade Canadian mining corporations’ FDI increased from $30 billion in 2002 to $210 billion in 2011 (Engler 2012). The region now harbours four of the top ten (and eight of the top 18) locations for Canadian corporations’ foreign exploration investment, as they have interests in roughly 1200 mineral properties, ‘making Canada one of the largest investors in the region’ (Gordon & Webber 2008: 70). Furthermore, of the ten countries where the ‘larger Canadian-based companies’ had their greatest exploration budgets, six were in Latin America (Drake 2012). Canadian companies also have an interest in nearly double the number of their foreign mines, refineries, smelters, and advanced projects in Latin America (over 70 in total) than they do in any other region of the world (Gordon & Webber 2008: 71). Guatemala is a particularly shocking example of Canadian mining corporations’ dominance in Latin America, as eight of the nine foreign firms operating there are Canadian (Dougherty 2011: 3). Similarly, while Peru’s largest gold mine belongs to the U.S.-based Newmont Mining Corporation, the country also contains a number of Canadian-owned gold mines, and is the third Latin American destination for Canadian mining corporations’ investment (Drake 2012; SNL Metals Economics Group 2013: 1; Patterson 2013).

In addition to harboring the most gold mining corporations in the world, Canada is home to the Toronto Stock Exchange (TSX) and the Toronto Venture Stock Exchange (TSXV). In 2011, these two stock exchanges financed 90% of all global mining equity deals by number (and 39% by value) and registered 58% of the world’s mining corporations (Canadian Chamber of Commerce 2013: 17). As such, according to a report by the Canadian Chamber of Commerce, in addition to exploration, Canada is the clear global leader in mining finance (2013: 5).

### 2.4 The Role of the U.S.

At first glance, the dominance of Canadian corporations, particularly in Latin America, is puzzling, especially when one considers the United States’ claim to one of the strongest mining industries in the world and its historical hegemony in the region. Although mining is not the economic backbone of the U.S., it still plays an important role in the

---

6 The North American Free Trade Agreement (NAFTA) between Canada, Mexico and the US.

7 Mexico, Chile, Peru, Brazil, Argentina, and Colombia.
economy. In 2012, mining contributed $225 billion to the national GDP and generated roughly $50 billion in tax payments to federal, state, and local governments (NMA 2012: 3). The mining industry provided 1.2 million jobs, with 416,000 people directly employed and 798,000 indirectly employed (NMA Fact Sheet 2012: 1). In fact, the U.S. has the largest mining supply sector in the world (followed by Canada) (Stothart 2011: 4). As such, in 2010, ‘metal ore mining generated $6.8 billion in direct labor income and $17 billion in total’ (NMA 2012: 16). In particular, U.S. metal mining production had a total value of $34.9 billion, with the largest contributor of that (roughly 36%) coming from gold mines (USGS 2013: 7). As the world’s third largest gold producer, accounting for 9.2% of the world total, the U.S. is undeniably a major player in the gold mining industry, raising the question as to why it has fallen behind Canada in the Latin American context (Stothart 2011: 103).

Another reason for puzzlement is that, historically, the U.S. and not Canada has been the most influential foreign power in Latin America. U.S. hegemony in the region has its origins in the idea of ‘Manifest Destiny’—the drive to unify a country spanning from the Atlantic to the Pacific—and was further substantiated by the Monroe Doctrine (of 1823) and its subsequent ‘Roosevelt Corollary’. These declared that the U.S. would not tolerate any European intervention in the Americas and reinforced the U.S.’s role as ‘international police’ in the region (Kinzer 2006: 64-65; Arias & Arias 1980: 33). These mark just the beginning of a history of U.S. intervention based on geopolitical, military and economic (corporate) interests that have led to war, CIA-supported military coups, and economic and social policies that favour the ‘needs’ of the few elites at the expense of the rest, among others.

Despite this history, Canadian and not U.S. corporations have somehow managed to take over the gold mining industry in Latin America. As of 2010, Canadian corporations accounted for the ‘dominant share, by far, of the value of all mineral exploration programs planned worldwide by the larger companies’, while the U.S. accounted for just 7% of the value of planned mineral exploration (Drake 2012). In 2009, the worldwide exploration budget for precious metals, base metals, and diamonds for U.S. companies was $444 million (with larger companies accounting for $395.3 million) while Canada had a total of $2,479.7 million (with larger companies accounting for $1,825.8 million) (Ibid: 5.13). Although these figures are representative of more than just gold, gold was the target of 51% of worldwide exploration budgets in 2010 (Stothart 2011: 40). As such, while these data demonstrate the importance of mining in these two countries and the integral part gold plays within the industry, they also, and most intriguingly, show Canada’s overwhelming dominance in mining investment in Latin America (See Appendix A).
Chapter 3: Exploring Mainstream Explanations

3.1 A Transaction Cost Economics Approach

The long history and current prominence of the U.S. gold mining industry, in conjunction with the U.S.’s longstanding involvement in Latin America, raise the question, ‘why are Canadian and not U.S. gold mining corporations so prevalent in Latin America?’ This question has been approached in a variety of ways. Indeed, there is no unanimous answer, but rather an array of arguments that each portrays its own biases and assumptions. This chapter analyses the two most mainstream explanations: from a Transaction Cost Economics (TCE) perspective, and a Historical Institutionalism perspective.

Perhaps the most mainstream explanations base their arguments in the neoclassical economics doctrine. These are theories that reduce their answer to the analysis of the organization and behaviour of multinational firms—characterized by the activities of rational actors and functional institutions that behave in an individualistic and self-interested manner to lower transaction costs. More specifically, these explanations emphasise TCE, and take the firm and transaction cost as the basic units of analysis.

Theories adhering to a TCE logic are based on the research of Coase (1937)—who first initiated interest in the concept of transaction cost—and Stephen Hymer—whose theory of the Multinational Enterprise (MNE) maintains that that multinationals only arise if they have a competitive advantage over their rivals (e.g. superior technology or lower transaction costs) (Markusen 1995: 173; Dunning & Pitelis 2008: 167, 169). However, while Hymer’s MNE theory emphasises competitive advantage as the main dictator of firms’ behaviour and organization, TCE approaches like ‘Internalization’ theory or John Dunning’s OLI framework, focus specifically on transaction costs in explaining firms’ vertical integration (or in other words, the ‘make or buy’ decision) (Williamson 2005: 42). Such theories follow the fundamental hypothesis of TCE: that ‘the development of a particular organizational form can be explained as the results of the efforts of rational actors to reduce transaction costs’ (Pierson 2000b: 476).

TCE’s firm-centric approach assumes that actors (both individuals and groups) behave according to the principle of bounded rationality—the notion that ‘…behavior that is extendedly rational but only limitedly so…’ (Williamson 1998: 30-31). Furthermore, TCE defines the firm as a ‘governance structure, which is an organizational construction’ and sees ‘governance [as] the means by which to infuse order, thereby to mitigate conflict and realize mutual gain’ (Williamson 1998: 32; Williamson 2005: 43). Accordingly, the organization and behaviour of firms depends on a variety of factors, but, in the end comes down to rational actors deciding in what way firms can best function—in terms of lowering transaction costs (Williamson 1975: 4).

---

3.1.1 A TCE Explanation

A TCE explanation of why Canadian corporations have flocked to Latin America, assumes that these firms acted to take advantage of lower transaction costs abroad. These transaction costs refer to the presence of vast, untapped mineral resources and the relatively low barriers to foreign direct investment, attractive tax regimes, cheap labor forces, and low enforcement of environmental regulations. Indeed in the cases of Peru and Guatemala, each country has relatively low royalty and tax rates, a large and cheap labor pool, and an historical lack of government enforcement of environmental standards, all of which combine to substantially lower the risk of investing in gold mining and subsequently lower corporations’ transaction costs. For example, the tax revenue as a percentage of GDP between 2000 and 2006 was 14.71 in Peru and 13.46 in Guatemala, well below the 35% average of OECD nations and the Latin American average of 16% (Kumar 2009: 6-7). Furthermore, Canada has a Bilateral Investment Treaty (BIT) with Peru, which, like most other BITs and Free Trade Agreements (FTAs) ‘...emphasize[s] a strong protection of investors’ rights...ensuring foreign companies can freely remit profits, abolishing preferential treatment for local businesses, applying a ‘light’ regulatory approach and providing incentives such as keeping wages low and offering low tax rates’ (Christian Aid 2009: 6). Although Canada has no treaty with Guatemala, since the 1990s, Guatemala has reformed its mining code ‘...in a bid to attract foreign investment by lowering royalty rates and/or offering various tax incentives’ (Kumar 2009: 6). Via the process of neoliberalization, Guatemala has one of the lowest tax and royalty rates for mining corporations, and radically increased levels of FDI.

In addition to explaining why Canadian firms invest in these Latin American countries, TCE also provides an explanation of why they have invested more than U.S. firms. Following a similar logic, one might infer that, while U.S. firms have some incentive to invest in Peru and Guatemala for the same reasons stated above, the expected benefits of investment for U.S. firms do not outweigh the costs by nearly as much as they do for Canadian firms. A TCE theorist might point to three primary reasons for this difference: Canada’s financial institutions, its domestic policy, and its foreign policy, all of which are geared to benefit the mining industry.

The financial support given to junior firms through the Toronto Stock Exchange is a clear advantage Canadian firms hold over U.S. firms. Junior firms are small enterprises that focus mainly on exploration and lack the financial capacity to enter into the production phase. According to Canada’s Chamber of Commerce, Canada is the ‘...global capital of mining finance’ (2013: 17). The report states that ‘Canada…and Toronto in particular have developed a significant competitive advantage in mining finance by developing a unique pool of expertise on the exploration and early-stage development of mineral resources’ (Ibid: 17). This is significant because finance is particularly important in the mining industry given the volatility of commodity markets and the risks associated with exploration that make it extremely difficult for junior firms to raise capital through banks or bond markets (Ibid: 17).

Connected to its financial advantage, is Canada’s abundance of junior firms, which provides another significant competitive advantage (Canadian Chamber of Commerce 2013: 21). Junior firms are extremely important in the mining industry as they control the exploration phase, and in doing so, feed the greater mining industry by selling projects to

9 The U.S. is party to NAFTA and CAFTA-DR (which includes Guatemala).
senior firms. Understanding their importance to the industry, Canada’s government gives tax breaks to junior firms with a ‘flow through shares’ policy that makes capital invested in domestic activity 100% tax deductible (Dougherty 2011: 5). The resulting concentration of junior firms has created a critical mass of larger firms in Toronto and Vancouver that encourage ‘world-beating business clusters’10 of suppliers and ancillary industries that give Canadian firms a competitive advantage over U.S. firms as they lower transaction costs and create a knowledge-based industry in the country (Canadian Chamber of Congress 2011: 22).

Additionally, a TCE theorist might argue that political support from embassies, foreign policy, the mining lobby, government institutions and individual politicians—including current Canadian Prime Minister Stephen Harper—further lower transaction costs of Canadian firms by reducing the likelihood that host governments’ would challenge corporate behaviour and support them in quelling any local uprising. In contrast, the U.S. government is much less vocal on mining issues, as the mining sector is much less important to the national economy. For example, whereas the Mining Association of Canada is the nation’s third largest lobbying group, the U.S. mining lobby (excluding oil and gas) is nowhere near as powerful11 (Vongdouangchanh 2013). Furthermore, unlike Canada, the U.S. Alien Tort Claims Act—although still undergoing a process of interpretation—has been used to sue socially irresponsible corporations accountable in U.S. courts (Cotula 2013). As such, even while it may be overzealous to conclude that the U.S. hinders its mining firms while Canada actively promotes theirs, it is fair to say that the support U.S. firms receive (mainly in terms of the legal and political environment) is less than that of Canadian corporations.

In sum, a TCE argument assumes that rational individuals make decisions based on the information (often incomplete or imperfect) available to them with the primary goal to make a profit by lowering transaction costs. From a TCE perspective, the benefits that Canadian firms have—including easier access to finance, closer connections to junior firms, ‘world beating’ business clusters, and political support from the Canadian government—lowers their transaction costs in comparison to US-based firms. This, in combination with the pro-foreign investment climate in Peru and Guatemala explains Canada’s dominance in the region.

3.2 A Path Dependency Approach

Using TCE concepts as a platform, Historical Institutionalism moves beyond the inquiry of present day conditions and explores the historical processes that led to Canada’s lower transaction cost in relation to the U.S., and the pro-FDI conditions in Peru and Guatemala. While various strands within Historical Institutionalism differ, they all generally rely on the concept of Path Dependency, which indicates that ‘…preceeding steps in a

---

10 Clusters are defined as, ‘…geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (e.g., universities, standards agencies, trade associations) in a particular field that compete but also cooperate’ (Porter 2000: 15).

11 The top spending industries on lobbying in the U.S. for 2012 were (in descending order): Pharmaceuticals/Health Products, Business Associations, Insurance, Electric Utilities, and Oil & Gas (OpenSecrets 2013).
particular direction induce further movement in the same direction…’ (Pierson 2000a: 252; Hall & Taylor 1996: 941). This paper focuses on one form of Path Dependence in particular, predicated on the concept of increasing returns, as this was the most prevalent in this literature to explain the phenomenon of study.

The concept of ‘increasing returns’ denotes that once a certain path is initiated, it becomes increasingly difficult and costly to change paths, because the relative benefits of staying the course (as opposed to changing the current activity) increase over time, and continually lead to further movement down the given path creating a process of positive feedback (Pierson 2000a: 252). The assumption of rational behaviour carries over from TCE, as Path Dependency maintains that actors will remain on the same path because changing course would be costly and irrational.

The idea of Path Dependence and increasing returns has also been applied to countries that dominate particular industries. As Pierson (2000a: 255) states, ‘Countries that gain a lead in a particular field, for whatever reason, are likely to consolidate that lead over time. The result is a high degree of specialization. Even countries with similar initial endowments develop divergent areas of economic strength. Comparative advantage is not simply given, it is often created through a sequence of events over time.’

This particular notion of path dependency represents another mainstream explanation of how and why Canadian mining firms are more prevalent in Peru and Guatemala than U.S. corporations.

### 3.2.1 A Path Dependency Explanation

A Path Dependency explanation would maintain that specific choices and occurrences early on and throughout Canadian history—such as the discovery and exploitation of minerals in Canada itself, and the subsequent choices to implement financial and social policies that prioritized the mining industry over others (based on rational decisions to sustain economic growth)—initiated its current path of economic reliance and specialization in the mining industry. In an interview, the president and CEO of the Association for Mineral Exploration British Columbia, Gavin Dirom, cited five factors that explain Canada’s dominance in the mining industry, that fall in line with a path dependency argument (Lupick 2013). Dirom explains that the industry’s long history in Canada, dating back 150 years to the Gold Rush, led to the formation of business clusters that promoted a mining-based economy. Consequently, the industrial component of mining grew alongside complementary academic institutions—which provided research, innovation and experts in the field—as well as legal institutions—characterized by law firms specialized in ‘helping mining firms secure financing, navigate regulations or conduct mergers and acquisitions’ (Canadian Chamber of Commerce 2013: 18). Furthermore, financial institutions, such as Canada’s two stock exchanges (the TSX and the TSXV), have provided the necessary venture capital and penchant for high-risk investments supporting mineral exploration, and further bolstered Canada’s mining business clusters.

Finally, Dirom suggests that the Canadian government has also played a role in making mining a central aspect of the Canadian economy, furthering the country’s path towards economic reliance on mining. Indeed, a path dependency explanation would hypothesize that the Canadian government’s history of using public policy and influence to
benefit the mining industry is the result of a process of increasing returns in which it is has become more cost effective for the state to support the mining industry—due to the extensive business clusters that depend on the industry—rather than breaking from its current path. As such, since the Gold Rush, subsequent decisions and circumstances have led to Canada’s current policies and political support of the mining industry—as evidenced by its flow-through shares tax policy, the House of Commons’ voting down Bill C.300 in 2010, and Canadian embassies’ and government agencies’ (e.g. Export Development Canada), habitual support (both politically and financially) of even controversial mines throughout Latin America owned by Canadian firms.

This argument appears very similar to the TCE explanation above. Indeed, Dirom states that, ‘These five pieces…’ which lower transaction costs for Canadian firms as mentioned previously, ‘…come together in a very unique way here in British Columbia and Vancouver…’ suggesting a TCE-like emphasis on competitive advantage. However, where these arguments clearly differ is in the explanation of how these advantages came into existence. As Dirom concludes, ‘It’s hard to replicate or see those five pieces anywhere else in the world’ (Lupick 2013). From a path dependency view, Canada’s uniqueness is difficult to replicate because it did not happen overnight, but rather comes from a long history of occurrences and rational decisions that pushed Canada down this specialized path. This differs from a TCE perspective, which focuses on current transaction costs without looking into the historical context from which they came.

Although the U.S. and Canada’s mining industries started from a similar historical point—Gold Rushes spaced only a few years apart—Canadian institutions reinforced the supremacy of mining as one of the pillars of the national economy through a process of increasing returns. Natural abundance of resources led to business clusters, which became more and more robust as the cost of changing paths—in this case promoting another sector as the backbone of the economy—became greater and greater. In contrast, in the U.S. mining remained a significant, but not integral piece of the national economy. Consequently, through a different process of increasing returns, the U.S. produced fewer mining clusters and had less dedication by academic, legal, and financial institutions to specialize and promote gold mining, as other sectors—such as manufacturing and finance among various others—became more prominent (Bureau of Economic Analysis 2013). Canada’s advanced domestic mining industry allowed it to take advantage of the various factors—rising gold price, technological innovation, and the proliferation of neoliberal policies—that came together during the 1990’s to induce the current gold rush, propelling Canadian firms into the lead in terms of mining investment in Latin America.

Correspondingly, a path dependency argument also points to historically specific phenomena in Guatemala and Peru that led to the current conditions in which they came to accept Canadian and U.S. transnational corporations’ investment. Both have histories of mineral extraction since before colonization and large gold reserves. These factors, and their historical willingness to exploit their resources led both countries down a path of mineral extraction. In Guatemala, although mineral extraction was limited during the civil war, mining was already a part of the economy. Aided by external shocks, like the decline of its agricultural and maquiladora industries in the 1980s and 1990s, the government—through a

---

12 Canadian Bill C-300 would have held Canadian corporations accountable for their environmental and human rights violations abroad (Kamphuis 2013: 1468).
process of increasing returns—encouraged mining investment, which explains Guatemala’s current low royalty and tax rates, and overall beneficial conditions for foreign corporations. In Peru, mining has historically been a large sector. With the necessary institutions and infrastructure already in place, the end of its civil war and external shock of neoliberalization, led to increased mining as Peru opened its boarders to foreign investment.

3.3 A Varieties of Capitalism Approach

Falling under the broad banner of Historical Institutionalism, the Varieties of Capitalism (VoC) approach, provides yet another explanation. While not incorporated into the current analysis due to lack of space, VoC is worth briefly mentioning, as it is an amalgam of the TCE, firm firm-specific analysis, and an increasing returns, Path Dependency analysis and provides a more complex, ‘firm-relational’ perspective. Like TCE, the VoC approach proposed by Hall and Soskice places the firm at the center of their analysis, as they are ‘…the crucial actors in a capitalist economy’ (2001: 5-6). However, in contrast to TCE theories, a VoC approach takes a relational view of the firm that acknowledges the interaction between firms and non-firm actors, as well as the role of historically situated formal and informal institutions (Ibid: 6). Consequently, in line with Path Dependency, firms’ operations are contingent on their context and their historically situated relations with cultures, institutional structures and organizations (Ibid: 9, 13-15).13

13 For more information on VoC read: Hall & Soskice (2001); Boyer (2005); Kang (2006); and Schneider (2009).
Chapter 4 : Theoretical Framework, Methodology and Method

4.1 Theoretical Framework: An Overview of Régulation Theory

Régulation Theory was first initiated as a critique of neoclassical economics in the 1970s, and aimed to provide an alternative analysis of capitalisms without succumbing to the biases and assumptions of mainstream, ‘scientific’, economic theory predicated on ideas of rational agents divested of social and political influence, market equilibrium, and historical indifference. Indeed, Regulation theorists agree that ‘…neoclassical economic theory ignores not only the historical aspect of economic laws, but also the fact that the very substance of economic relations is social—in other words, composed of socially instituted forms’ (Nadel 2002: 32). Therefore, the principle goal of Régulation theory is to address these theoretical limitations. According to Michel Aglietta, the theory accomplishes this through the analyses of ‘the transformation of social relations as it creates new forms that are both economic and non-economic, that are organized in structures and themselves reproduce a determinant structure, the mode of production’ (1979: 16).

An important aspect of Regulation theory is its holistic and detailed analysis of real world phenomena that acknowledges that the social, political and economic are inherently integrated within each other (Boyer 2000: 279). This acknowledgment of economic actors as socialized and political beings challenges the neoliberal hypothesis of self-serving rational choice, and supports the notion of ‘situated rationality’, which appreciates that markets are inserted ‘into a series of institutional arrangements that socialize both information and behaviour and restricts the rationality of agents to available information and cognitive abilities…’ (Boyer & Saillard 2002: 41).

Another key aspect of Régulation theory is its Marxian conceptualization of capitalism as inherently contradictory in that, any configuration of social, political and economic relations under a particular regime of capital accumulation will inevitably create tension and disequilibria (rather than equilibrium) and eventually produce conflict (Nadel 2002: 30-31; Boyer & Saillard 2002: 41). Within this framework, Régulationists do not view social relations as static nor as a given. On the contrary, ‘…regulation theory adopts a well-tempered ‘hol-individualism’, on the basis of which it considers collective actors and institutions, which are viewed as preexistent—in other words, formed by historical past’ (Boyer 2002a: 3). As such, Régulation theory accounts for the temporal influences on social relations by acknowledging that such relations are produced within an historical context.

This ontological belief is tied to the equally important notion of Régulation theory, that, what exists does not do so automatically, but must be produced and reproduced (Aglietta 1979: 12). Régulationists maintain that social relations between actors are organized through the formation of a collection of economic and non-economic institutions that then reproduce social relations. This reproduction yields both intended and unintended consequences (social relations), which influence actors’ behaviour, as they recursively impact the nature of institutions, creating a cyclical process of co-production and reproduction.

This concept of ‘reproduction’ in Régulation theory is accompanied by that of ‘rupture’, which describes the necessary transformation of social relations and institutional
reform that occur when the crisis produced by a given mode of production can no longer be managed (Aglietta 1979: 19). Therefore, a mode of production is characterized by the crises it produces and the ways such crises are managed through the reproduction of social relations. The rupture (identified as crisis) and reproduction (meaning the overcoming of said crisis) of social relations are not mutually exclusive, but rather coexist within a hierarchical and constitutive relationship (Ibid: 12). Indeed, continual ruptures in the reproduction of social relations are inherent in the capitalist accumulation of capital and require the constant re-modification of social relations to overcome such crises. Consequently, any mode of production, does not imply identical reproduction, rather it suggests inscription in historical time…” (Boyer & Saillard 2002: 43). According to Régulation theory, this process of managing crisis through the constant production and reproduction of social relations through a variety of historically defined institutions is known as the ‘mode of régulation’, which, in conjunction with a ‘regime of accumulation’, define a given ‘Mode of Development’ (Ibid: 41).

4.1.1 Regime of Accumulation (RoA)

An accumulation regime summarizes the growth model of an economy—characterized by the ‘social and economic patterns that enable accumulation to occur’—in a specific period of time. Accumulation regimes can either be ‘extensive’—in which capitalist development spreads to new markets and different ‘spheres of the economy’ without altering conditions of production—or ‘intensive’—in which conditions of productions are changed to increase the productive capacity of laborers (Juillard 2002: 154). Furthermore, RoA can be defined by three factors. The first is ‘…the nature of technical change in the extent to which it may affect productive sectors differentially’ or in other words, how technological innovation contributes—ranging from a determining factor to an inconsequential factor—in the accumulation of capital. The second is, ‘…the level of contribution of wage income to the dynamic of the means of consumption section…’—for example, whether inequalities stabilize or increase as they contribute to the accumulation process. Finally, the RoA can be defined by ‘…the degree of extraversion of the economy…’ that is characterized by the export section of the economy and how it relates to the other productive parts of the economy (e.g. imports and domestic production/consumption) (Juillard 2002: 158). More generally, every growth model is guided by particular social relations organized within a set of institutional forms that collectively codify a MoR (Ibid: 153).

4.1.2 The Mode of Régulation (MoR)

The MoR is a fundamental aspect of Regulation theory, and the principle concept used in the analysis of the present research. According to Boyer and Saillard, ‘A mode of regulation establishes a set of procedures and individual and collective behaviour patterns which must simultaneously reproduce social relations through the conjunction of institutional forms which are historically determined and supported by the current accumulation regime’ (2002: 41). More specifically, a compilation of five ‘institutional forms’ that work in concert to ‘structure the realm of production, exchanges, money, distribution and consumption’ codify the MoR (Nadel 2002: 33). They are: 1) the monetary and financial regime, 2) the wage-labour nexus, 3) the form of competition, 4) the form of the state (relationship between the state and the economy), and 5) the insertion of the state in the international system. It is the combination of these institutional forms, which are individually
distinct and yet inextricably interconnected, which reproduce social relations, ‘support and steer’ a given RoA, and also ‘[ensure] the compatibility of a set of decentralized decisions, without requiring agents to internalize the principles governing the overall dynamic of the system’ (Boyer & Saillard 2002: 41). A MoR dictates the rules of the game, reduces the information that agents need to assemble and analyze, restricts ‘strategic interactions’ between actors and monitors the solutions to recurring crisis (Boyer 2001: 83).

4.2 Methodology: Benefits of Régulation Theory

The French Régulation theoretical framework is useful to explain why and how Canadian gold mining firms have become so prevalent in Latin America in relation to U.S. corporations because it provides a holistic and systematic (yet not deterministic) explanation. In doing so, Régulation theory avoids the pitfalls of mainstream explanations. Indeed, according to Boyer and Saillard,

‘The purpose of the whole conceptual apparatus of institutional forms, accumulation regimes and modes of régulation is to overcome methodological individualism’s inability to deal with the basic economic institutions of capitalism (by reducing them to forms of market exchange) and Marxist structuralism’s inability to analyse change, particularly during major crisis’ (Boyer & Saillard 2002: 38).

In other words, Régulation theory strives to analyse complex economic, political and social processes without resorting to the reductionist explanations of such phenomena that TCE and Historical Institutionalism provide.

4.2.1 Limitations of Mainstream Explanations

A TCE explanation is problematic because of its underlying assumption of rational behaviour, the functionality of firms and institutions and its failure to incorporate history into its analyses. The assumption of self-interested rationality ignores the role of agency and reduces economic agents to automatons. TCE dismisses the many social relations, norms, rules (both written and unwritten), beliefs and overall processes of socialization that influence behaviour and diminishes the roles of non-firm actors. For example, TCE reduces its explanation of firms’ investments in Latin America to purely economic criteria based on cost efficiency, and ignores the political interests and social norms of various local national and international groups that have combined to make Guatemala and Peru so pro-mining and pro-FDI. Similarly, when explaining Canada’s dominance, TCE ignores the political interests, lobbies, and social norms that allow for and fuel different policy choices and financial institutions in the U.S. and Canada that go beyond individual firm’s rational decision to pursue economic efficiency.

Focusing only on firms’ current transaction costs, TCE disregards the historical processes that produced them in the first place. The current differences in policy, financial regimes, and other institutions that give Canadian mining firms’ a cost advantage did not occur in a vacuum, but were produced through historically situated processes. Historical, political, economic, social, and physical circumstances—such as the development of mining-related business clusters, financial expertise, economic dependence and national geographies—led Canada to emphasize their gold mining industry while other industries took the lead in the U.S. (e.g. finance, energy and manufacturing). As Pierson states, ‘Rather
than assume relative efficiency as an explanation, we have to go back and look…’ and to conduct an ‘…investigation of history, if only to evaluate the validity of functionalist assertions’ (2000a: 264). Conducting such an investigation of history shows that, while transaction cost undoubtedly influences the organization and behaviour of firms, it is but one piece of a more complex puzzle.

In contrast to TCE, Path Dependency emphasizes historical context and temporality in defining corporations’ behaviour. However, it seems ‘too deterministic in that once the initial choice is made, then the argument for future development becomes mechanical’ (Kay 2005: 566). The concept of increasing returns assumes the entrenchment of stability with less and less possibility of change and as such, offers ‘…little insight into the conditions under which paths may change…” (Crouch & Farrell 2002: 5; Pierson 2000a: 265). To correct this, Path Dependency theorists have developed concepts like ‘learning processes’, in which actors learn from the intended and unintended consequences of a certain path, and make incremental changes (Pierson 2000a: 261). However, like TCE, this assumes rational choice and does not account for context—meaning the social and political forces that influence behaviour.

Path Dependency explanations of the mining boom in Guatemala emphasize the rational decision of the Guatemalan state to promote mining in response to the sudden end of the civil war and to fill the economic void left by the country’s declining agricultural and maquila sectors. However, this fails to take into account the political underpinnings and economic interests influencing the Peace Accords and the new mining code, like the pressure from international financial institutions, foreign powers, and domestic forces (e.g. national elites and the guerrilla movement). Similarly in the case of Peru, Path Dependency’s focus on increasing returns that led to a building up of the mining industry under neoliberalism, ignores the political and business interests both within and outside the country that pushed for neoliberal policies and benefited from the end of the civil war and subsequent privatization of Peru’s mining industry.

The increasing returns view of Path Dependency reduces the role of history to a determinant of future and rational behaviour and provides an over simplistic analysis of change. Even a more critical strand of Historical Institutionalism like the VoC provides reductionist explanations for change, as it ‘gives the impression that national economies change primarily in order to react to external shocks and that institutional infrastructure stays largely invariable’ (Boyer 2005: 539). As such, while useful to explain stability or ‘on-path change’, the VoC inadequately explains change that breaks the cycle of path dependency (Kang 2006: 15). Significantly, critics of path dependency do not denounce the importance of history in shaping current phenomena, but rather call for a more complex understanding of the role of history and the social, political and economic relations that influence behaviour (Crouch & Farrell 2002: 6).

### 4.2.2 Further Value of Régulation Theory and the MoR

The main value of Regulation theory and its concept of MoR is that it overcomes the limitations of TCE’s firm-centric perspective and Historical Institutionalism’s overly deterministic or firm-relational (in the case of VoC) analyses, which, although different, are each reductionist. It does so by providing a holistic approach that cuts across these individual domains highlighted by mainstream explanations. Indeed, the concept of MoR incorporates an analysis of firms, their many relations, the role of the states, sectors (e.g.
mining) and regions (e.g. Latin America), but unlike mainstream theories, emphases their interconnectedness, without reducing the analysis to one or the other. The further added value of the MoR is its systematic approach. It allows an analysis of the gold mining industry via its Institutional Forms, which require a clear definition and delineation of the actors, organization field, timeframe, and historical context related to the phenomenon of study. Contrary to Historical Institutionalism, it does this without being deterministic—taking both structure and agency seriously—and as such, is better suited to answer the research question posed in this study.

4.2.3 Critiques and Confirmation of a Régulation Theory Approach

Despite its benefits, Régulation theory is not without its detractors. Some critics challenge its treatment of agency and its over-general periodization. According to Bob Jessop, régulationist studies are often ‘one-sidedly institutionalist’, and ‘marginalise social agency’ in their analyses (2013: 9, 22). Jessop argues that Regulationists ‘…take for granted that such objects as the commodity form, the laws of profit, the wage relation, the state, and social formations exist’ and thus, risk functionalist analyses in that, ‘…the survival of a mode of regulation relies on its necessary correspondence to its object of regulation’ (1990: 194).

Although not entirely unfounded, this critique of Régulationists’ poor handling of agency misreads the theory. Boyer states, that to view Régulation theory as functionalist is to ‘…misconstrue the central question for regulationist research, which…is constantly involved in an examination of geographical and historical variations in the institutional arrangements that define capitalist economies’ (Boyer 2002a: 2). While Régulationists may not explicitly deal with agency, it is unquestionably an important aspect of the theory. The theory openly acknowledges that while social relations between agents are organized within institutions, agency is also fundamental in shaping such institutions.

Régulation theory has also been criticized for its periodization and exclusive reference to Fordism (Boyer 2002a: 2). Fordism, a term coined by Régulation theorists, describes the similar growth regimes of the post-WWII U.S. and France. Subsequent periods are defined as post-Fordism, and neo-Fordism, leading to what critiques describe as an over simplistic view of a much more complex and diverse variety of capitalist economies worldwide.

While historically accurate, this attack is no longer relevant. Regulation theorists now acknowledge that Fordism may have been the exception, rather than the norm (Boyer 2005: 514-515). As such, they have moved away from such periodization and on towards a much more complex characterization of varieties of capitalism. This willingness to adapt and rectify previous mistakes should be considered a strength rather than a weakness. Therefore, while these critiques must be taken into consideration, they do not do adequate justice to Régulation theory in its current form and should not detract from the usefulness and validity of the application of Régulation theory in this study, as it remains an improvement on mainstream explanations.

4.3 Method

Given the limitations of mainstream theories of TCE, Path Dependency, and VoC, this research uses the concept of MoR in French Regulation theory. As previously
mentioned, five institutional forms codify the MoR. Due to a lack of time, space, and access to data, however, this research only partially applies the concept of MoR, and analyzes just three institutional forms, specifically, the form of the state, its integration in the international regime, and the form of competition. Although all five institutional forms are relevant, these three are the most pertinent in answering why Canadian gold mining firms are so prevalent in relation to U.S. firms in Latin America.

4.3.1 The Form of the State

The form of state is a key concept for this research. It characterizes ‘the group of institutionalized compromises…[that,]…once they are made, create rules and patterns in the evolution of public spending and revenue, as well as the orientation of regulations’ (Eds. Boyer & Saillard 2002: 339). Régulation theory views the state as relational; thus it does not describe an ‘intrinsic essence’, but rather, a ‘conjunction of phenomena indication strong patterns’ (Delorme 2002: 121). Furthermore, the state is integrated, as it is simultaneously both a structure and an actor. As the state is a multifaceted entity, the economy cannot be reduced to a ‘state-market coupling’, but rather must be viewed as a composite of various and evolving constituents (Ibid). The concept, form of the state, thus acknowledges the ‘reciprocal presence of the state and the economy within one another…’ (Ibid: 117, 120).

Differences in the form of state are reflected in access to state-provided (or organized) collective services, taxation processes—including the broader fiscal and financial regime—and, also, how the monetary regime, forms of competition and wage-labor nexus are arranged (Boyer & Saillard 2002: 40). The form of state is particularly important in characterizing a given RoA, as the state is integral in defining the processes of capital creation and distribution. Analyzing the form of state is relevant in the context of TNCs’ involvement in the global gold mining industry as national differences in taxation, access to resources, and financial regimes are integral components of Canada’s recent domination in the global mining industry.

4.3.2 Insertion of the State into the International Regime

The insertion of the state into the international regime describes the relations between states and the ‘international forum’ (Boyer & Saillard 2002: 39). These relations are not merely market-based, but are also the result of political choices. ‘The idea of an international regime emphasizes that the many institutional arrangements governing trade, direct investment, financial flows and the organization of exchange cannot be reduced simply to market adjustments’ (Ibid: 40). It is these institutional arrangements, which reflect a series of political options, such as the ‘…choice of a commercial regime, exchange management or openness to foreign capital…’ among others, which define a ‘mode of insertion’ (Ibid: 39-40). As such, the international regime ‘refers to a set of principles, norms, rules and decision-making procedures which assure the stability and relative coherence of the behaviour of different agents within the international economy’ (Ibid: 40). These institutional arrangements exist at both a national level to describe countries, and at a sector-based level (e.g. to describe the gold mining industry) (Ibid). Understanding the insertion of states into the international system is key for the present analyses, as the spread of free trade and FDI flows following the widespread neoliberalization has been crucial in facilitating mining corporations’ unprecedented migration to Latin America.
4.3.3 Form of Competition

The concept of ‘forms of competition’ describes the complex organization of relations between producers (Boyer & Saillard 2002: 39). Forms of competition are determined by many factors, including ‘…unit size, company size, relations between [and within] companies involved in different stages of the production process, the role of the market and organization of co-ordination procedures, relations between finance and industry, buyer and seller relations in markets, the type of object exchanged in markets and the ratios of physical goods to services’ (Hollard 2002: 101). Since competition has a domestic and an international dimension, these variables must be analyzed within the global context, taking into account the influences of international variables such as foreign exchange (Ibid: 106).

The form of competition is especially pertinent to the study of the global gold mining industry as it is comprised of a network of firms of various types, sizes, and capacities, most of which are present in some phases in the production process but not in others, and which have unequal access to resources (financial, political and physical), which, in turn, depends on a variety of factors—including the form of state and its insertion into the international regime.

4.3.4 Wage-Labor Nexus and the Monetary Regime

An analysis of these three institutional forms does not exclude the concepts of the monetary regime or the wage-labor nexus, which are all invariably linked. However, for the purposes of this study, these two institutional forms will not be addressed individually. This is because, the wage-labor nexus—defined by the ‘…the set of legal and institutional conditions that govern the use of wage-earning labour as the workers’ mode of existence’ (Boyer 2002b: 74)—is less relevant for the current analysis. While the wage-labor nexus may play an important role in corporations’ investment in Latin America it is not the most important factor in differentiating why Canadian firms, rather than the U.S. firms, are so prevalent in Latin America. Similarly, the monetary regime—which describes the ‘…forms of money and the conditions of their issue, the organisation of their coexistence through a payment system, and their circuits of circulation’ (Guttmann 2002: 58)—is less relevant for the present research.

4.3.5 Organizational Field and Illustrations of Gold Mining as a MoR

In connection with the concept of MoR, this paper adopts the notion of an ‘organizational field.’ According to DiMaggio and Powell, an organization field describes, ‘…those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products’ (1983: 148). The concept incorporates an analysis of ‘the totality of relevant actors’—not just in a sector—and includes a characterization of both the geographical space in which actors interact (physical space) and, the ‘…communicative space among different social actors, which delimits values, social norms, sanctions and other aspects owing to the relational configuration between them’ (social space) (Machado-da-Silva et al. 2006: 38). It is this bridging of organizational and societal levels that makes it possible ‘…to work the complex interrelation between the environments of material, competitive and institutional resources in a more suitable way…’ (Machado-da-
Silva et al. 2006: 33). Therefore, this study’s focus on the organizational field includes all the relevant actors in the gold mining industry and the social forces that influence their interaction, from the period just prior to the mining boom in 1990 to the present.

Furthermore, to illustrate how the concept of MoR is better suited to explain Canadian firms’ prevalence in Latin America, this paper focuses on examples from Guatemala and Peru. These countries are not the cases in this research, but rather, illustrations of the MoR of gold mining. The case this research investigates is the gold mining industry as a MoR. Therefore, this research applies the concept of MoR—codified by three institutional forms—to analyze why and how Canadian gold mining firms have become so prevalent in Latin America in relation to U.S. corporations. Using the concept of organizational field, I will demonstrate how the MoR cuts across the domains left unaddressed by mainstream explanations, looking at the collective of relevant actors within a given period of time.

4.3.6 Data Selection and Collection

For this research, I collected data from both primary and secondary sources. I conducted an interview with an expert on the Canadian mining industry and the activities of Canadian transnational mining firms in Latin America from MiningWatch Canada. Despite attempts to contact and interview Canadian politicians (including two members of Parliament), experts on international gold investment, and corporate representatives, I was unable to reach certain individuals or was denied an interview. In addition to these primary sources, the majority of data for this research was collected from secondary sources such as scholarly publications, academic journals, NGO reports, online news sources, government documents, and corporate reports, among other resources. Again, some data was unattainable due to financial restrictions and limited access.
Chapter 5 : A Régulation Theory Explanation

5.1 The Gold Mining Sector

For any study, and particularly for the application of the concept of the MoR, it is important to define and describe the unit of analysis, which in this case, is the gold mining industry. In general, mine development and operation is highly capital intensive. It involves extremely high production costs, mainly for labor wages (of specialized workers), energy (fuel and electricity), and materials and supplies (e.g. advanced technologies) (Bridge 2010: 407; Stothart 2011: 59, 61). In order to profit and stay competitive, mining firms must find a way to control their costs, as they have limited control over their revenue, since, ‘…mineral prices are generally set through international trading and exchanges…’ (Stothart 2011: 60).

In the international gold mining industry, competition is characterized by the interaction and cooperation of a variety of actors on a local, national and international level (e.g. large corporations, junior firms, subsidiaries, and international and government institutions), all of which influence and are influenced by both foreign and domestic laws, regulations, and norms. The geological properties of gold greatly impact the form of competition. Gold’s relative scarcity (its limited supply) gives it a high value-to-volume ratio that causes intense competition, while its diffuse distribution within the Earth’s surface allows access by a greater number of firms (Dougherty 2011: 5). Although the exploration stage of mining operations is carried out by thousands of junior firms, they account for less than 1% of global production (Ibid: 4). In contrast, due to the high capital outlay and fixed costs, just 150 firms (or 4% of all gold mining companies) account for 80% of global production (Marketline 2013: 14; Dougherty 2011: 4). Competition between these senior firms is not as intense as in the exploration stage, as most of them have geographically diverse operations and diversification in their product portfolio (producing more than just gold) (Marketline 2013: 14).  

A further configuration of the gold mining industry requires an application of the concept of MoR that goes beyond the characterization of a particular sector, and which defines the necessary relations—the physical, economic, social and political characteristics—that shape the mining industry. The next section uses Guatemala and Peru to illustrate the MoR of gold mining and explain how and why Canadian (and not U.S.) firms have come to dominate in the context of the current mining boom.

5.2 Explaining why Latin America

5.2.1 The Guatemalan Illustration

The importance of mining to Guatemala’s economy is not a new phenomenon. Gold mining existed prior to colonization. Throughout the past century, mining has continued sporadically in Guatemala, following ever-changing metal prices and conditioned by local

---

14 Barrick Gold has 26 mines across five continents. It produced 468 million pounds of copper and 7,421 thousand ounces of gold (Marketline 2013: 19, 23).
conflict (Castagnio 2006: 8). In all of Central America, the recurring disputes and conflicts of the past century stem from the great inequalities of land distribution that occurred during the early 1900s. At the end of the 19th century, a booming coffee industry helped shift control of land to a small minority of wealthy landowners. These land-owning oligarchies ‘…used the power of the state to pass Agrarian Reform laws dissolving the Indians communal ownership’ and dispossessing peasants of their land (Simon 1981). In Guatemala, coffee and banana production was primarily foreign-owned— with a large presence of the United Fruit Company—and benefited the minority elite. The Guatemalan oligarchy and corporate interests worked to maintain and even increase the drastic inequalities in land distribution—going so far as to support a CIA-led coup to overthrow popularly elected President Jacobo Arbenz, an agrarian reformer, in 1954 (Simon 1981). Following the coup, the growing social unrest and the exhaustion of political diplomacy led to a civil war that raged from 1960 to 1996. As this brutal conflict intensified (compounded by the Latin American financial crisis of the 1980s), Guatemala’s mining industry lay dormant until the signing of the Peace Accords and the introduction of a neoliberal regime that transformed Guatemala’s form of state and competition via its insertion into the international regime (Dougherty 2011: 9).

The Peace Accord brought radical economic and policy change, and became the launching pad for Guatemala’s integration into the world market through the process of neoliberalization (Dougherty 2011: 9). However, to say that the intensification of mining during the 1990s resulted from the end of violence and national policy change alone is too simplistic. These changes stemmed from a complex web of national and international economic and social processes and transformations serving particular economic and political interests. For example, in the context of a changing global economy, characterized by the declining agricultural sector, the increasing importance of finance and the emergence of neoliberalism as the dominant discourse, the traditional agroexport oligarchy of pre-civil war Guatemala was supplanted by an emerging ‘…transnationalized fraction of the elite…’ (Robinson 2000: 99). This ‘new’ elite, whose power resided in their control over the financial sector (tied to international banking), ‘…assumed its own profile and clashed with the old state-protected oligarchy over fiscal, tax, liberalization, and related policies’ (Ibid). The war made it impossible to establish the stability that transnational capital requires, but the Peace Accords allowed consolidation of the new financial elite and set the stage for the restructuring of the Guatemalan state and society through neoliberalization processes (Ibid: 102-103).

While following their own interests, Guatemala’s economic elite also catered to the interests of international forces pushing the neoliberal agenda. The neoliberal doctrine emerged as prescribed policy in Latin America via the Washington Consensus, advocated for by U.S. foreign policy-makers and implemented by International Financial Institutions (IFIs) like the IMF and World Bank. These IFIs attached macroeconomic conditions to their loans, requiring Guatemala to modify its policies and priorities, emphasizing free-markets, privatization and export-oriented economies (Kwon et al. 2009: S7; Rich 1990: 308). Despite their seeming economic neutrality, ‘…in practice, the IMF and World Bank [serve] powerful interests of western countries’ both directly and indirectly (The Thistle 2000). Therefore, the interaction of many actors both in and outside of Guatemala advanced the neoliberal agenda, which fit their historically situated, social, political and economic interests.

15 The Peace Accords also served the interests of the guerrilla movement who paid large financial and human costs during the violence.
As Dougherty points out, ‘One outcome of this neoliberalization was a renewed commitment to attract [FDI] in the mineral sector’ (2011: 9). Indeed, during the Peace Accords, the administration of President Álvaro Arzú, agreed on a new mining code, with support from various internal and external influences (e.g. the Guatemalan elite, the local mining industry and TNCs) (Dougherty 2011: 9). Enacted in 1997, the mining code exemplified Guatemala’s push for a neoliberal agenda, and was only reinforced by external actors like the World Bank, which directly supports mining investment as a key strategy for development and invested $45 million in Guatemala’s Marlin mine (Onorato, Fox & Strongman 1998: vi; Sarin et al. 2006: 4; Moore 2013, personal interview16).

Another factor spurring mining investment in Guatemala was the decline of the textile industry. After the Uruguay Round (1986-1994) and the decision to phase out the Multi-Fibre Agreement—the WTOs quota system for garment and textile exports—by 2005, Guatemala looked to other industries, including mining, to pick up the slack (Dougherty 2011: 9-10). In a ‘race to the bottom’ Guatemala, Honduras and El Salvador tried to outbid one another for FDI in mining and replace the lost revenue from textile production (Dougherty 2011: 10). The Arzú regime started an international campaign to promote Guatemala as an attractive destination to invest foreign mineral capital (Dougherty 2011: 10). This was reinforced when Guatemala joined CAFTA-DR in 2004.

Guatemala’s process of neoliberalization transformed the country’s form of state, and competition by fully integrating the mining industry into the international regime. The results were astonishing, as ‘Metal exploration licences rose from just three under Arzú to 26 under President Alfonso Portillo (2000-2004) and to 64 under President Oscar Berger (2004-2008) (Dougherty 2011: 11). This drastic increase mirrored the evolving tax and royalty policies in the country’s new mining code. The most important change was a reduction in the royalty rate for mining companies from 6% to 1% of net profits17 (Dougherty 2011: 9-10). In doing so, over the next three years, Guatemala gave up over US$28 million in mining royalties (Christian Aid 2009: 1). Guatemala is now among the countries with the worst tax and royalty regimes for their mining sector and has become one of the lowest-cost gold producers in the world. Not only do Guatemalan taxation laws provide a variety of exemptions and loopholes, but also, Guatemala has a terrible track record in tax collection18 (Christian Aid 2009: 5, 10).

Guatemala’s form of state is also characterized by a history of weak environmental standards and regulatory enforcement. In fact, during the Berger presidency, witnesses testified that the administration prohibited the rejection of environmental impact studies for mining projects, as Berger intended to promote mining at all costs (Dougherty 2011: 11). These processes led to an inundation of TNCs that altered the form of competition in Guatemala’s mining industry, and further impacted its form of state by giving the corporations major influence in Guatemala’s political arena.

16 Personal interview with Jennifer Moore, Latin America Program Coordinator for Mining Watch Canada, via Skype, 6 September 2013.
17 It also increased the limit on the size of mining concessions and combined exploitation and exportation license procedures to make it easier for Corporations to attain them.
18 In 2008, Guatemala collected only 11.3% of its GDP in tax (OECD nations average 35%).
5.2.2 The Peruvian Illustration

Like Guatemala, gold mining has played an influential role in Peru’s economy since the Pre-colonial Inca civilization. Prior to 1990, gold production was dominated by informal, small-scale mining operations and medium-scale enterprises (Burry 2005: 226). However, the industry went through radical changes over the second half of the 20th century, a period ‘…marked by political upheaval and economic chaos’ (Burry 2005: 222).

Following the military coup in 1968, General Juan Velasco Alvaredo rose to power and launched sweeping political and economic reforms that included agrarian reform, the implementation of social programs, a dedication to ISI, and the nationalization of Peru’s major industries (including mining) in an attempt to end Peru’s dependency on foreign influence (Burry 2005: 222; Torres 2005: 201). However, by the 1980s, this ‘Peruvian experiment’ was failing as ‘…successive oil shocks related to international oil crisis, climate-related natural disasters, sharp decreases in exports, international disapproval, and unbridled international borrowing threatened the country’s economic stability’ (Burry 2005: 222). By the mid-1980s, the state had defaulted on its debt, causing the IMF to refuse approval of further international loans (Torres 2005: 202). Growing social unrest due to increasing poverty and inequality only compounded Peru’s economic crisis and led to the outbreak of civil war. By 1990, Peru’s annual inflation was above 7500%, the GDP had decreased by more than 30% over three years and the violence had intensified (Burry 2005: 222). Dissent permeated Peru’s government as the political elite disagreed on how to address this economic crisis, with an emerging fraction advocating free market-oriented liberalization that challenged the traditional ruling political-economic elite (Torres 2005: 200). This set the stage for the election of President Alberto Fujimori in 1990, ushering in a new political and economic era in Peru, and drastic changes in the country’s form of state and competition, especially in relation to the mining industry, through a process of neoliberalization.

In this context of economic crisis, social unrest, and political segmentation, president Fujimori came to power with the goal to restore economic stability through the implementation of neoliberal Structural Adjustment Policies (SAPs) and a strong, authoritarian government (Torres 2005: 203, 208). Fujimori found allies among the Peruvian military, large business owners, IFIs, donor countries and TNCs (Torres 2005: 203). Each with different economic and political interests, these actors sought to benefit from the ‘…reintegration of the Peruvian state into the international financial system…’ (Torres 2005: 201, 204). As in Guatemala, in order to attract investment Fujimori made it a priority to end the guerrilla rebellion (in this case through violence), which was ‘…unfavourable when attracting investors’ and threatened Peru’s capitalist elite (Torres 2005: 202, 207).

However, neoliberal policies were not simply imposed on Peru by outside pressures. A number of actors within Peru—such as economic elites and (often corrupt) government officials—also had vested interests and influence in such change (Torres 2005: 213-214). Many large-business owners supported Fujimori’s neoliberal model as they sought to benefit from a liberal market economy and the ability to transfer investments and merge with

---

19 Between the government and the Partido Comunista del Perú (PCP) (known as the ‘Shining Path’) (Torres 2005: 200-202).
international companies\textsuperscript{20} (Torres 2005: 208). Tellingly, ‘the radicalization of the [neoliberal] model in Peru surpassed the demands of the IFIs and donor countries’ (Torres 2005: 216). While, Fujimori’s reform did not go unchallenged by internal forces, such as the Peruvian parliament, the ‘autogolpe’ (or self-inflicted coup) on April 5, 1992 closed down parliament, suspended the autonomy of the judiciary and the central bank and laid the groundwork for the new constitution of 1993 that effectively squelched the opposition.\textsuperscript{21}

Peru’s neoliberal reform integrated the country into the international economy, ended the civil war, and restructured the economy and form of the state (Burry 2005: 222; Torres 2005: 205). In fact, ‘…the Fujimori administration opened all sectors of the Peruvian economy to [FDI] and lifted restrictions on remittances of profits, dividends, royalties, access to domestic credit, and acquisition of supplies and technology abroad’ (Burry 2005: 222). These reforms had important ramifications for mining sector in particular, as manifested in the new Mining Law of 1992, which aimed to ‘…[attract] foreign investment in the sector’ (Caipo et al. 2013: 9).

As a result, total investment in mining between 1992 and 2004 reached $9.8 billion, ‘…with gold production increasing fourfold between 1994 and 2005’ (World Gold Council 2011: 9). The regime privatized nearly all of the state’s mining enterprises\textsuperscript{22} so the vast majority of investment was from TNCs, which accounted for 75% of the capital flows emerging from privatization overall (Ibid: 5; Burry 2005: 226; Torres 2005: 211). In addition to the privatization of state assets, ‘more [new] mining claims…were filed between 1991 and 2003 than in the entire period of nationally recorded mining claims for the region (from the late 1800s)’ (Burry 2005: 231). Furthermore, a handful of large-scale operations, owned by a concentrated set of transnational enterprises came to dominate the industry, replacing the dispersed, small-scale mining that characterized the industry prior to 1990. ‘By 1995 the production of large transnational gold-mining operations surpassed the total production of all small and medium-size operations, and by 2000 accounted for 67% of all Peru’s gold production’ (Ibid: 226-227).

Currently, large-scale gold mining plays an important role in Peru’s national and local economy, as gold production has increased rapidly since the early 1990s (World Gold Council 2011: 16). The mining sector accounted for 60% ($16.3 billion) of Peru’s total export revenues in 2009 with gold representing $5.6 billion (in 2008). It accounted for 5.7% of the national GDP in 2009, growing 12.8% in the last five years (Ibid: 1, 10). The sector has also received a large portion of FDI inflows during the past decade (receiving 13% of the total FDI flow in 2011) (Caipo et al. 2013: 16; Burry 2005: 224).

\textsuperscript{20} Peru’s Buenaventura Company holds a 43.65% stake in Newmont’s Yanacocha mine, benefiting greatly from Peru’s free-market economy (World Gold Council 2011: 15; Oxford Business Group 2012).

\textsuperscript{21} This tactic was supported by the military, big business and was tolerated by the U.S., the OAS, and IFIs (Torres 2005: 204-205).

\textsuperscript{22} Mineral production accounted for by private operations jumped from 55% in 1990 to 95% in 1999. Between 1992 and 2000 more than 200 mining operations were privatized (Burry 2005: 225).
Peru’s mining taxation regime has also transformed since the 1990s. Although mining has been one of the largest taxpayers in the country throughout the last decade, Peru has one of Latin America’s worst taxation regimes as it provides generous exemptions and loopholes (Christian Aid 2009: 1). For example, Peru’s ‘taxation stability agreements’ prevent the government from altering the taxation arrangements for a specific corporation, allowing companies to benefit from Peru’s archaic tax law (Caipo et al. 2013: 11; Christian Aid 2009: 9). Furthermore, mining companies are able to deduct all costs associated with exploration and development. Peru’s accelerated depreciation rules, allow companies to recuperate their investment in five years via an annual depreciation rate of 20% (Christian Aid 2009: 8-9). Consequently, mining firms routinely declare annual losses and avoid paying taxes and Peru’s already low royalty rates (that range from 1-3% of revenues) (Caipo et al. 2013: 10).

Like Guatemala, Peru’s pro-mining taxation policy, is compounded by a history of weak enforcement of environmental and social regulations (Christian Aid 2009: 5). While Peru’s government has recently declared its commitment to ‘planning to strengthen environmental enforcement in the country’ (Caipo et al. 2013: 10) and promote socially ‘responsible’ mining, the industry has been associated with pollution, human rights violations and generally unsustainable practices (Christian Aid 2009: 5).

5.2.3 Explaining the Mining Boom in Guatemala and Peru

Using Guatemala and Peru as illustrations, it is evident that the changes in their MoR, were necessary to incite their current mining booms. While these institutional forms in Guatemala and Peru prior to 1990 were noticeably different, some similarities are relevant. Initially, neither country was well integrated into the international regime, and their forms of state and competition did little to encourage FDI. In Guatemala this was due primarily to the dominance of the land-owning oligarchy and the prioritization of non-mining industries as well as the 36-year civil war; in Peru, war, the government’s active nationalization of the mining industry and its aversion to foreign influence were significant. Similarly, although different social, economic and political processes led each country towards radical transformation, the changes themselves, characterized by the implementation of neoliberal policies, were much alike, and produced comparable results. Both countries’ post-1990 neoliberal transformation led to their full integration into the international regime with the end to civil wars, new mining codes, FTAs and BITs, and encouraged FDI, particularly in mining. Their forms of state became characterized by poor royalty and tax regimes, weak environmental and social regulation, and in the case of Peru, broad privatization of the industry. Whereas Peru already had a strong mining sector, the decline of the agriculture and textile sectors put new emphasis on mining in Guatemala.

As these institutional forms are interconnected, the changes in the form and insertion of the state into the international regime had profound effects on the form of
competition in each country’s mining industry and visa-versa. Indeed, the end of civil war, the promotion of FDI and reduced tax and royalty rates—along with technological improvements and increases in global gold prices—made previously undesirable reserves, suddenly profitable. These factors led to an increased presence of concentrated, large-scale projects owned by TNCs and a huge wave of junior firms, changing the competitive landscape. In turn, the form of competition of gold mining influenced their forms of state and insertion into the international regime. For example, the industry’s capital-intensive nature, its use of highly specialized technology and need for experienced workers also impacted state’s decisions to accept TNCs with more capabilities to fully develop mineral reserves (Kumah 2006: 317).

The current institutional forms in Guatemala and Peru were formed within each country’s historical context that produced a unique confluence of social, political and economic forces advocating for mining. However, while these forces and institutional forms are necessary, they are not sufficient to explain what has made Guatemala and Peru such hotbeds for gold mining. Indeed, an underlying factor for both countries remains their vast, untapped mineral reserves. Thus, it is both an ‘appropriate policy bundle’, which must be historically situated within multiple socialized actors’ economic, political and social interests, along with the ‘geological and geochemical qualities of [their] mineralisation’, which have contributed to Guatemala and Peru’s current mining boom (Dougherty 2011: 13). While these trends explain why both U.S. and Canadian firms have flocked to Guatemala and Peru, it fails to clarify why Canadian firms are more prevalent. To examine this phenomenon more explicitly, the following section analyses the MoR of the Canadian and U.S. mining industries.

5.3 Explaining Canadian Domination in Relation to the U.S.

Since the early 1990s the economics of gold mining has been ‘radically re-defined’, leading to ‘…an extra-ordinary renaissance in some countries such as… the United States…and Canada for about 20 years’ (Mudd 2007: 50-51). To understand these changes, we must first examine the history of the mining industry in each country preceding 1990—specifically looking at their forms of state, forms of competition, and insertion into the international regime.

Both Canada and the U.S. have produced gold for almost 150 years. Since the 20th century, gold mining in both countries has fluctuated due to volatile gold prices, technological innovation, economic policy-changes, and varying national and global historical contexts (e.g. the Great Depression and WWII) (Craig & Rimstidt 1998: 407-409; Mudd 2007: 50-51). Despite these similarities, there are key differences. For instance, while the U.S. government generally left the mining industry to its own devices, Canada’s government gave continual support for the industry, especially as gold prices fell, since it formed the entire basis of various local economies and was a substantial part of the national economy as well (Cranstone 2002: 14-15). Mining’s importance to the overall economy was much greater in Canada than in the U.S. In 1980, for example, the U.S. GDP (over $2767 billion) was much higher than Canada’s ($268 billion) and relied on many other industries in addition to mining (such as manufacturing and finance, among others) (UNdata 2013; 26 Via the Emergency Gold Mining Assistance Act of 1948 and tax incentives from 1983 to 1988.)

Since the 1990s, however, both countries’ mining industries have changed dramatically, particularly with regard to the boom of TNCs’ foreign investment in Latin America. The origins of both countries’ transformations lie in their changing institutional forms. These processes emerged during the mid-1970s through radical alterations in both countries’ insertion into the international regime via neoliberalization.

For the U.S., the 1950s and ‘60s marked a period of ‘embedded liberalism’ characterized by social and political constraints and a regulatory environment surrounding market processes and corporate activities (Harvey 2005: 11). However, by end of 1960s, embedded liberalism was on the verge of collapse as unemployment and inflation skyrocketed worldwide, leading to economic stagflation for much of 1970s (Ibid: 12). Solutions to the economic crisis centered around two ideologies, one pushing social democracy and central planning, and the other representing the interests of ‘…those concerned with liberating corporate and business power and re-establishing market freedoms…’ (Ibid: 13). By the mid-1970s, and the subsequent election of Ronald Reagan in 1980, the latter view prevailed.

The neoliberal agenda also fit the needs of U.S. investment banks, which were overflowing with the recycled ‘petrodollars’ from OPEC nations after the oil price hikes of 1973. These banks needed profitable outlets for their massive funds, which, due to the economic downturn in the U.S., could only be found abroad. Such investment required having ‘…open entry and reasonably secure conditions for lending…’, which was accomplished through neoliberlization (Harvey 2005: 27).

Canadian neoliberalism likewise emerged following the international economic crises of the 1970s and the subsequent ‘…shift in the balance of class forces and the defeat of the left, and in particular social democracy’ (Albo 2002: 48). This transformation led Canada from a MoR and RoA characterized by ‘permeable Fordism’ in the post-WWII-era to a regime of ‘continental neoliberalism’ (Carroll & Little 2001: 37-38). The former was characterized by ‘…growing investment and trade relations with the United States…mediated by state programs of regional and cross-class income redistribution…’ (Albo 2002: 50). In sharp contrast, the neoliberal transformation—predicated on policies of ‘continental integration’ associated with the Canadian-U.S. FTA—led to the emergence of financial monopolies with power over export-oriented industrial enterprises, reliant on forming international production networks through free trade (McBride 2005: 10; Albo 2002: 50; Carroll & Little 2001: 37-38).

Following a Régulation theory line of analysis, these shifts were not purely economic nor apolitical, but rather came out of a confluence of historically embedded political, economic and social factors. For example, although it was proposed as a solution to the economic crisis at the time, the ascension of neoliberalism under the ‘Washington Consensus’ was not a mere economic or technical fix, but rather, prevailed in the U.S. and Canada due to a series of choices influenced by particular political and economic interests in the given historical context. As David Harvey notes, ‘The crisis of capital accumulation in the 1970s affected everyone…’ including the economic and political elite within the U.S. and Canada, whose wealth plunged as their stocks, property and savings collapsed (2005: 14-15). This economic threat, in conjunction with the threat of communist and socialist movements across Europe, the call for widespread reforms and state interventions in the U.S., and the
welfare-state in Canada, pressured political and economic elites, who turned to neoliberalism as the necessary solution for reconsolidating their economic and political power (Ibid: 15). Business elites in both countries, ‘…desperately needed to reverse the policy direction of the government and the opinion of the public in order to inaugurate a more conducive political and economic climate for corporate interests and thereby restore their class power’ (Enoch 2007; Albo 2002: 51). Reagan and Canadian Prime Minister Brian Mulroney unleashed neoliberal policies characterized by deregulation, budget cuts, and especially in the U.S., attacks on trade unions (McBride 2005: 48-49; Harvey 2005: 25). These policy changes had profound impacts on both countries mining sector via their transforming forms of state and competition.

While the neoliberal onslaught was not as harsh in Canada—where labor unions, public healthcare and education (among others) survived—it had significant ramifications for Canada’s mining industry. Despite benefiting Canada’s domestic mining—particularly through the emphasis of self-regulation, replacement of mandatory standards with voluntary standards, and reduced liability of firms’ for environmental safety—neoliberalization made a more profound impact on Canada’s foreign mining (Prudham 2004: 353). According to Carroll & Little, ‘the single most important catalyst for [Canada’s neoliberal] transition was the “trade agreements” of 1989 (FTA) and 1994 (NAFTA)’ which granted unprecedented private sector rights both domestically and abroad (2001: 38). By 2000, ‘…Canada was no longer predominantly a recipient of [FDI], but now a provider of such investment on the international scene’ (Carroll & Little 2001: 44). It was within this context that the drastic increase in Canadian investment in gold mining in Latin America occurred.

Currently, both the U.S. and Canada are proponents of the neoliberal model. In addition to signing FTAs and BITs to promote their neoliberal agenda, both have also used government agencies, Development Banks, and other institutions, including embassies, to promote private investments in mining throughout Latin America. The Canadian International Development Agency (CIDA) is a particularly notorious example and has pressured foreign governments to pass pro-mining legislation that benefit Canadian corporate interests (Canadian Network on Corporate Accountability 2007: 2). Indeed, since it was folded into Canada’s federal Department of Foreign Affairs and International Trade in May, 2013 (overseen by advisors like the CEO of mining giant Rio Tinto Alcan), CIDA has taken on a more explicit role in advocating for Canada’s business interests abroad—especially mining (Payne 2013; CIDA 2011). Similarly, USAID has also played a fundamental role in shaping broader policy in Latin America. In Guatemala, USAID helped establish a New Right business association that actively promoted neoliberal restructuring (Robinson 2000: 106), and in Peru, USAID has partnered with Barrick Gold (Barrick Gold Corporation website), reinforcing the agenda of FDI in mining.

Government banks have also become instrumental players in the mining industry in the past two decades, providing crucial funding for mining projects (Bebbington 2009: 8). Export Development Canada and the U.S. Export-Import Bank have funded many controversial mines while promoting their nations’ trade and private sector investment abroad through government-backed loans, guarantees, and insurance (Canadian Network on

---

27 In Ontario, the ‘Common Sense Revolution’ deregulated the mining industry, substantially weakening weakened environmental standards, and creating a pro-mining environment (Prudham 2004: 352-354).
Corporate Accountability 2007: 1.1). Finally, Canadian embassies have used their voice and influence to support Canadian firms’ gold mining operations throughout the Americas. For example, on November 4, 2004, when a national Guatemalan newspaper reported that 95.5% of communities surrounding the Canadian-owned Marlin mine opposed the operation, the Canadian ambassador to Guatemala, James Lambert, published a counter article noting the benefits of mining for indigenous peoples, in a clear attempt to neutralize local dissent (Ibid: 2).

Each of these institutions has its own historically situated political, social and economic motivations for promoting the neoliberal agenda. Through the concerted activity of these actors, ‘The Canadian mining industry [has become] highly integrated into the global economy and is one of the few sectors where Canada has a strong external investment presence’ (Canadian Chamber of Commerce 2013: 15). The U.S. mining industry, by contrast, it is one among many U.S. sectors with international presence, but has not reached the same level of domination in Latin America. This trend can be explained by tracing and comparing the form of state and competition within both Canada and the U.S. as they have transformed via this process of neoliberalization.

5.3.1 Why Canada?

Perhaps one of the most important distinctions between the U.S. and Canada currently and even prior to the mining boom of the 1990s is the relative importance of gold mining to each country’s economy. In the past 20 years, Canada’s minerals and metals industry contributed between 2.7% and 4.5% to its GDP (Stothart 2011: 10). Equally important is the industry’s indirect economic impact on the Canadian economy. For example, ‘…mining accounts for over half of Canada’s rail-freight revenues and port tonnage’ and strengthens other businesses within the cluster, which, in 2011, was made up of 3,215 Canadian firms that provided ‘…technical, legal, financial, accounting, environmental and other expertise to the mining industry’ (Stothart 2011: 12-13). Furthermore, ‘Canadian mining firms with operations abroad benefit Canada through repatriated profits and taxes and, in some cases, by giving Canadian suppliers and services providers a foothold into new markets’ without which, national and regional economies would suffer considerably (Canadian Chamber of Commerce 2013: 15; Stothart 2011: 39).

The U.S. mining industry also contributes to the national economy, but accounted for just 1.5% of the national GDP in 2010 with just 19% of that (or 0.285%) coming from metal mining (NMA 2012: 3-4). In further contrast with Canada, mining is not as fundamental in providing indirect support to the U.S. economy, since many more influential and international sectors take on that role other than mining (Yuskavage & Fahim-Nader 2005: 71). While the U.S. currently produces more gold than Canada domestically, Canadian corporations are responsible for much of that production, as they own several large-scale operations in the country (Lewis 2010).

A further area of difference between the U.S. and Canadian forms of state is their mining taxation regime. The U.S. CIT rate is 35%, much higher than Canada’s CIT rate of merely 15% (Pricewaterhouse Coopers 2012: 19-20, 47). At a provincial level, tax rates vary significantly. However, comparing the two highest gold producing areas of each country, 28

---

28 In 2010, Canada’s mining industry (excluding oil sands mining) paid around $5.48 billion to the federal and provincial/territorial governments of Canada (Stothart 2011: 20).
Ontario and Nevada, is telling. Ontario’s mining tax for gold falls between a 5 to 10% rate, while Nevada’s Net Proceeds Tax for gold is slightly lower, falling between a 2 to 5% rate. An important caveat however, is that ‘Ontario mining tax is levied at rate of 10% on taxable profit in excess of $500,000 derived from mining operations in Ontario…’ and ‘…For a three-year period, the first $10 million of profits generated by a new mine or major expansion of an existing mine is exempt from tax’ (Ibid: 19-20, 47). So while Nevada has lower general rates, Ontario provides incentives for new projects with low profits, which largely benefits the ever-risky exploration process of junior firms. Furthermore, when one factors in that the U.S. lacks Canada’s flow-through shares legislation—which has raised $2.5 billion for Canadian mining corporations over the past five years alone—it becomes evident that Canada’s tax code benefits the mining industry more. The change in Canada’s form of state, or rather the continuance of the historical state-services in support of gold mining through tax incentives—currently in the form of its financial assistance for junior firms—gives it a competitive advantage (Hasselback 2013). This differentiates the two countries’ form of competition as the number of small firms at play in Canada is far greater than that in the U.S.

Canada also fosters easy access to its national mineral reserves. More than 90% of Canada’s surface rights and mineral rights are government-owned, and cannot be purchased, but only leased by individuals or firms (Natural Resources Canada 2011). This benefits firms as the Canadian government has one of the shortest timeframes for processing and approving mining licences and permits (an average of two years) (Tanton 2013: 3). In the U.S., by contrast, ‘…the owner of the surface land can also have the rights to extract minerals from underneath that land’ (International Energy Network). Because companies must deal with various private owners, as well as the ‘…unnecessary regulatory and political barriers [that] currently hamper the process…’ of developing natural resources, the U.S. has among the longest wait times in the world for approving mining permits (between four to ten years), and far behind that of Canada (Tanton 2013: 3, 8-9; Wilburn & Stanley 2013: 40). This difference characterizes the countries’ two distinct forms of state and their distinct forms of competition within their mining industries as regulatory patterns influence the time horizon for capital creation and the type of firms involved—as smaller firms may have less ability and incentive to wait—further explaining Canada’s dominance of junior mining firms.

The Canadian government also sets itself apart by actively and continually backing the mining industry both financially and politically. The Canadian government helps finance the mining industry, allocating over C$25 million to the Geoscience Initiative—to survey undiscovered mineral resources and develop new methods for exploring deposits—and $100 million to the Geo-mapping for Energy and Minerals (GEM) program (Gurmendi et al. 2003: 1.4; Wilburn & Stanley 2013: 38). Furthermore, as Jennifer Moore states, ‘…there is no doubt that Canada has stalwartly stood behind the mining industry to ensure that it is very hard to hold them to account’ (Moore 2013, personal interview). However, while it may seem that the U.S. has a much stricter foreign policy than Canada, the extent of its legislative

---

29 Ontario accounts for roughly half of Canada’s gold production (U.S. Global Investors 2012).
enforcement of such regulations is debatable, as Moore suggests, ‘Both the U.S. and Canada have ensured and helped to ensure corporate impunity’ for their actions abroad (Ibid).\textsuperscript{31}

Nevertheless, there is a distinction between the seeming indifference of U.S. foreign policy as opposed to the active enabling of Canadian policy. This view is further substantiated when one takes into account what Moore refers to as the ‘blurred line’ between government and private mining firms in Canada. Indeed, this line becomes even more obscured by Canadian politics’ ‘revolving door’, in which, “…former foreign ambassadors, former trade commissioners, [and] foreign prime ministers’ end up on the boards of directors of ‘almost any’ mining corporation,\textsuperscript{32} providing ‘their diplomatic voice, their way in, [and] their source of contacts…” (2013, personal interview). Due to this crossover between politics and the corporate realm, Moore explains, “…we have, certainly, in the last 20 years, seen tremendous harmonization with Canadian foreign policy with the mining sector’ (Ibid).

This overlap highlights how policy and economic interests are inherently intertwined with political and economic interests and how in Canada’s case, the mining sector, along with the financial sector—which also has huge investments in the mining sector—have come to dominate the national economy (Ibid).

From these comparisons, it is clear that the Canadian and U.S. positions in the international gold mining industry differ due to dissimilarities in their forms of state and forms of competition. The above examples demonstrate how differences in tax regimes, access to resources (through permits and licenses), public spending and foreign policies that characterize each form of state provide greater benefits for Canadian firms than for U.S. firms. These are inherently interlinked to differences in the form of competition, as the rules, norms and patterns of each form of state influence, and in turn are impacted by, which (and what types of) firms participate, and how they access resources. For example, Canada’s tax policy benefits junior firms, and therefore influences the form of competition. However, the fact that junior firms are so important in the industry’s form of competition also further impacts Canadian tax policy and thus, the form of state.

These current pro-mining institutional forms are historically situated, having emerged from prior institutions and social relations. Canada’s relatively pro-mining environment, compared to the U.S., originates in the historically greater importance of mining (both economic and social) in Canada. Indeed, Canada’s forms of state and competition show continuity regarding certain pro-mining ‘…rights, principles and practices…’—whose origins lie in Canada’s mining regulatory regime of the late-1800s—which help explain why contemporary Canadian mining regimes are so pro-mining (Lapointe 2009: 2) That is not to say, however, that they have not changed. Quite the contrary, the mining industries, and the institutional forms characterizing them, in both countries have changed drastically via processes of neoliberalization and the deepening of each state’s insertion into the international regime—processes that were not predetermined or rational, but the result of a confluence of political and social forces. Therefore, Canada’s international dominance of the gold mining industry in relation to the U.S. can be explained by its historical dependence on, and specialization in mining, as well as its history of pro-mining institutional forms, which, after neoliberalization (both at home and abroad), extended far

\textsuperscript{31} According to Cortula (2013), the U.S. Alien Tort Statue poses little threat to U.S. TNCs operating abroad.

\textsuperscript{32} Former PM Mulroney is currently on Barrick Gold’s Board of Directors.
beyond domestic gold production, and encouraged TNC’s increased international mining investment. While similar processes occurred in the U.S., they lacked the historical and necessary conditions unique to Canada. Consequently, aided by technological advances and record high gold prices, Canadian TNCs emerged as dominant players in the international gold mining industry.

In sum, while ‘Canada’s substantial endowment of natural resources is perhaps the key reason Canada has been able to build a knowledge economy based on mining’, Canada’s current domination ‘…cannot be explained by geographical accident alone’ (Canadian Chamber of Commerce 2013: 21). Indeed, ‘…Canada’s success is due at least in part to the emergence of smart policies as well as innovative private institutions that are tailored to the unique attributes of the mining industry (Ibid: 21-22). These policies and institutions were not created in a vacuum, nor were they pre-determined by a process of increasing returns and rational choices. Instead, they were shaped within the confines of historically embedded social relations that are inherently socialized and political. Additionally, Canada’s international success cannot be attributed solely to its own history, national policies and institutions. Indeed, local and national circumstances (political, social and economic) in Latin American countries like Peru and Guatemala, which are predicated on their own set of historically embedded social relations that characterize a unique set of institutional forms, form the necessary conditions that allow Canadian mining firms to thrive.
Chapter 6: Conclusion

In the context of the current gold mining boom in Latin America and the predominance of Canadian TNCs in particular, this paper asked why and how are mainstream explanations regarding Canadian gold mining corporations’ prevalence in Latin America in relation to U.S. corporations limited, and how can they be improved upon? Through an examination of two mainstream explanations in the literature, this paper shows that the TCE and Historical Institutional perspectives, while distinct, both provide a reductionist, and therefore limited, analysis of the complex processes that define Latin America’s gold mining industry. A TCE explanation attributes the current mining boom in Latin America to low taxation and royalty regimes, minimal enforcement of environmental standards, and the presence of cheap labor and untapped resources that reduce transaction costs for FDI. It further explains Canadian firms’ prevalence in relation to U.S. firms as resulting from Canada’s superior mining-oriented business clusters, specialized financial institutions and the government’s political and financial support of the industry that give Canadian firms a competitive advantage. Consequently, TCE reduces its explanation of mining investment in Peru and Guatemala to purely economic criteria based on the cost efficiency of individual firms, and fails to acknowledge the historically situated political interests—of local and transnational elites, political lobbies, and IFIs—and social forces (e.g. civil war and the emergence of the neoliberal doctrine) that go beyond individual firm’s rational decision to pursue economic efficiency, and shape transaction costs in the first place. The underlying reason for this firm-specific, ahistorical reductionism is TCE’s adherence to neoclassical economics’ assumption that economic actors behave in a self-interested, rational way, divested of social and political influence.

In contrast, Historical Institutionalist explanations, and particularly those predicated on increasing returns-Path Dependency, place strong emphasis on historical processes and the influence of past phenomena and decisions on current ones. While this perspective improves upon TCE, analyzing the historical origins of the policies, business clusters and local conditions in Peru, Guatemala, the U.S. and Canada that characterize the current situation, it is also reductionist. This is because Path Dependency’s overly deterministic account of history impedes its ability to analyse change, and, like TCE, fails to acknowledge the political and economic interests and social forces that have influenced the transformations within these countries with regard to their mining industries (e.g. the local and international interests behind neoliberalization). Much like TCE, these limitations of Path Dependency lie in its assumption that change—predicated on learning processes—is inherently functional and based on rational choice. As such, these two mainstream theories are limited in their reductionist analysis that are based on problematic assumptions and biases that ignore the political, social and (in the case of TCE) the historical in their explanations.

In addition to asking how and why mainstream explanations are limited, this paper also sought to provide an improved explanation, via the use of Régulation theory, and specifically through the analysis of the MoR of the gold mining industry. As demonstrated above, the concept of MoR improves upon the mainstream explanations of TCE and Historical Institutionalism because it overcomes their limitations by providing a holistic and systematic, yet not deterministic (as it accounts for both structure and agency), analysis that
studies the social relations between the various relevant actors within a given timeframe that are not simply economic, but also inherently, political and social. The MoR’s historically situated institutional forms cut across the many players in the organizational field of the gold mining industry, avoiding a firm-specific, firm-relational-specific, sector-specific and other reductionist analyses by acknowledging each of these domains, and their interconnectedness.

Using Peru and Guatemala as illustrations, this paper argues that Canadian firms’ dominance over U.S. firms in Latin America, resides in each country’s current institutional forms. Unlike TCE, this paper argues that these contemporary social relations are historically situated in past institutional forms, and unlike Path Dependency, this paper describes the transformation of each country’s social relations, via the process of neoliberalization since the 1990s, as contingent on the confluence of social, political and economic interests. Therefore, neoliberalization was the necessary, but not sufficient catalyst that ignited the mining boom in Latin America, and Canadian FDI in particular, as it was neoliberalism’s interaction with pre-existing social relations in each country, that is responsible for the current political economy of gold mining.

In addition to its contribution to the literature, this research also provides a foundation for further intellectual inquiry. The application of only three of the MoR’s five institutional forms provides room for future study to provide even more in-depth explanations that incorporate the labor-wage nexus and monetary regime into their analysis. Furthermore, it is worthwhile for future studies to incorporate additional illustrations, beyond those of Peru and Guatemala, into their investigation, as the MoR of gold mining should be explored in its many historical and geographical contexts to provide a greater understanding of the complex processes that characterize it, and more importantly, which fuel current conflicts worldwide.
References


Lapointe, U. (2009). Origins of Mining Regimes in Canada & The Legacy of the Free Mining System.’ Presented at the Conference Rethinking Extractive Industry: Regulation,
Dispossession, and Emerging Claims. The Centre for research on Latin America and the Caribbean (CERLAC) & the Extractive Industries Research Group (EIRG). York University, Toronto, 5-7 March 2009, pp. 1-16.


49
Appendices

Appendix A: Exploration Trends

Exploration Budgets of the World’s Larger Companies by Domicile, 1998-2010

Only includes companies with worldwide budgets of at least US$3 million in 2010 for precious-metal, base-metal, or diamond exploration (Drake 2012).

Distribution of Global Exploration Budgets, by Location, 2010

Based on 2085 international companies with exploration budgets of at least $100,000 for base metals, precious metals, and diamonds (Drake 2012).
Distribution of the World's Larger Exploration Companies, by Domicile, 2010

Based on 618 companies with budgets of at least US$3 million for precious-metal, base-metal, or diamond exploration (Drake 2012).

Worldwide Exploration Spending, By Target, 2002-2010

<table>
<thead>
<tr>
<th>Target (as % of worldwide exploration)</th>
<th>2002 (%)</th>
<th>2010 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold</td>
<td>48</td>
<td>51</td>
</tr>
<tr>
<td>Base Metals</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Platinum Group</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Appendix B: Trends in FDI

Canadian FDI in energy and metallic minerals to non-OECD countries as a percentage of total, 1990-2005

(Gordon & Webber 2008: 71).

Total and mining FDI in Peru, 1991 to 2009

(World Gold Council 2011: 8).
The Central American Isthmus and the Dominican Republic: Foreign Direct Investment as a Percentage of GDP, 1990-2010

Estimates on the basis of official figures (Calderon et al. 2010: 14).