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THE CAUSES OF DIFFERING DEVELOPMENT LEVELS AMONG NATIONS

JAMIE LYNN BOLOGNA  
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Reviewed and approved\* by the following:

Kerry A. Adzima  
Assistant Professor of Economics  
Thesis Supervisor

Todd M. Nesbit  
Assistant Professor of Economics  
Thesis Supervisor

James A. Kurre  
Associate Professor of Economics  
Honors Advisor

\* Signatures are on file in the Schreyer Honors College.

## **ABSTRACT**

It is well known that countries develop at very different rates causing some nations to be very rich, while others are left very poor. The goal of this research is to develop an understanding of why these differences occur. By understanding the underlying conditions of a successful nation, it will make it possible to guide policy makers of struggling nations in the correct direction. This paper will begin by exploring the two extremes of economic policy, free market and extreme governmental intervention. It is expected that the free market approach will be more beneficial to most countries, but how to begin implementing this approach depends highly on the culture of the specific country. This research will contribute to developing a strong understanding of the underlying causes to a nation's success. This can then lead into the analysis of two specific countries. This analysis will involve examining the governmental structure, the country's culture, etc. These results can then be compared and contrasted and should suggest that either governmental influence or free markets were more beneficial to those particular societies. This will then imply that under certain conditions there is evidence supporting either governmental influence or free market economic policies for most countries.

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# **I. ECONOMIC DEVELOPMENT THEORIES**

## **A. Introduction**

A seemingly basic, yet complex question arises when discussing the economic well-being of certain countries relative to others. It appears that some countries continually develop, while other countries can never seem to improve from a certain point. The goal of this paper is to develop a solid theoretical understanding to the causes of differing development levels amongst countries; mainly dealing with the role of institutions. This will, hopefully, help answer the question “Why do some countries develop faster than others?”

This question has been prevalent amongst researchers for many years. While discussing his economic development theories Olson (1998) claims that, “Poverty and prosperity are normally marked by boundaries. These boundaries are also the borders of countries.” This claim is inferring that the reasoning behind these differences across borders is present because of the institutional system present in that country, rather than natural endowments that a country contains. This paper will fully analyze many aspects of institutional factors that affect economic development.

Section two of this paper reviews the important factors that other researchers have theorized affect economic development. It compares and contrasts the theories that pertain to incentives that are either encouraged or inhibited by institutions. It will also explain alternative views on economic development that do not consider the differences in government. Sections three and four will analyze the significant economic changes that have occurred in Chile and Mexico since 1970, respectively. The analysis of the countries will involve comparing the history of the country with the economic development indicators revealed in section two. It will

use both theoretical ideas and basic data to analyze these effects. Section five will offer concluding remarks and areas for future research.

## **B. Literature Review**

A very prominent field in economic research is economic growth and economic development. Many economists believe that economic development and growth is caused by things such as resource endowments, others believe resource endowments do not matter as long as the country has a strong institution. This paper is arguing the latter.

The first part of this section explains the flaws in the resource endowment argument. The second part of this section explains the importance of entrepreneurship. The second part will also briefly explain the two classical opposing theories of economic growth from Adam Smith and David Ricardo. The third part of this section discusses the general facets of economic freedom that are important to economic development. This will result in a general idea of the causes of economic development and therefore the historical cases of Chile and Mexico will be analyzed with regards to the conclusions reached in this section.

### **i. Factors of Production**

There are several aspects of governmental intervention that can inhibit the incentives of individuals in an economy from being productive; however, there are also several things that the government can do in order to encourage productivity. The over-arching idea of this piece is that institutions, rather than factors of production, are important.

"If natural resource endowments, exogenous differences in capital stocks, cultural differences in individual responses to economic incentives and the features of the international system are not sufficient to explain economic development, it would by elimination seem that, broadly speaking, the institutions and policies of countries would have to be important (Olson, 1998 378)."

Many researchers believe that government intervention is not the cause of economic development level differences across countries. They believe in the ideas of the production function; where differences in labor, capital, and land explain differences in economic development. Olson (1998) attempts to disprove this theory by examining the production function across borders of countries. He does this with the goal of discovering the reasons for the differences in per capita income. He describes the three factors of production as human capital, productive knowledge, and population to land/natural resources ratio.

Olson (1998) claims that since national boundaries mark the borders of public policies and institutions that are extremely different, it is also important to consider these differences. He examines each factor of production in regards to these differences. He claims that capital is essentially available to all countries regardless of whether they are rich or poor; it is institutions that prevent certain countries from obtaining capital.

According to the neoclassical theory the differences in the return of the three factors of production will cause returns to become relatively equal across countries. This is because when the returns are higher in a certain (host) country it will result in more people from other (source) countries to invest in the capital of the host country. This then causes the return to fall in the host country and the returns to increase in the source country.

In regards to productive knowledge, more commonly referred to as capital, the neoclassical theory claims that all countries are on the frontiers of their production function; however, Olson (1998) claims this is not true because this would infer that the marginal product of capital would be much higher in poor countries than in rich countries. However, as history clearly shows, this is certainly not the case. His claim is that this uneven distribution of capital

can be caused by economic policies/institutions that keep capital in those countries from earning rates of return that are appropriate, and in some cases even discourage foreign investment.

Similarly, in regards to population to land/natural resources ratio, neoclassical theory predicts that due to migration from low-wage to high-wage countries the marginal product of labor will eventually become equal. Therefore, the wages will eventually become equal; however, as history shows this is also clearly not the case.

Olson (1998) also briefly discusses the differences in human capital due to differences in culture and claims that this difference is minimal, using migration as an example. He claims that migration shows that profit maximizing firms would not hire immigrants from poor countries unless they had a marginal product that was at least as large as their wage.

Overall, Olson (1998) went through each of the main factors of production and shows that the neoclassical production theory is not holding true throughout history. Lawson (2007) also recognizes flaws in the production function theory in that it is wrongly assumed that labor and capital would always be combined in the most efficient way possible; therefore, there is something more important occurring than simply factor endowments. This reinforces the idea of this paper that certain nations are poor because they have poorer economic policies not because of a lack of factors of production.

Similarly, Hall and Jones (1999) discuss why differences in the factors of production may be important; the difference in productivity is by far the most important. They claim that differences in productivity are driven by the role of institutions. They define this as “social infrastructure,” which means “...the institutions and government policies that determine the economic environment within which individuals accumulate skills and firms accumulate capital and produce output.”

The claim is that although government can be the most efficient provider in social infrastructure, they are often the biggest diversion of productivity in an economy. They discuss that the suppression of diversion is a central element of a good social infrastructure. This suppression includes the limiting of rent seeking; a very non-productive activity.

Hall and Jones (1999) develop an empirical model to test their hypothesis of the institutions role in economic development. They measure economic performance as output per worker and use a government anti diversion index that measures the government's ability to protect against diversion, along with an index indicating how open the country is to international trade. The anti-diversion index has five categories which are: law and order; bureaucratic quality and governments possible role as a diverter; corruption; risk of expropriation; and government repudiation of contracts.

The results of this paper find empirical evidence that countries with the highest level of output per worker are strongly correlated with the countries that have the highest measured social infrastructure. They note factors of production are important to determining economic growth, however, these factors of production are extremely influenced by social infrastructure. Therefore, social infrastructure is the underlying cause.

These papers provide a theoretical understanding and empirical evidence that the differing levels of economic development amongst countries are caused by more than just differences in the factors of production. Therefore, we need to examine what these causes are exactly.

## **ii. Importance of Entrepreneurship**

One of the most fundamental ideas in economics is that people respond to incentives. Therefore, if incentives are in place that encourage productivity, people will be productive. This



is where the importance of entrepreneurs in an economy is recognized. Holcombe (2007) explains Adam Smith's idea of economic growth as being unlimited. Smith's idea of economic growth is caused by the process of innovation resulting from entrepreneurship. This contrasts to David Ricardo's idea of economic growth as a result from the production function, and therefore is limited.

Many people know Smith as the man that developed the idea of division of labor to increase productivity. He believed that as markets grew, entrepreneurship would lead to innovation, which would lead to an increasing division of labor and increasing productivity. Ricardo envisioned economic output as a function of inputs of the fixed factors land, labor, and capital. He also believed that population growth would always dominate economic growth, keeping most of the population at a constant level of income (Holcombe, 2007). In the Ricardian production function approach, investment is the key to economic growth; where as in the Smithian view, innovation is the key (Holcombe, 2007).

Holcombe (2007) explains the process of innovation primarily by using a book written by Kirzner (1973). Kirzner (1973) explains that entrepreneurship is the process of acting upon a previously unnoticed profit opportunity. He also explains that entrepreneurship stems from previous entrepreneurship. These entrepreneurial ideas arise when there is an environment that is conducive to these actions. This occurs in a decentralized economy because this allows individuals to act on their entrepreneurial insights and rewards them for doing so. Therefore, this environment gives entrepreneurs an incentive to be productive, causing economic growth because "...acts of entrepreneurship creates an environment within which innovations build on themselves, leading to continually increasing productivity (Holcombe, 2007).

Holcombe (2007) explains that people are more alert for profit opportunities when they are more likely to exist and they are more likely to exist in growing economies. This infers that economic growth builds off of previous economic growth; therefore, it is very important to create an environment that encourages entrepreneurship in the first place. A person needs to be able to change their individual status quo through individual actions, otherwise innovation, and therefore, the economy will suffer.

Holcombe (2007) explains that there are several factors that cause entrepreneurial ideas to build off of one another. Changes that result from entrepreneurship alter the current economic environment, creating new opportunities for other entrepreneurial activities. Secondly, according to Adam Smith wealth increases the extent of the market and entrepreneurial activities increase wealth. This new wealth not only generates new market opportunities, but also the increase in the extent of the market generates a higher volume of goods which gives opportunity for greater specialization in these goods. Lastly, entrepreneurial insights create new market niches. All three of these factors provide further opportunity for entrepreneurial activities.

“When one recognizes that entrepreneurship gives rise to knowledge externalities and increasing returns , it then becomes apparent that growth theory should focus less on Ricardian production function approach where inputs are combined in a black box to produce outputs, and more on the process by which production processes are determined. The engine of economic growth is not better inputs, but rather an environment in which entrepreneurial opportunities can be capitalized upon (Holcombe, 2007).”

Overall, the ideas present in Holcombe’s paper suggest that entrepreneurship is very important to economic growth. Therefore, an environment conducive to entrepreneurship will result in having significant economic growth. He suggests that this environment occurs in a decentralized economy that has policies<sup>1</sup> that set up a good incentive structure.

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<sup>1</sup> These policies will be explained in the section titled “Economic Freedom.”

Since individuals respond to incentives, it is natural to wonder what happens to entrepreneurs when the proper incentives are not in place. It is important to understand that entrepreneurs are always present and active. The only thing that changes is the type of activities that these entrepreneurs engage in: productive or unproductive.

There are the obvious productive activities such as innovation, but there are also the less obvious unproductive activities such as rent seeking. The type of entrepreneurship that offers the better incentives will be where most of the entrepreneurship will be allocated. This is determined by the set of rules and policies present in that economy. This implies that policies are enacted to influence the allocation of entrepreneurship, not to create it.

“...persons who are ingenious and creative in finding ways to add to their own wealth, power, and prestige, then it is to be expected that not all of them will be overly concerned with whether an activity that achieves these goals adds much or little to the social product or, for that matter, even whether it is an actual impediment to production (Baumol, 2007).”

Baumol (2007) uses an extension of the Schumpeterian model of analysis to incorporate the effects policy has on entrepreneurship. The Schumpeterian model designates entrepreneurial activities into certain categories. These categories include: (1) the introduction of a new good, (2) the introduction of a new method of production, (3) the opening of a new market, (4) the conquest of a new source of supply of raw materials or half-manufactured goods, (5) the carrying out of the new organization of any industry. He extends on this model by including items such as rent seeking procedures.

Baumol (2007) also makes three propositions: (1) the rules of the game change dramatically from one time and place to another, (2) entrepreneurs changes with respect to the rules of the game, (3) allocation of entrepreneurship has a profound effect on innovation and the spreading of technological discovery. He provides evidence of these claims by using historical examples. For example, as evidence for the first two propositions he discussed that in Medieval

China people avoided investing their resources visibly because the Monarch was known to confiscate the property of the wealthy. This shows that because of the rules of the game people chose to invest differently.

Another interesting historical example given by Baumol (2007) is that by first century B.C. the city of Alexandria in ancient Rome "...knew virtually every form of machine gearing that is used today, including a working steam engine." However, these technologies were only used as entertainment, rather than for productive uses that would have promoted economic growth. He claimed that this technological stagnation was caused because the rules of the game severely discouraged productive entrepreneurship; therefore, these incredibly useful technologies were not put to good use.

Therefore, these examples show that entrepreneurship is very important and it is always present. It is now important to fully understand the incentive structure that needs to be in place for these entrepreneurs to be productive. This productivity of entrepreneurs is then hypothesized to spur economic growth.

### **iii. Economic Freedom**

It is in human nature for someone to look to always improve their current status, and is always room for improvement. In a non-free environment the government stands in the way of this goal that people have. This causes people to lose this natural instinct, or redirect their survival instinct to unproductive activities. There are several papers that discuss the basic ideas of economic freedom. This section of the paper introduces general theories of economic freedom as well as summarizing a few case studies that reinforce these theories.

"Government actions that hinder people's ability to engage in mutually beneficial exchanges limit the standard of living that people are to achieve. Restrictions on international trade and domestic regulations interfere with some mutually beneficial trades. Taxes and inflation take away from citizen's wealth that could have been used to make trades to increase their well-being. Legal

security and the rule of law give people the confidence that when they undertake long-term projects for mutual benefit, the government or other citizens will not be able to arbitrarily seize their increased wealth (Powell, 2007).”

Lawson (2007) discusses the institutional environment necessary for there to be economic growth using the Economic Freedom of the World (EFW) Index. The primary assumption of this index is that individuals own themselves; they are not owned by the government. Therefore, the protection of individuals and their property is at the core of economic freedom.

The index uses four cornerstones of economic freedom: (1) private ownership (2) personal choice (3) voluntary exchange (4) free entry into markets. The EFW attempts to measure the degree to which a nation’s institutions and policies fit these four cornerstones. The EFW index uses 38 different components to measure the four cornerstones of economic freedom.

These 38 components are allocated into five major areas: the size of the government, the legal structure and security of property rights, access to sound money, exchange with foreigners, and regulation of credit, labor, and business. Each category will be examined more thoroughly throughout this section of this paper and will be related back to the four cornerstones of economic freedom.

Lawson (2007) explains that freer economies will grow more rapidly than less free economies because of competition, entrepreneurship, and investment. Competition is derived from open markets and forces companies to provide quality products that a consumer wants at a low cost or they will be replaced. A wide range of people are free to try out their innovative ideas in a free market economy; therefore resulting in new entrepreneurs. This last point reinforces the previous ideas discussed on productive entrepreneurship; the rules of the game significantly affect entrepreneurial actions.

Lawson (2007) goes on to explain several positive relationships he found between the EFW Index and economic development indicators. One of the most fundamental economic development indicators is changes in average income. Lawson (2007) explains that as economic freedom, according to the EFW Index, increases, so does average income. He then uses several countries that are geographically and economically diverse as examples of this phenomenon.

Lawson (2007) also shows that with higher economic freedom come higher life expectancy, literacy rates, and per capita income amongst the poor. Therefore, countries that are more economically free perform better in measures of social progress, in addition to measures of economic growth. Lawson (2007) summarizes this idea by saying "...societies that organize themselves with private property, rule of law, and free markets outperform, on almost every measurable margin, societies that are less economically free." Therefore, in order to have a well performing economy it is important to fully understand what exactly makes a country economically free.

#### **a. Limited Government and Political Stability**

As discussed above, Lawson (2007) claims that two of the cornerstones of economic freedom are private ownership and personal choice. This stems from the idea that individuals need to have control of their own actions, the government is not in control of them. Also, not only is limited government important, but also having a non-corrupt government is extremely crucial for economic growth. There have been several studies providing evidence that limited government and non-corrupt governments results in positive economic growth. Beaulier and Subrick (2007) discuss how limited government in Botswana is associated with social progress and economic development.

"From 1965 to 1975, the size of government spending (as a percentage of gross domestic product) was cut substantially (see Figure 1 below). Famines and

droughts became less common experiences; more children were put in schools; an impressive road network was built; and, some of Botswana's major cities, such as Gaborone and Francistown, began to flourish (Beaulier and Subrick, 2005).”

One of the most crucial functions of a government is the securement of property rights. This enables individuals to have control of their own property. This is one of the most important factors in encouraging entrepreneurship. To see the positive effects of limiting government, consider a case study done by Beaulier and Subrick (2007) on Botswana.

After seven weeks of fieldwork Beaulier and Subrick (2007) finds that Botswana developed a rule of law that secured property rights and limited the role of government that resulted in Botswana growing much faster than any other African country after independence. Prior to independence, Botswana had a very poor growth record and was the third poorest nation in the world. This changed quickly after independence.

The difference between Botswana and the other African countries were the reform policies promoted by their first elected president, Sir Seretse Khama. Khama was a very popular and charismatic political figure, which is important for political legitimacy that will be discussed in another section of this paper. Khama promoted policies that focused on cutting government spending substantially, tolerating foreigners and dissidents, and outcomes rather than consistency. The people of Botswana truly believed in these policies and they adopted some of the policies that were common laws that the British had already in place; therefore, transitioning was fairly smooth.

One of the policies in Khama's reform was called National Development Plans which allocated government spending and established development goals for five years. This kept government spending under control. Another important component of this positive economic growth was the Botswana Democratic Party's platform. They promised individuals law and order

and to prevent political, social, or economic discrimination. Also, they promised to keep the Judiciary independent of the Executive. These simple reforms caused extreme economic growth. Botswana was found to be the fastest growing nation in the world between 1966 and 1996, with an average annual growth rate of 7.7 percent Beaulier and Subrick (2007).

However, eventually the government began to grow because of the discovery of diamonds. This discovery resulted in a concern with national defense because they were concerned about protecting diamonds and they felt more threatened because of invasions. This fear of attacks also altered their view on openness. The citizens also became more concerned with income inequality. These factors caused the government to become very large and the economic growth to slow.

The fact that national defense became very important to Botswana, is the primary reason the government had grown so much. This is because spending on national defense is an extremely large portion of total government spending. Gupta et al. (2001) focuses on how total government spending, specifically military spending, is positively correlated to political corruption. They define corruption as the abuse of government authority in order to obtain a personal status gain and claims that there is both a supply and demand that causes corruption.

Corruption due to military spending is 'supplied' by legalized bribery to officials, specifically in the importing of arms and military equipment. This is amplified by a decrease in military spending throughout the world, so the increased competition among suppliers causes them to resort to bribery in order to make an extra sale. The 'demand' side of this argument comes from the fact that government is usually the sole provider of defense; therefore, officials have a significant amount of power in their hands causing rent seeking. Also, these defense expenditures need to be kept fairly secretive; thus, causing corruption to be relatively easy.



The statistical findings of Gupta et al (2001) provided evidence that their hypothesis was correct. The more government spending, specifically on national defense, the more corruption seemed to be present in that country. This suggests that limiting government spending in general will cause less corruption, and therefore, positive economic growth.

### **b. Rule of Law and Legitimacy**

Another important facet of economic freedom is the ability of individuals to have the freedom to exchange. Without this freedom, individuals lose their incentive to be productive, and therefore entrepreneurship will suffer. This freedom begins with securing individuals right to ownership. “Freedom to exchange, for example, is meaningless if individuals do not have secure rights to property, including the fruits of their labor (Lawson, 2007).”

Not only do individuals need to have secure property rights, but more generally they need a rule of law that fits their specific society. Developing a rule of law that is acceptable for each society is a difficult task and is accomplished by building this rule of law from the ground up. This means that when making a rule of law, the government needs to consider how society is currently functioning and needs to incorporate this into the formal system.

Williamson (2009) discusses the importance of the informal society versus the formal society of finds empirical evidence that formal institutions are only successful when they are formed from informal constraints. Formal institutions are defined as constitutional constraints whereas informal institutions are defined as the social norms that come from culture. Therefore, these informal institutions cannot be designed and it is important to realize that not all formal and informal institutions will react in the same way. The results of this paper showed that countries that have weak formal and strong informal institutions have the highest GDP per capita, while countries with both strong formal and informal come in second (Williamson, 2009). This shows

that it is important to understand that reforms to the formal institution will not be effective unless these reforms are fully accepted by society in general.

The idea of a formal rule of law being accepted by society stems from the idea that government will not be fully accepted and trusted unless it is legitimized. In their case study of Botswana, Beaulier and Subrick (2005) discuss the fact that Botswana had made their political institution legitimate and this was one of the sources to their great success. Specifically, they claim this success resulted from the fact that the political authority in Botswana stemmed from traditional sources and the policies pursued since independence has legitimized the regime.

According to Lipset (1979), in order to be successful the regime must stem from tradition, have rational-legal authority, and have a charismatic leader. Also, this regime must pursue policies that limit tax evasion, secure property rights, and reduce the incentives for rebellion (Grossman and Noh, 1994). Finally, in order for a regime to be legitimized there must be a separation of power between agents of authority and the source of authority. Beaulier and Subrick (2005) claim that Botswana possessed all of these characteristics; therefore, their government was legitimized.

Knack (1996) examines the reasons why the incomes across nations never actually converge as theory would predict finds "...strong convergence in per capita incomes among nations with institutions (namely secure property rights) conducive to saving, investing, and producing (Knack, 1996)." This empirical study suggests that all countries, regardless of whether they are low-income or middle-income, have the potential for rapid catch up growth. It is possible for any country to experience this, given the right institution and secure property rights.

There are several case studies that show that when there is a lack of property rights it prevents entrepreneurship; and therefore, innovation. One example is a case study discussing the reasons why Romania has seemed to continually fail in developing. Boettke et al. (2007) reason that "...a lack of formal title prevents those in rural areas from using their property as collateral for loans, machinery, and so forth," and therefore, fail to develop.

### **c. Freedom of Trade and Openness to Foreigners**

The more open a country is to foreign exchange, the more they are able to specialize. Trade is a mutually beneficial exchange, and will therefore result in both parties being better off. This section of the EFW Index represents the cornerstones of economic freedom that deals with voluntary exchange and free entry into markets, and in order to get a high score in this category a country must allow people the freedom to trade with people in other nations.

Also, according to Lawson (2007) "...freedom of exchange across national boundaries is a key ingredient of economic freedom." This is because in our modern world a vast majority of goods and services are either produced abroad or contain components from abroad.

Almost all countries have some type of trade restriction, such as tariffs or quotas. This is interesting since trade is a positive sum gain. There are also restrictions to this international trade due to administrative factors because international packages generally have to go through customs. Also, sometimes corrupt international officials look to seek bribes through international trade (Lawson, 2007).

During the period of extreme economic growth, Botswana was very open to both international trade and immigration. Thousands came into Botswana and this resulted in an increased work force and increased productivity. However, there was a discovery of diamonds and this caused there to be a fear of attacks and changed their feelings of openness. This, along

with other factors, caused their miraculous economic growth to slow (Beaulier and Subrick, 2007).

Another example of the importance of this category of economic freedom comes from New Zealand. New Zealand had one of the least open economies in the world in the 1970s, which limited the variety of goods they could consume and limited their comparative advantage. This also limited the ability of entrepreneurs to differentiate their goods. This resulted in them making trade reforms that dramatically increased the ranges of goods and services available to them. It also dramatically increased consumer welfare and increased entrepreneurial activity (Sautet, 2007).

With openness of trade, it not only brings about economic growth in general but more specifically it gives society a greater variety of goods. Therefore, it improves upon the welfare of society as a whole, both economically and personally.

#### **d. Access to Sound Money and Regulations**

The final two sections of the EFW index deal with all four cornerstones of economic freedom in some way. “Sound money is essential to protect property rights and, thus, economic freedom (Lawson, 2007).” Throughout history, there have been several examples of cases where inflation destroyed the value of a currency. For example, money in Zimbabwe is meaningless; therefore, people prefer to use other means to exchange.

Since inflation erodes the value of property held in monetary instruments, it is important to keep inflation under control. Thus, sound money deals with the cornerstones of property rights and voluntary exchange. Without sound money, these economic freedoms are difficult to obtain.

The general regulation of business activities inhibits economic freedom. This limits competition and interferes with the freedom to engage in voluntary exchange. A very common

regulation that infringes upon economic freedom is the minimum wage. In order to score high in this area of the index a country must have policies that let the market set the prices for labor and goods. They must refrain from regulatory activities that inhibit the entry into business and increase the cost of producing products, including taxes.

“The tax system therefore affects entrepreneurial discovery because it influences the pure monetary profit that emerges through exchange (Kirzner, 1985).”

The tax system influences investment choices and causes unproductive entrepreneurial activities, such as rent seeking. Overall, by having access to sound money and low regulations it encourages individuals to engage in entrepreneurial activity. Thus, these two categories are important to economic growth.

#### **iv. Conclusions**

It is clear that something other than factors of production matter when determining economic growth of a society. It is also clear that entrepreneurs are very crucial to the level of economic growth in a society. This shows that it is then important to establish what causes these entrepreneurs to be present in some societies and not others. It is then hypothesized that a society that is based on the four cornerstones of economic freedom will be a society that experiences more economic growth.

## **II. CHILE**

### **A. Introduction**

The Republic of Chile is a country in southern South America bordering the South Pacific Ocean and the countries Peru, Bolivia, and Argentina. The goal of this section is to obtain a thorough understanding of Chile’s economic history in order to fully understand the elements of economic freedom that have been put in place and their effect on economic

development. This will be accomplished by beginning with a thorough overview of Chile and its political/economic history while connecting some of this history to economic freedom. Lastly, basic data of economic development indicators and other freedom measures will be analyzed to provide empirical evidence supporting the theory that economic freedom induces economic growth.

This analysis covers the years of 1970 until 2000. This is because since the early 1970s Chile has faced many drastic political changes, leading to drastic economic changes. Therefore, by analyzing Chile through time it allows the possibility of seeing economic changes caused by these political changes. The overall result will be a fairly in depth analysis of Chile's economic development patterns due to changes in economic policies.

## **B. Economic and Political History**

Chile has come from a long-term and well established system of democracy. However, as history shows it has experienced very slow economic growth and development. For example, Chile has had a poor growth record when examining statistics on several of its economic development indicators, such as Gross Domestic Product (GDP). Prior to 1973 Chile was far below the rest of Latin America in these statistics (González, 2002). Thus, prior to 1973 Chile was far below average, relative to other Latin American countries. However, as we will later discover this trend has been reversed. From 1980 onward, Chile's economic performance has been better than other Latin American countries, on average.

Drastic changes in the political economy made way for drastic changes in the economy in general. Chile always had very strong ideological political forces. In the 1970 election for President, the Communists, Socialists, and Radicals formed an alliance called the Unidad Popular (UP); their nominee was Salvador Allende. The other major parties of this time were the

National Party and the Christian Democratic Party (PDC). The National Party had a more conservative view and the PDC had a more liberal view. In the end, the PDC and the UP ended up working together so Salvador Allende could win this election; despite the efforts of the right-wing groups, including the United States President Nixon (History of Chile, 2005).

The UP's main goal was to broaden social, economic, and political participation. They had a very Marxist view on politics and wanted to nationalize a majority of the large industries in Chile. This caused a significant amount of tension between the right and left wing parties, the private sector and the state, and the executive and the state. This tension increased and eventually the economy began collapsing.

The UP nationalized the copper industry, which I found to be Chile's main source of income (Bologna, 2010). They also threatened property rights with a large scale land reform; which, as discussed in the literature review is going against economic freedom and inhibits entrepreneurship. Also, the UP engaged in high deficit spending and low investment, which is another factor that hinders economic freedom. Basically, in this period Chile was becoming less and less economically free and it was causing the economy to fall apart.

Although the PDC helped get Allende into office, after a few years of having Allende in charge the PDC began to oppose the UP's actions. They then decided to form the Confederación Democrática (CODE) with the National Party. CODE controlled enough congressional votes to block the UP's legislation (History of Chile, 2005). The UP was also strongly opposed by the American government. The Central Intelligence Agency of America financially supported covert operations with the goal of destabilizing Allende's government.

These events caused further tension between the political parties and in 1973 Allende was overthrown by a military coup. The Chilean government was overthrown on September 11 of

1973, and many people blamed U.S. President Richard Nixon. This period of chaos caused by the UP's socialist policies, followed by a military take over in 1973 can be seen in Figure 1 by looking at the negative spike in GDP in this period that is circled in red.

The Military Junta assumed power after the coup, and operated in an authoritarian manner. They did this because conservative leaders feared that a restoration in democracy would result in a resurgence of left-wing parties. Augusto Pinochet, the man that led this military coup, ruled until a freely elected president took office in 1990. From 1973-1975 the military ruled using emergency declarations, which also contributed to the negative spike in GDP during this time period. There was no political activity or parties allowed in general and the constitution written in 1925 was suspended.

The military saw themselves as fighting an internal war to rid Communism from their homeland; this could ideology could have been influenced by the Cold War that was present at the time. They even created the Dirección de Inteligencia Nacional (DINA). This group had the task of persecuting and eliminating the opposition from the left; therefore, Chileans that opposed the military were targeted and often 'eliminated'. This obviously received poor publicity with the rest of the world because of the severe human rights violations that were occurring.

Pinochet even met with America's Secretary of State Henry Kissinger in June of 1976 to discuss human rights violations. Kissinger emphasized that they supported the overthrow of Allende, however he did not approve of the human rights violations. This support that Kissinger gave Pinochet backfired when after their meeting the DINA assassinated two people in Washington D.C.

This assassination in Washington D.C. hurt Chile's relationship with the American government. This fact combined with the presidency change in America in 1977 from Richard



Nixon to Jimmy Carter hurt their relationship even further. Carter changed foreign policy to be focused on human rights. Without America's support, Chile became increasingly isolated.

In general, there was an overall uncertainty because of the deepening economic crisis that was present in Chile since 1972. The lack of clear economic policy during this emergency period worsened the uncertainty. Chile experienced a balance of payments crisis with 343 percent inflation and a GDP contraction of 12.9 percent (Dual Transitions, 2002). This can also be seen in Figure 1 with the significant spike downwards from 1974-1975.

This crisis led to a second period of early military rule after 1975. This second period was a lot more positive than the first, as can be seen in Figure 1 with the increase in GDP from 1975 until 1982. During this period the military focused on reforms that ensured economic stabilization and restructuring. This was one of the only ways that the military junta would obtain popular support in the short term and legitimacy in the long term. Legitimacy of an institution is very crucial to positive economic growth and economic freedom in general. Therefore, if they can accomplish legitimacy, improvements in their economic situation will likely follow.

The economy began experiencing successful stabilization at 1975. Because of the threat of hyperinflation and the collapse of the economy the junta sought assistance from the International Monetary Fund (IMF). This gave the military junta access to economists that could help them develop an economic plan along free-market lines.

Many of the economists that helped manage the economy during this period were from the University of Chicago. Their nick name was the "Chicago Boys." They attempted to apply neoliberal principles to every aspect of Chilean Life; it was seen to conservative thinkers around the world as a natural experiment. The project that resulted from the Chicago Boys is known as

the El Ladrillo and was actually developed before Allende was ever even overthrown. It was the first free market plan implemented in Chile since the 1930s.

El Ladrillo was implemented in mid 1975. This plan was based on two ideas. The first part of the plan involved decreasing demand significantly, causing a shock and the second part involved implementing structural reforms. To cause a shock in demand, government expenditure was cut by 27 percent, tax revenues and public prices were increased, and real wages were contained and pushed downwards (González, 2002). The structural reforms involved a wave of privatization of public enterprises. The prices in the economy were liberalized, interest rates rose, and trade was liberalized. This caused inflation and unemployment to come under control; giving the military junta some breathing room.

Several of these structural reforms relate to the economic freedom discussed in the literature review. Privatization of public enterprises reduces the amount of regulation in an economy in general, and will therefore encourage more entrepreneurship. This can be seen in the upward trend of the trademark application variable in Figure 1.2. The variable of trademark applications is used to measure the degree of entrepreneurship present in the economy.

Liberalization of trade enables Chile to specialize and enables Chile to be involved in the international community. Because of the time lag that is always present when implementing these policies, the positive affects of these actions do not appear in the EFW index until after. The categories of the EFW scores can be seen in Figures 2 through 7. There has been a steady increase in the EFW category of regulation for Chile from around 1973 until 1990; this can be seen in Figure 7.

Chile institutionalized itself by stabilizing the economy and restoring growth rates. This would be considered Chile's formal institutions. They finalized their institutionalization by

constructing a constitution in 1980. This constitution was structured through conservative and market-oriented lines.

Chile's government was successful at implementing this constitution and economic policies in general because they finally coincided with society. Therefore, they agreed with informal constraints. The World Fact Book provided by the CIA summarizes this as "Sound economic policies, maintained consistently since the 1980s, have contributed to steady growth, reduced poverty rates by over half, and have helped secure the country's commitment to democratic and representative government."

The 1980 constitution has remained the law of the land to this day. It developed a restricted democracy to prevent another revolution and the rise of left wing groups as well as a new fundamental law. They began drafting the constitution in 1977. This constitution incorporated three phases: (1) recuperation where the armed forces remain in charge, (2) a transition period with increased civilian participation through partial Congress elections, and (3) a period of constitutional normality in which power will return to civilians under a tutelary (protected) democracy. Therefore, it was grounded on two philosophical-legal traditions, namely, libertarianism and tutelary democracy.

In order to keep tutelary democracy and make it very difficult to get rid of they put several restrictions into the constitution. The first was the development of the Consejo de Seguridad Nacional. This group was created to ensure the participation of the Armed Forces in national security policy. Its composition and its powers allowed it to act as a counterweight and a limit on the president's decision making ability. The second was the Tribunal Constitucional that had strong veto power and the 1980 constitution declared that no appeals could proceed against it. The third was designated Senators that would veto fundamental legislation and allowed a

minority in the upper chamber to place rigid limits on democratic government's policymaking and general decision-making capacities. The fourth restriction was that General Pinochet had the ability to incorporate provisions and not retire as commander-in-chief of armed forces until 1998 and afterwards permitted to take a seat in the senate for life. The 1980 constitution also contained a transition to democracy calendar. Therefore, this constitution cleared up a significant amount of uncertainty.

Chile's military leadership allowed the development of strong centralized decision-making process. They also formed a strong alliance with middle-class sectors and outward-oriented business groups. This centralization of power and positive relationships gave them the space to build strong state capacity; which was necessary for the implementation of bold economic reforms.

Short term success provided justification for deepening neoliberalism. They felt that state intervention should be limited to the provision of order, public goods, and basic infrastructure. This ideology caused the Chilean economy to become a significant part of the international market again; therefore, enhancing its competitiveness. There was also financial deregulation which reduced the limitations on foreign investment, foreign credit, and foreign exchange transactions. This also caused a dramatic increase in foreign debt.

Relative to the rest of Latin America, Chile had a comparatively strong economic performance during the late 1970s, the 1980s and the 1990s; therefore, it was nicknamed the "Chilean Miracle." Despite this economic success, people were still opposing the military junta due to human rights violations, high social costs of restructuring, and the lack of the eventual return to democracy. There was a widening gap of income and wealth inequality. Those that relied on governmental social functions were hit the hardest. This is important to note because

there will always be economic losers and social costs during reforms; however, these costs are minimal relative to the benefits. The opposition resulting from the economic losses of some sectors of society along with a severe economic crisis that impacted all of Latin America in the early 1980s caused further challenges for Chile. This severe economic crisis can also be seen by the negative spike in GDP in Figure 1.

This collapse caused the worst financial and economic crisis since 1930. Chile was hit extremely hard because of the financial liberalization. The business people of Chile borrowed heavily internationally and the Chilean peso was extremely overvalued. In mid 1981 the U.S. and other European countries raised their interest rates causing a global recession and since Chile was so heavily indebted it hit them the hardest. Eight financial institutions required intervention by the government, while others were filing for bankruptcy (González, 2002).

This caused the state to assume the role of the lender of the last resort leading to a moral hazard problem. This sent signals to the financial system that the state would assume any further losses, thus they engaged in last minute borrowing. At the same time the Mexican government declared unilateral suspension of Mexico's debt payments causing international financial institutions and private banks to suspend any further loans to heavily indebted Latin American countries leading to a brutal external shock that led to the financial collapse of most Latin American countries.

This shows that it is important for governments to not interfere, even when the private market fails. Interfering can make the situation even worse, as it did in Chile. It sends signals that encourage unproductive activities. It is important for some firms to fail in order to succeed.

During the early 1980 collapse, Pinochet was forced to take over 80 percent of the formerly private financial system; therefore, nationalizing the foreign debt. The military regime

now had monopoly power over both the economic and political spheres causing massive protests for the first time. However, the military did not give in and they defended the free market system they created.

This crisis did, however, cause a resurgence of political parties that had the top priority of the reestablishment and the defense of a political democracy and a liberal-oriented mixed economy. This forced the individual services of the armed forces to assume stronger roles in crisis management. Chile remained in control of the state and managed to keep the community confident. Pinochet remained in charged with uncontested personal rule.

Pinochet promised political opening and economic populism because the Chicago Boy's plan collapsed. They developed a new plan entitled *Recuperación Económica* that outlined a more sensible neoliberal strategy. This plan did not have extreme free market goals like the first plan did. One of the main proposals was to increase public spending and lower interest rates. Another proposal was to be more tolerant of deficits in fiscal spending and keep annual inflation rates under 30 percent. A third proposal is to implement public works and housing programs. A fourth proposal is the enactment of an active industrial policy through tariffs and export incentives, tax cuts, and, most importantly, greater access to the political process.

From the beginning of the 1982 crisis until late in 1984 there was a significant amount of guerilla group violence. This provided arguments in favor of the maintenance of a military regime in order to preserve political order and social peace. Then in 1985 an economic upturn also reinforced the military regime. There were international events that stimulated the Chilean economy such as declining oil prices and interest rates paired with rising copper prices.

Chile honored the country's external debt with hope to attract foreign investment again. By attracting foreign investment this not only positively influenced economic growth, but it also

ensured that powerful voices such as the U.S. Treasury, the IMF, and the World Bank, as well as big private financial firms would monitor its evolution closely. Chile also implemented fiscal adjustment through rolling back the size and expenses of the state which gave them political support from big business. Fiscal expenditure went from 30 percent of GDP in 1984 to less than 20 percent in 1986 (González, 2002). This caused the economy to increase savings, investment and generated new resources to respond to social sector needs.

In 1988 Pinochet lost in the plebiscite by a slight margin, revealing the fact that the Chilean economy was deeply divided. This caused Pinochet to decide to deal with constitutional reforms while he was still in office. The military regime proposed a binomial electoral system to ensure parties of the right were a majority in the legislature to create a formula that encouraged less fragmentation and less polarization. Throughout the 1990s there was international support for a free market ideology, which gave support to the free market ideologies set in place in Chile.

The first president to take office was Patricio Aylwin in 1990. It was feared that Aylwin would not continue with the market economy approach. The Chilean economy had been the best performer in Latin American during the second half of the 1980s. Therefore, Aylwin was under pressure to continue this positive growth.

Aylwin decided to stay on course with what was already in place. This is partially because they watched the other failed populist experiments in other Latin American countries and the stabilization that the neoliberal model had provided. Throughout 1990-1994 Chile experienced a decrease in inflation, government surpluses, consistent decreases in unemployment, and economy growth. This provided confidence in the government and economy in general. Investment therefore increased significantly and was driven by the private sector.

If the Concertación tried to implement expansionary policies it would be incapable of doing so because the institutional framework gave the political right veto points to stop policies that deviated from a market-driven model. The political right could use institutional as well as tacit sources of power to influence and limit policy decisions by the center-left government.

Dynamic market economies should be led by the private sector. Since the private sector is negatively affected by high taxes, these taxes need to be lowered or eliminated. In order for a private market to achieve economic efficiency it needs to be flexible. Many policies implemented by the government inhibit this flexibility and cause rigidities in the market. For example, minimum wage laws set a price floor on wages and cause business to not be as flexible, and therefore, less competitive.

Currently, the country has a government that is republic using the constitution they developed in 1980. Therefore, their current political system is very similar to the United States. In the legislative branch they have a Senate and the Chamber of Deputies. In the judicial branch, they have a Supreme Court where the judges are appointed by the president and ratified by the Senate. In the executive branch the president is elected once every four years and the president selects the members of the cabinet. Their current President is Sebastian Pinera who took office March 11 2010. The president is elected by popular vote for a single four-year term. According to the Economist Pinera is a representative of a centre-right wing, he is a moderate member of the Alianza por Chile coalition, also known as Coalition for Change party. He is the first right-wing elected president elected since Pinochet left the presidency in 1990. The previous party in power was the Concertacion coalition, also known as the Coalition of Parties for Democracy.



### **C. Economic Freedom and Data Analysis**

Overall, Chile's economic freedom has been increasing in general since the economic take over of 1973. This can be seen in Figure 2. The EFW Index is designed to measure the consistency of a nation's institutions and policies with the concept of self-ownership, non-interference, and the protection of people and their property from invasions by others. Therefore, according to this index Chile's economic policies have been becoming more consistent with the general ideas behind economic freedom.

As discussed in the literature review, one of the corner stones of economic freedom is private ownership. In order to measure this it is important to look at the size of government in Chile. The first area of the EFW index measures the size of government. It does so by measuring the countries expenditures, taxes, and enterprises. As Figure 3 shows, the overall trend for Chile's score in this area has been increasing since 1970.

The second area of the EFW index examines legal structure and security of property rights. The key components in this section of the index are rule of law, security of property rights, an independent judiciary, and an impartial court system. This section indicates how efficient markets are operating. When individuals and businesses lack confidence and trust in the government to enforce their contracts and protect their earnings, their incentive to engage in productive activity is eroded. As Figure 4 shows, Chile's score increased significantly in this category after 1970 to about 1980; however, ever since 1980 it's score has remained relatively constant. This could be because after the take over the property rights and rule of law were rearranged once and have remained relatively stable ever since.

Another important aspect in this category is political legitimacy. As the economic history section shows, one of the main reasons the government in Chile survived chaos was because they

institutionalized themselves. The theory is that if a rule of law is not accepted by society then it will not be successful. This was proven true in that the government was successful at implementing policies only when the society supported these policies. For example, when the society of Chile did not support the policies prior to 1973, they overthrew the government. Society must believe that a government is legitimate in order to follow the rule of law that the government provides.

The third area of the EFW index measures access to sound money. As discussed in the literature review, an absence of sound money weakens gains from trade. As Figure 5 shows, the trend in this score is a bit less clear than the previous scores. There was a significant upward trend after 1975; however, this trend appears to be leveling off after 1980.

The fourth area of the EFW index measures the freedom to trade internationally. The score for Chile in this category has been increasing throughout the years since 1970, as can be seen in Figure 6. This shows Chile's effort to be more integrated into the international community.

The fifth area of the EFW index measures the regulation of credit, labor, and business. The score for Chile in this category has also been increasing throughout the years since 1970, as can be seen in Figure 7. Overall, all five areas have been increasing, and therefore the overall Economic Freedom of the World Index has also been increasing for Chile. This shows that Chile has been becoming more economically free ever since the take over in 1973. Therefore, their positive economic performance is associated with economic freedom.

Another interesting and useful statistical tool to analyze is the correlation matrix. The data for this is used from the available years of the EFW index; from 1970 up to 2008. The first column in Figure 8 shows how well each category is correlated to GDP. An absolute value greater than .7 indicates a significant correlation.

As the chart shows, the EFW data is positively correlated to GDP. In other words, as the EFW Score increases, so does GDP. This enforces the hypothesis of this paper that economic freedom induces economic growth. It is also important to examine the relationship GDP has with other economic development variables.

The economic development indicator of life expectancy is also positively correlated with GDP; however, what may be even more important is its strong correlation to the EFW score. This is inferring that with an increase in the EFW Score, and therefore an increase in economic freedom, comes an increase in life expectancy. This is just one of the positive outcomes of economic freedom discussed in the literature review.

The patent and trademark application variables are included to incorporate the degree of entrepreneurship present in Chile. It is hypothesized that both of these variables are positively correlated with both GDP and the EFW Score. As Figure 8 shows, both the patent and trademark application variables are positively correlated with the EFW Score and GDP; however, only the trademark variable has significant correlation.

Another important variable that needs to be pointed out from this chart is the Corruptions Perceptions Index (CPI) variable. As expected, corruption has a negative relationship with GDP. What is more interesting is the fact that corruption has a negative relationship with the EFW Score. Thus, there is evidence that economic freedom and corruption move in different directions. This shows another important benefit that results from economic freedom.

#### **D. Concluding Remarks**

From 1970 until 2000, Chile has implemented reforms along free market lines. They have also experienced positive economic growth during that time period as well, in general. The political economy transformed from authoritarian to a democracy relatively smoothly because of the

secure rule of law that the 1980 constitution put in place. Thus, overall, this case study provides evidence that implementing free market reforms in the proper manner will result in positive economic development.

### **III. MEXICO**

#### **A. Introduction**

Mexico is a country in North America bordering the Caribbean Sea, Gulf of Mexico, and the North Pacific Ocean. It is also bordering the countries of the United States and Guatemala. The goal of this section is to obtain a thorough understanding of Mexico's economic history in order to fully understand the elements of economic freedom that have been put in place and their effect on economic development. This will be accomplished by beginning with a thorough overview of Mexico and its political/economic history while connecting this history to economic freedom. Lastly, basic data of economic development indicators will be analyzed to provide empirical evidence supporting the theory that economic freedom induces economic growth.

This analysis will begin with the year of 1970 until present day in order to keep consistent with the analysis of Chile. Also, Mexico has experienced drastic changes during this time period as well; therefore, by analyzing Mexico through time it allows the possibility of seeing economic changes caused by these political changes. The overall result will be an analysis of Mexico's economic development patterns due to changes in economic policies.

#### **B. Economic and Political History**

Unlike Chile, Mexico had experienced 25 years of positive economic growth and social modernization. This was surprisingly accomplished through an authoritarian based government that tended to intervene a significant amount in the economy. Mexico was led by the hegemonic Partido Revolucionario Institucional (PRI).

The government had a strategy of conventional macroeconomic management and inward-looking industrialization. Inward-looking industrialization is when the government attempts to reduce foreign dependency by producing industrialized products locally. These policies unexpectedly caused high rates of economic growth and price stability. This was referred to as the Mexican Miracle; however, as anticipated, this government strategy was not sustainable (González, 2002).

Throughout this time of positive economic growth, there was growing inequality and growing poverty. The political system was classified as a corporatist system. This means that the country was organized into major interest groups and representatives of those groups settle any issue through negotiation and agreement. This granted a control of voice and representation to leaders of organized workers, peasants, and members of the middle class. For the time being, this resulted in political stability and control.

The PRI political-economic project was called the Nacionalismo Revolucionario. The project emphasized the PRI's belief in nationalization. They wanted to regulate property ownership, which as discussed in the literature is detrimental to economic freedom. Individuals need their property rights secured; they need to feel as if they have full control and ownership of their property (González, 2002). By regulating their property, this may make individuals feel that their right to property is threatened, therefore hurting entrepreneurial activity and economic growth.

Nacionalismo Revolucionario also had the goal of making Mexico become a strong, interventionist state. This also goes against economic freedom. Government intervention distorts the signals that a market will naturally send. This causes inefficiencies and can limit competition.

Intervention also gets in the way of voluntary exchange. This can lead to a decrease in entrepreneurship, and therefore, economic growth.

Despite the negative aspects of the Nacionalismo Revolucionario, there was still broad popular support for it because of the past success. This support stems from the fact that this regime was legitimized, as it was in Chile. This shows how important legitimizing a regime can be for a nation. Without this legitimacy, their economy project would have failed before it could ever have been implemented.

The political elite were uncomfortable with political participation outside the PRI. When opposition arose the regime confronted it through cooptation. They then proceeded to use force and coercion when cooptation failed. By the end of the 1960s the political arena was scattered with dissident student, worker, and peasant organizations who felt that the PRI regime had increasingly put legal limits to the Mexican Revolution's ideals of democracy, social justice, and inequality (González, 2002).

This opposition and dissatisfaction increased when during a massive rally of university students the military and police opened fire and killed several hundred people in 1968(González, 2002). This occurred just days before the inauguration of the Olympic Games that were to occur in Mexico City; therefore, the eyes of the international world were on Mexico when this occurred. This caused the president of the time, Gustavo Díaz Ordaz, to step down and his successor was Luis Echeverría.

The change of president did not mean that a change of economic policy towards a more free market approach would follow; Echeverría was nationalist and anti-communist. Also, the PRI remained unwilling to incorporate other's beliefs into their political plan. This obviously caused increased tension.

Militant students, workers, and peasants started urban guerrillas which gathered momentum in the early 1970s. Similar to Chile, Mexico participated in questionable acts against human rights. Hundreds of dissidents were kidnapped and ‘disappeared’ (more than 800 people disappeared) (González, 2002). This obviously did not go over well with international opinion.

Also like in Chile, the American government was involved with some of these disappearances. America and Mexico had a deal that Mexico would deal with the communist threat to America from the South. America even participated in the training of an elite anti-terrorist group called the Halcones. Thus, Mexico along with the rest of Latin America was immersed in the Cold War.

As mentioned above the PRI regime was essentially authoritarian in that they did not permit any other political opinions. However, they were very strongly institutionalized around the figure of the president of the republic and did not see themselves as authoritarian. The PRI’s lack of toleration to other opinions caused independent-minded workers and peasants to become infuriated.

Peasants demanded better opportunities and more land. The PRI’s solution was to redistribute more land, rather than grant property rights. Redistributing land does not grant individual ownership; therefore, entrepreneurship is still inhibited. Organized workers in 1973 and 1974 formed more than two thousand strikes (González, 2002). The government’s solution was once again to solve the problem through cooptation and then force, without actually coming up with a solution.

These rising oppositions caused Echeverria to respond through the expansion of the state through neopopulism. From 1972 until 1974 his government over-stimulated the economy and

expanded the state aggressively (González, 2002). His basic objective was redistribution and the economic strengthening of the public sector.

There were several new federal agencies created and by 1970 there were more than six hundred thousand federal bureaucrats. By the time Echeverría left office there were more than two million bureaucrats. A substantial portion of the country's industrial workers became public employees as the number of nationalized businesses and organizations went from 84 in 1970 to an incredible 845 in 1976 (González, 2002).

As expected, this caused extreme tension to occur between the state and powerful sectors of the Mexican private business elite. With good reason, business leaders became concerned about the means that the government would use to finance such a strong redistributive social policy. In particular, they became increasingly worried about the government's fiscal and labor policies in addition to the general growth of state intervention in the economy.

The government began engaging in a significant amount of foreign borrowing as a way to finance their new, extreme policies causing increasing external debt. This was combined with expansionary monetary policy causing inflation. For obvious reasons, the business elite vetoed these policies. As mentioned above, they do have this power because of the corporatist make up of the political system.

However, this only caused Echeverría to become even more drastic, hurting Mexico's image in the foreign business community. Echeverría got the United Nations (UN) General Assembly to adopt the Charter of Economic Rights and Duties of States. This drew on ideas that primacy of state power as is the origin of property rights. Thus, government should regulate private property in the collective interest of the population. This obviously is exactly opposite of what should be done in order to make Mexico more economically free.



The foreign policy that Mexico advocated was very dangerous for liberal advocates in the Cold War. These actions angered the American government, especially since the Cold War was still in full force. This foreign policy was in favor of regulation of international markets, international economic planning and cooperation, and political intervention through bodies such as UNCTAD in the operation of the world economy. All three of these actions go against economic freedom.

As these disputes escalated Echeverría continued pursuing his goal. He claimed that his model of development responds to the needs and aspirations of the country's majority; while, the previous development model favored entrepreneurs and industrial groups. However, what he does not understand is that entrepreneurs and industrial groups encourage economic development. Therefore, he was really harming Mexico with these policies.

In 1975 top members of the Mexican business elite decided to unify and form the Consejo Coordinador Empresarial (CCE). This included employers, industrialists, traders and merchants, bankers, private insurance, and big business (González, 2002). The CCE saw Echeverría's populist discourse as a violation of the principles of economic freedom.

The Mexican business counterbalanced Echeverría's push for the left simply by reviving the idea that freedom was a requirement of true democracy. Echeverría ended his presidency with another extreme land redistribution policy. The CCE called a general strike showing that the Mexican capitalist class had openly defied the PRI regime.

The new president, López Portillo, began his term in office in 1976 and leaned to the right (González, 2002). However, Mexico watched much of the rest of Latin America incur significant political and social costs while restructuring along neoliberal lines in the same time period. Therefore, they decided against restructuring in this way.

After massive oil fields were found in southeastern Mexico in 1972, state control of oil was one of the most powerful symbols of the hegemonic party regime's economic plan. Portillo promoted the state-led oil industrialization of Mexico (González, 2002). Since American government and various other foreign creditors supported this because of the potential benefits of another oil source, foreign investment started flowing back into the country.

State participation in the economy experienced a sharp rise between 1970 and 1982 (González, 2002). This is because Portillo claimed that the state-sponsored development would make all Mexicans prosperous and he was operating using a neopopulism approach. This caused a false sense of optimism and increased the demands for public resources. This is another example of how government intervention can cause distorted incentives.

The government tried to reconcile the interests of the Mexican business elite and of the organized labor movement through oil-derived cash; however this was only short term. This did work in diluting the pressures that organized interests had put on the previous government for the time being. However, by the late 1970s the government's most basic need was to strengthen its legitimacy and credibility through strong economic performance. This happened, as long as the international price of oil remained high, which is obviously not sustainable.

As discussed above, there was a severe economic crisis that affected all of Latin American in 1982. This crisis affected Mexico specifically by ending a four-decade streak of economic success that the PRI took credit for. Therefore, negatively affecting the regime's reputation and hurting their legitimacy causing opposition parties to strengthen throughout the 1980's. Despite this chaos, Mexico was able to contain the tensions and survive successfully. However, they continued implementing policies that went against economic freedom throughout the remainder of this decade.

Society demanded free, competitive elections and received their wish in 1988. This election ended the period of uncontested PRI rule. The first freely elected president was Carlos Salinas of the PRI. The continuous calls for competitive politics and market-oriented policies guaranteed that the elected president would pursue economic liberalization. This all occurred successfully because the Mexican government was extremely institutionalized. Therefore, during time of chaos, the government remained in charge and in control.

Salinas began his presidency in 1988 and his key objective was to make Mexico a key economic player in the international market (González, 2002). He also wanted to re-strengthen the regimes authority and restore its legitimacy. Overall, Salinas plan was based along free market lines.

One of his free market reforms involved the privatization of state enterprises. In particular, Salinas privatized the banking sector. Also, he pushed to reform property rights. He wanted the introduction of the free market and the state's guarantee of private property rights. These are significant steps towards economic freedom.

This restructuring also re-crafted the state by reinventing the formal and informal rules of the political system. However, Mexico never created an entirely new Constitution as Chile did. Their constitution from 1917 was continually reformed along neoliberal lines from 1985 onward (González, 2002).

In 1994 Ernesto Zedillo took the presidency until the year 2000. As in Chile, the newly freed banking sector took on too much international debt and the financial system was on the verge of collapsing, causing another economic crisis. This crisis caused challenges for Zedillo stemming both from his own party and other members of Mexican society. However, all this did was finally split up a monopolistic political party for good. Therefore, liberalization introduced

economic as well as political competition and despite some likely challenges, was overall beneficial to the Mexican society.

### **C. Economic Freedom and Data Analysis**

Overall, Mexico's economic performance has been improving at a steady pace since 1960. As can be seen in Figure 9, their GDP has been increasing despite a few negative spikes. The negative spike from 1980 through 1982 can be attributed to the economic collapse of all Latin American economies during that time period. The second negative spike from 1992 through 1994 can be explained by conflicts between political parties, causing uncertainty in the economy.

Unlike Chile, Mexico's EFW scores do not have a general upward trend. This can be seen in Figures 10 through 15. This is due to the fact that Mexico's government did not begin actually implementing reforms that were based on a free market ideology until mid 1990's. Therefore, the time period being analyzed (1970-2000) does not reveal much information about improvements in the economy due to economic freedom.

It is interesting to see that after the 1982 crisis that hit all of Latin America, there was a brief increase in the general EFW score and each category. This could have occurred because this is when Mexico's monopolistic political party, the PRI, began receiving significant competition from Mexico's big business leaders. They began to consider free market reforms.

Another interesting point can be seen that there was decrease in the EFW score from 1970 until early 1980s. This decrease can be associated with a sharp increase in state-sponsored development during this time; this can be seen in Figure 10. Also, this sharp increase in state-sponsored development caused the government to expand significantly. This can be seen in Figure 11 as the size of government score decreased steadily from 1970 until around 1980.

Since Mexico's government continually implemented extremely different policies there is a significant amount of variability in the rule of law category of the economic freedom index. As the chart shows in Figure 12, there is no direct pattern in the score. This can also explain the conflicts that occurred in Mexico during this time period. This variability in the rule of law caused a significant amount of uncertainty.

One category that does experience a significant pattern is the access to sound money score from the EFW index; this can be seen in Figure 13. As the government expanded and significantly intervened in the economy from 1970 through the early 1980s, the sound money score decreased. However, when Mexico began considering and implementing free market reforms the access to sound money score began increasing. This shows why free market reforms are important to having sound money. A similar argument applies in the freedom of international trade category; this can be seen in Figure 14. From 1970 until the early 1980s this score was decreasing, as economic freedom in general was decreasing.

The one category of the EFW index that does increase significantly throughout the years is Regulation. This can be seen in Figure 15. This shows that ever since 1970 Mexico has been removing regulations from many of its businesses in general. This likely occurred between of the opposition stemming from students, workers, and peasants in the early 1970s. Also the Mexican business elite unified and counterbalanced the government's push to nationalize many aspects of the economy.

A correlation matrix using data from Mexico found similar results as the one using data from Chile. This data is also from year 1970 until 2008, using only the years available in the EFW index. The first column in Figure 16 shows how well each category is correlated to GDP. An absolute value greater than .7 indicates a significant correlation.

This chart shows that the EFW data is positively correlated to GDP. This, once again, enforces the hypothesis of this paper that economic freedom may induce economic growth. Although, it is still not clear which occurs first: economic freedom or economic growth, it is clear that these two are positively related.

Another important economic development variable analyzed is life expectancy. Life expectancy is positively correlated to both GDP and the EFW score; although, the correlation is only significant between GDP and life expectancy. It is still important that a positive relationship was found between life expectancy and the EFW score, since this infers that economic freedom can increase life expectancy.

This analysis also included patent and trademark application variables to incorporate the degree of entrepreneurship present in Mexico. As expected, both of these variables are positively correlated to GDP and the EFW score. As with Chile, only the trademark application variable has significant correlation with GDP and the EFW score.

Overall, this data is far less clear than Chile's because of the delay in the implementation of the free market policies. It would be interesting to use data to closely examine the effects of more recent policies implemented in Mexico. This data does show that the EFW does correctly measure the degree of economic freedom a country has, as Mexico's scores did not increase because they were not implementing free market policies.

#### **D. Concluding Remarks**

Unlike Chile, Mexico did not even consider implementing economically free reforms until the late 1980s. Therefore, they did not experience an improvement in their economic growth until these reforms were in place. As Figure 9 shows, Mexico's GDP began increasing significantly at the end of the 1980s. Therefore, even as they began considering implementing economically free

policies, Mexico's economy began growing. This is also reinforcing the hypothesis that implementing free market reforms will result in positive economic growth.

#### **IV. CONCLUSION**

Overall, this analysis shows that free market policies are likely to result in positive economic growth in general. This then will lead to a higher standard of living. As these case studies show, Chile's specifically, it is important to build these policies according the country that they are to be implemented in or they will not be successful.

Both governments, Chile and Mexico, had a government that was legitimized. This enabled them to implement difficult reforms and remain in control. Without this legitimization, society would not have responded in a positive manner. This would have caused the policy reforms to be ineffective.

Areas for further research would be to use this data and develop a more in depth empirical model to find statistical evidence that economic development is influenced by the degree of economic freedom. It would also be interesting to find which area of economic freedom has the most significant effect on economic development. Lastly, since this analysis only reaches 2000, it would be interesting to examine the policies of these countries over the past ten years as well.

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## VI. APPENDIX

Figure 1: Chart of Raw GDP Data for Chile



Figure 1.2: Chart of Trademark Application Data for Chile

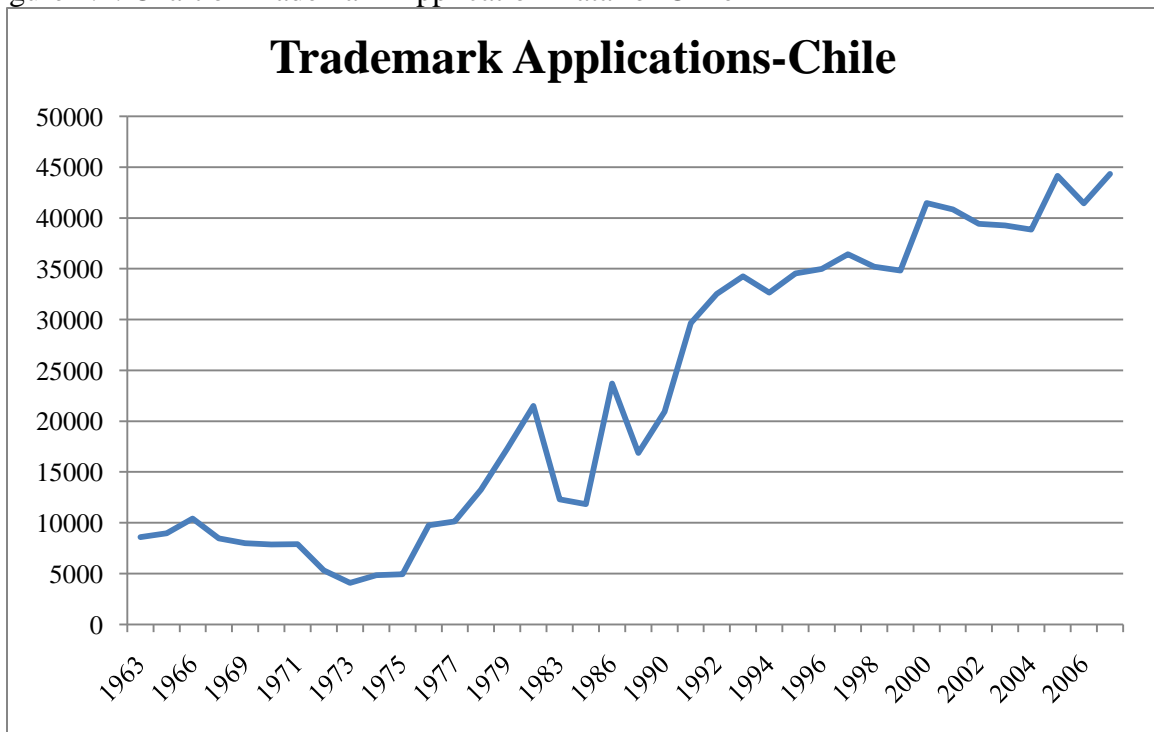


Figure 2: Economic Freedom of the World Index-Chile

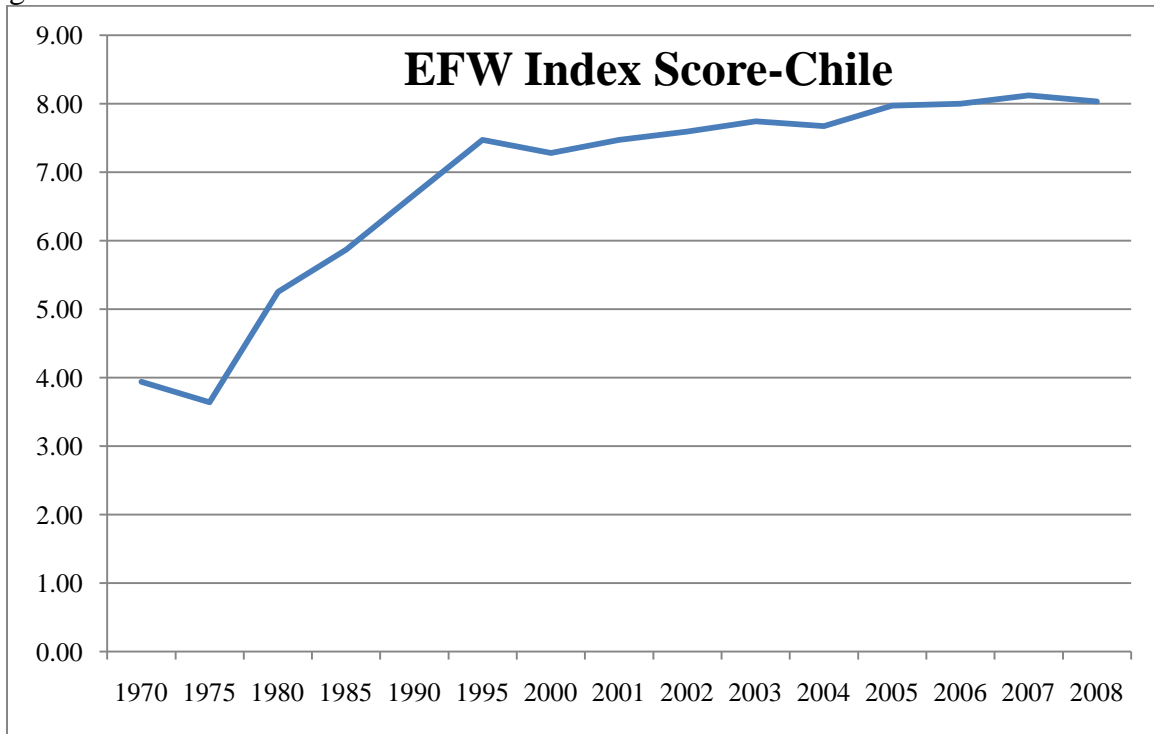


Figure 3: EFW Area 1 Score-Chile

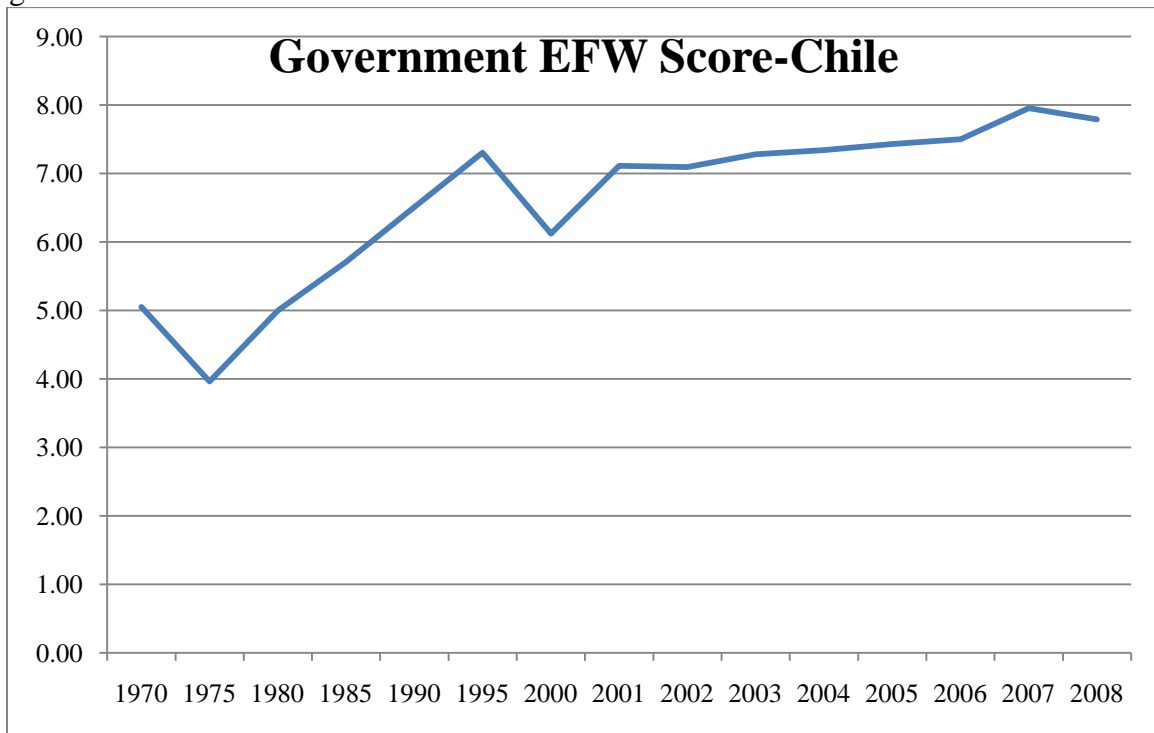


Figure 4: EFW Area 2 Score-Chile

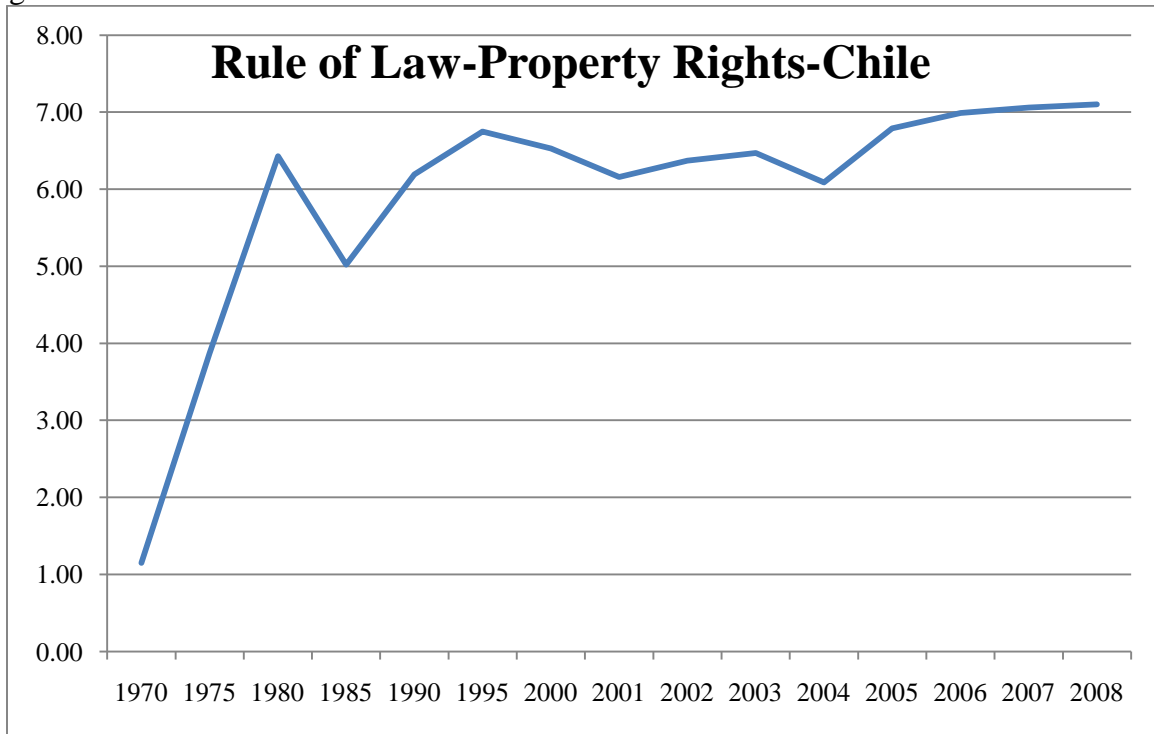


Figure 5: EFW Area 3 Score-Chile

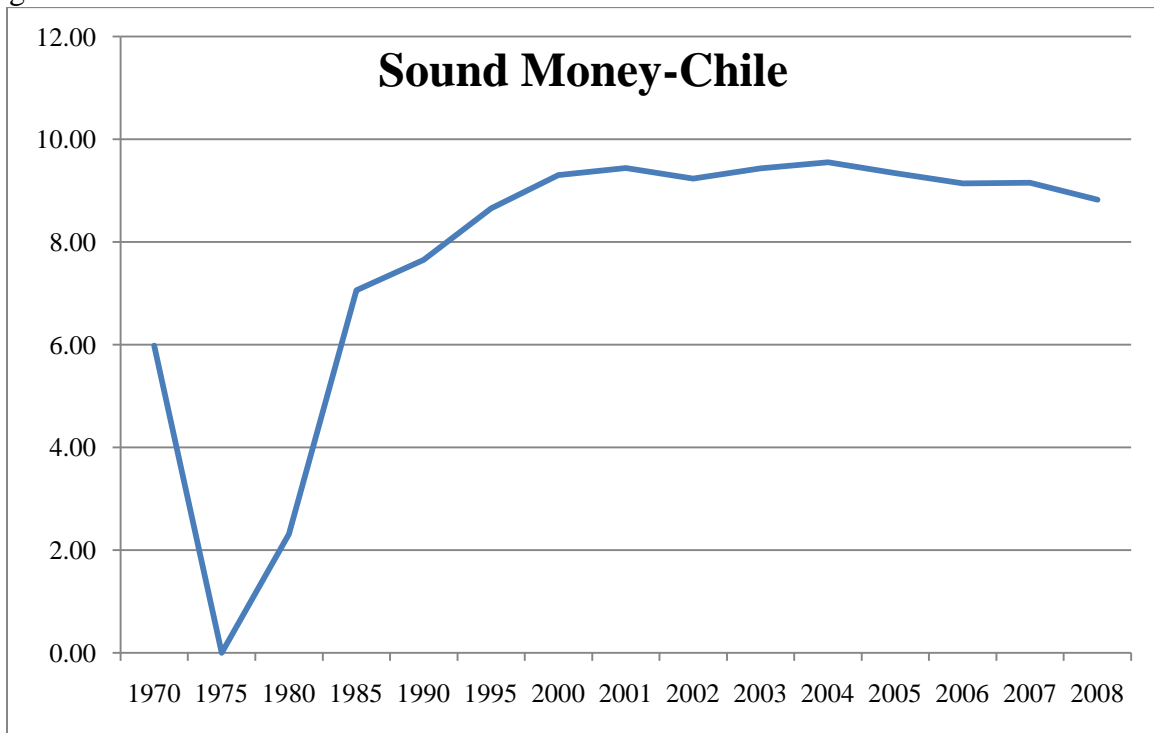


Figure 6: EFW Area 4 Score-Chile



Figure 7: EFW Area 5 Score-Chile

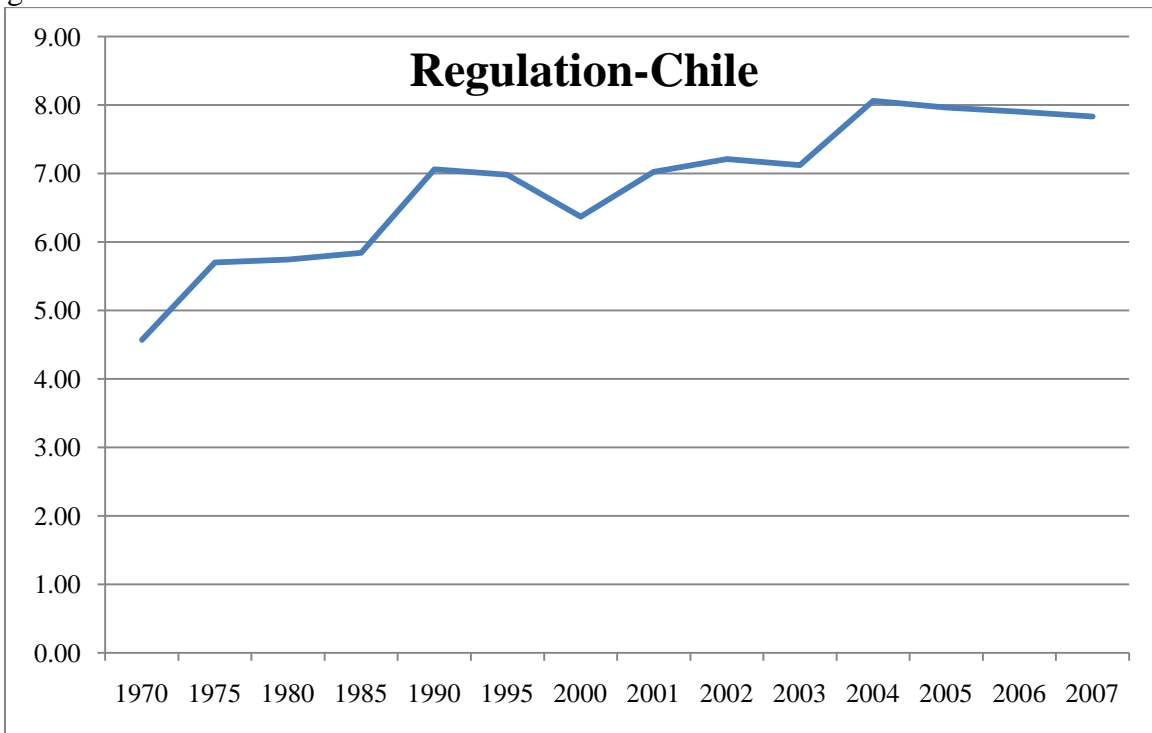


Figure 8: Correlation Matrix- Chile

	GDP	EFW Score	EFW Rank	Life Expectancy	Patents	Trademark Applications	Legal System & Property Rights	CPI
GDP	1.00							
EFW Score	0.81	1.00						
EFW Rank	-0.83	-0.97	1.00					
Life Expectancy	0.78	0.98	-0.92	1.00				
Patents	0.64	0.55	-0.57	0.60	1.00			
Trademark Applications	0.85	0.96	-0.91	0.95	0.62	1.00		
Legal System & Property Rights	0.55	0.75	-0.59	0.79	0.23	0.68	1.00	
CPI	-0.82	-0.73	0.57	-0.88	-0.64	-0.89	-0.50	1.00

Figure 9: GDP-Mexico

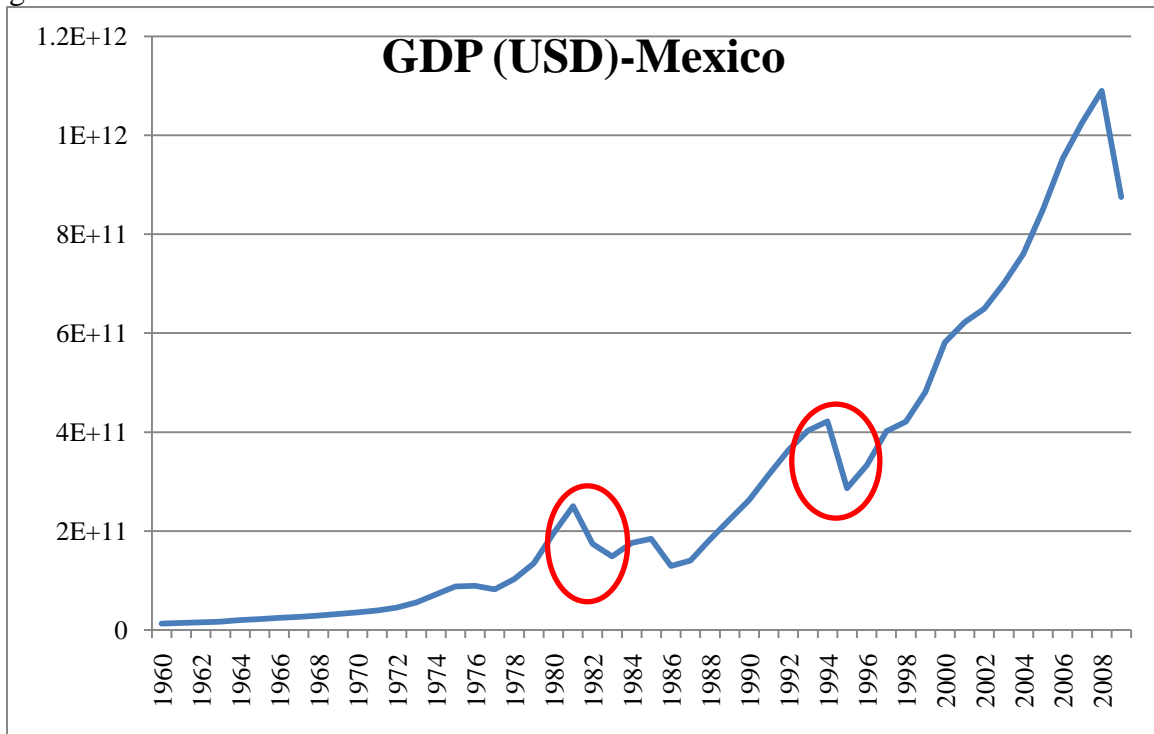


Figure 10: EFW Score-Mexico

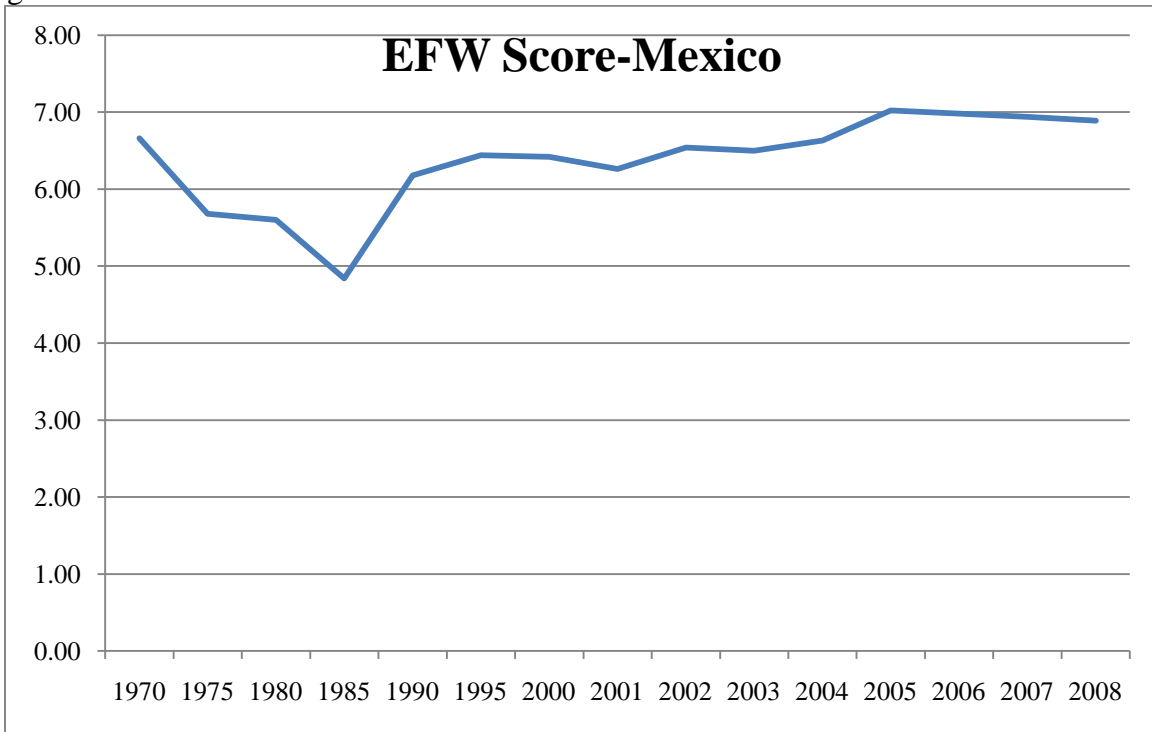


Figure 11: EFW Area 1 Score-Mexico

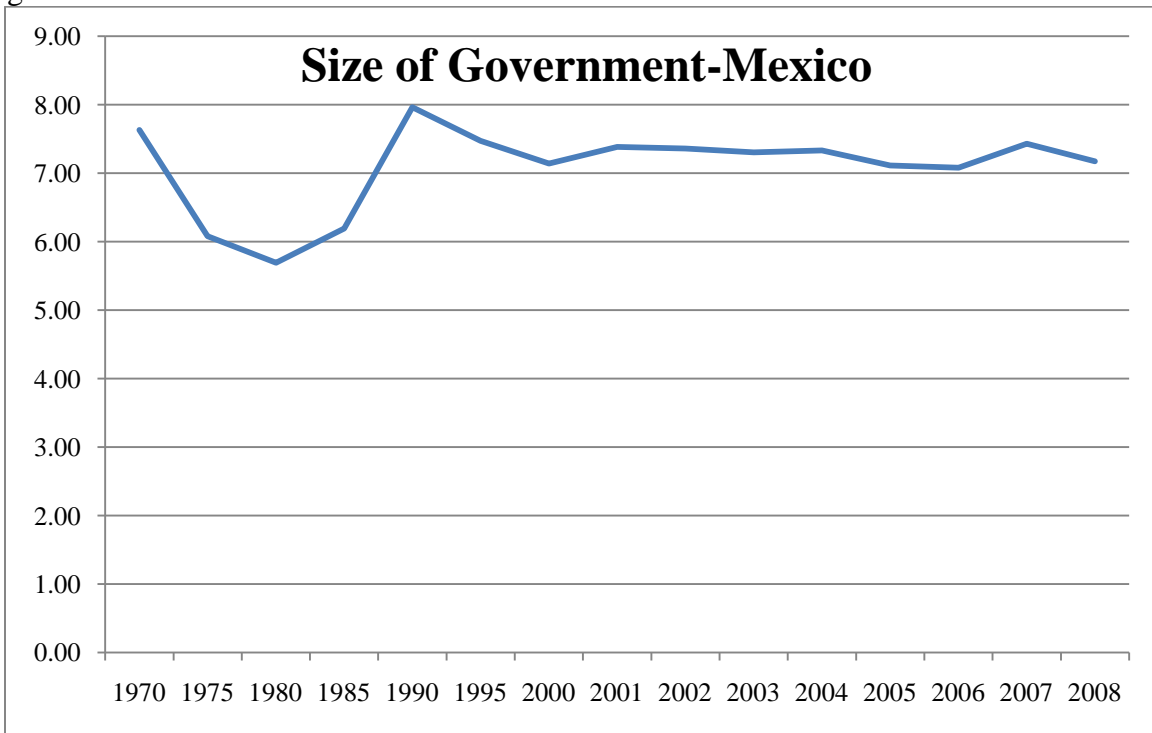


Figure 12: EFW Area 2 Score-Mexico



Figure 13: EFW Area 3 Score-Mexico

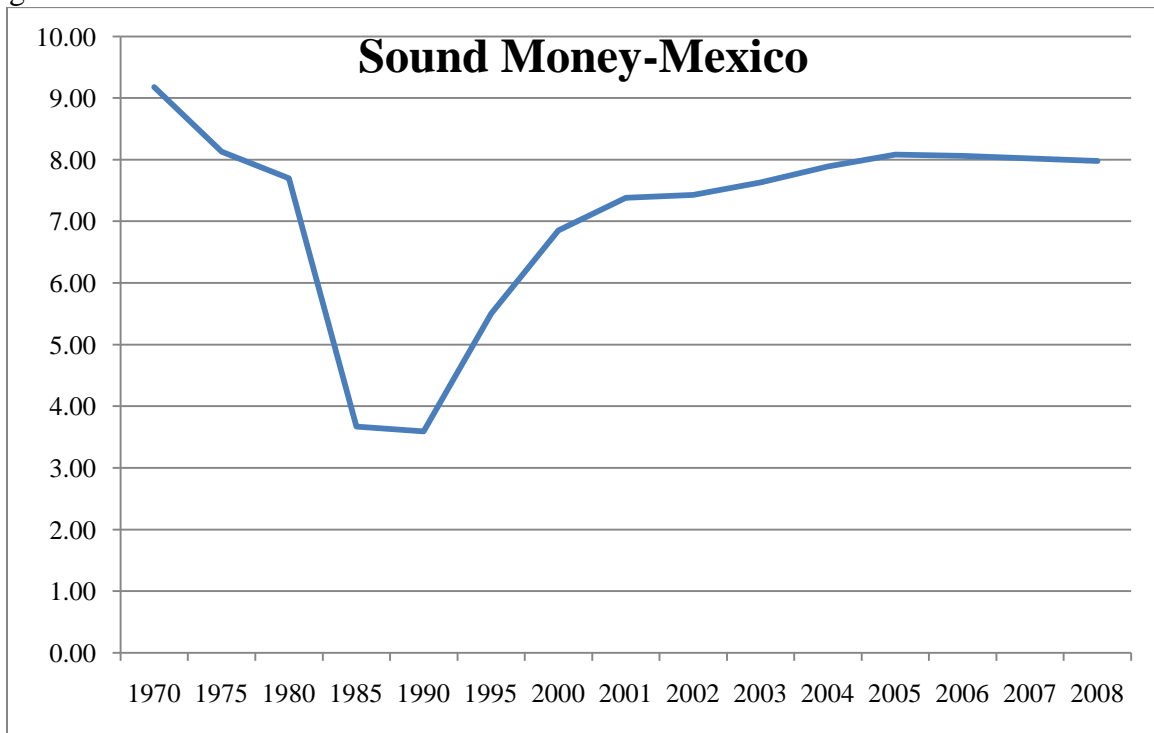




Figure 14: EFW Area 4 Score-Mexico



Figure 15: EFW Area 5 Score-Mexico

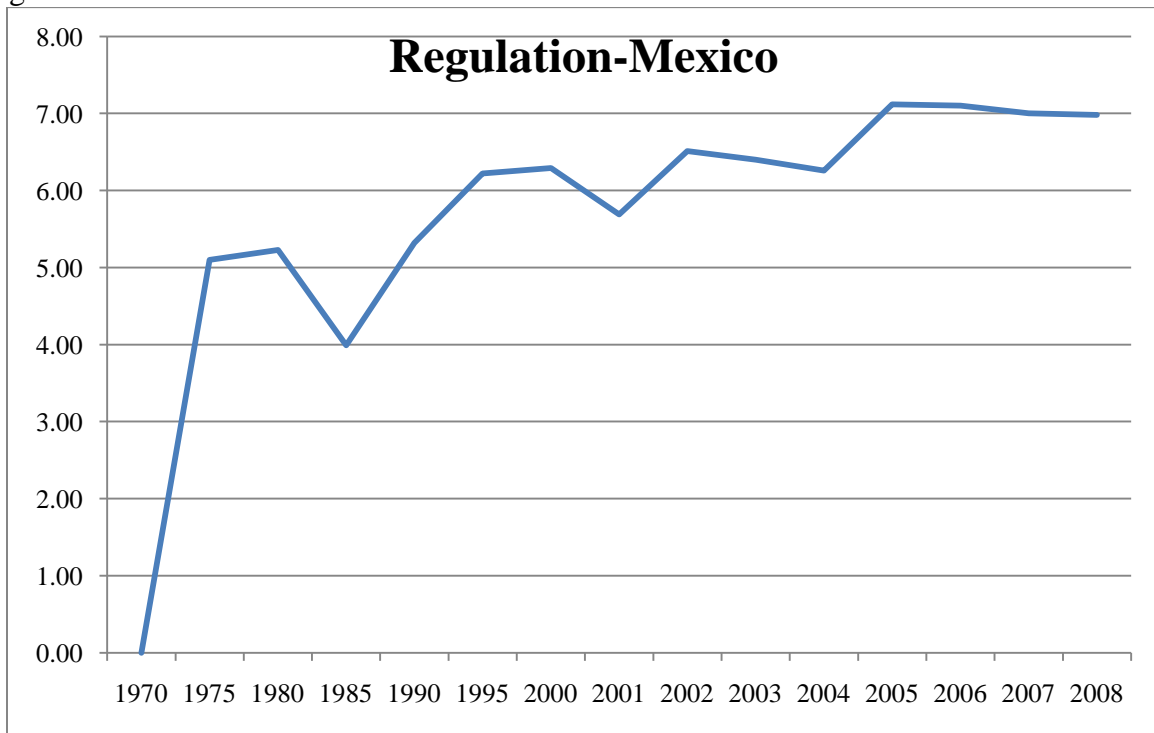


Figure 16: Correlation Matrix-Mexico

	GDP	EFW Score	EFW Rank	Life Expectancy	Patents	Trademark applications, total	Legal System & Property Rights	CPI
GDP	1.00							
EFW Score	0.71	1.00						
EFW Rank	0.59	-0.07	1.00					
Life Expectancy	0.85	0.52	0.73	1.00				
Patents	0.05	0.17	-0.12	-0.17	1.00			
Trademark applications, total	0.98	0.72	0.61	0.88	0.04	1.00		
Legal System & Property Rights	-0.21	-0.22	-0.21	-0.19	0.55	-0.27	1.00	
CPI	0.27	-0.09	0.62	0.51	0.16	0.29	-0.53	1.00

## **Academic Vita-Jamie Lynn Bologna**

P.O. Box 61  
Leechburg, PA 15656

Phone: (724) 882-0074  
E-mail: jlbologna@gmail.com

### **EDUCATION:**

**B.S. in Business Economics and Minor in Mathematics, Expected May 2011**

Penn State Behrend: Erie, Pennsylvania

### **TEACHING EXPERIENCE:**

**Penn State Erie, Learning Resource Center**

Peer Tutor of Economics, Business, and Mathematics, March 2010 –Current

- This position requires me to share my knowledge in economics, business, and mathematics with fellow students. This enables good practice in explaining difficult concepts in a way that is understandable to students. It also provides the opportunity to practice relating economics to real life situations.

### **HONORS AND AWARDS:**

Schreyer Honors College, June 2009 – Current

Undergraduate Student Summer Research Fellowship, Summer of 2010

Lawrence and Elizabeth Held Scholarship, 2009-Current

Beta Gamma Sigma, June 2010- Current

Dean's List, 2007-Current

### **LEADERSHIP POSITIONS:**

Society of Undergraduate Economists, Treasurer 2010-Current

Circle K, Vice President 2010-Current

### **RESEARCH IN PROGRESS:**

**Schreyer Honors College Senior Thesis**

Thesis Advisor: Kerry A. Adzima, PhD

Second Reader: Todd M. Nesbit, PhD

Thesis Title: The Causes of Differing Development Levels Among Nations

### **Econometrics Paper**

Supervising Faculty Member: Todd M. Nesbit, PhD

Paper Title: Determinants of Property Crime Rates Across the United States

### **CONFERENCE PRESENTATIONS:**

Penn State Behrend-Sigma XI Undergraduate Research and Creative Accomplishment

Conference (Presenter), Erie, PA (April 2010) "Determinants of Property Crime Rates Across the United States"

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