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Degree Matters: The Impact of a Leader's Foreign Education on His Country's Economic Development

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Claremont McKenna College

**Degree Matters: The Impact of a Leader's Foreign Education on His Country's
Economic Development**

submitted to

William Lincoln, Ph.D.

by

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for

Senior Thesis

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1. Abstract

I analyze the correlation between a nation leader's foreign education experience and their nation's GDP growth and economic freedom in African, Asian, and South American countries. There is a statistically significant correlation between a leader's foreign education and the country's GDP growth rate, especially in Africa. Data also shows that a leader's foreign education is positively correlated with his country's economic freedom. Despite the fact that the regressions can only demonstrate correlation as opposed to causation relationships among variables, further analysis of the results concludes that a leader's education and the country's development are reciprocal. The findings of this paper shine light on future policy directions for developing countries.

2. Introduction

After World War II, the number of international students in developed countries studying at all levels grew rapidly as developing countries sought to educate their populations. By the end of the 20th century, there were an estimated 1.5 million students studying internationally at the higher education level (Mazzarol, Soutar, & Seng, 2003). Many of these students returned to their home countries where they became important figures. The United States State Department estimates that nearly 300 world leaders, current and former, were educated at U.S. institutions (Wolfgang, 2012). However, it remains unanswered if a foreign degree has an impact on the ruling style of each leader and if so, to what extent.

In late 2001, after the death of Kim Jong Il, Time Magazine published an article, predicting that Kim Jong Un, who was educated in Switzerland, would initiate reforms once he came to power. The article argued, “There may be reason for cautious hope... and the cause of hope begins with the fact that as a young man Kim lived in Bern, Switzerland, attending school there under an assumed name from 1998 to 2000 (Powell, 2011).” However, other scholars disagreed. Zhang Lianghai, a professor at the Central Party School in Beijing claimed, “I think his background is less important than the position he occupies now ... Kim Jong Un will continue the military first policy of his father, unwilling in a tenuous political position to challenge the powerful military whose support he needs to rule (Glionna & Demick, 2011).” Despite intense debates on the media, there has not been much contribution to this topic from the academia. The motivation of this study is to understand the impact of a developing country leader’s

foreign education on his country's economic development with the help of rigorous data analysis.

My data shows that there is a positive correlation between a leader's foreign education and his country's GDP growth rate. However, when breaking down the data into three continents: Asia, Africa, and South America, such effect becomes statistically insignificant in Asia and South America while it becomes stronger in Africa.

Furthermore, I have also discovered a positive relationship between a leader's foreign education and his country's economic freedom. The impact is strongest in South America, followed by Asia and Africa.

The regressions only demonstrate a correlation, instead of causation relationship. However, I believe that a leader's foreign education and his nation's development are reciprocal. The leaders who have received educations abroad serve as a bridge connecting western ideas, perceived to be more advanced, to their home countries. On the other hand, better economic development in developing countries has led to more students studying abroad, which in turn, has resulted in a higher percentage of leaders with foreign education. The findings of this study may have implications on future government policies for developing countries. Developing countries should encourage more students to study abroad and be open to appointing qualified people who have studied abroad as government officials.

This study will rely on literature review, data description, result analysis, and logical explanation of the data. I will first review past literature on relevant topics. Next, I will describe the characteristics of the dataset of this study. Then, the results of the data

will be presented and discussed. Finally, I will attempt to interpret the findings of this important topic with the support from data.

3. Literature Review

In the past, many scholars have looked into the returns of foreign education on the individual level. Stephenson (1999) discovered that foreign education brought positive values to students and allowed people to better appreciate the richness of other cultures. On the other hand, Friedberg (2000) argued that education acquired abroad is significantly less valued than education obtained domestically.

At the national level, countries often face a tradeoff between “brain gain” and “brain drain.” The “brain drain” effect refers to the departure of talent as some plan to stay in the host countries after receiving an education (Beine, Docquier, & Rapoport, 2001). A country always needs to make the decision of whether it should encourage students to study abroad since there is a chance of them never returning. Rosenzweig, Irwin, and Williamson (2006) observed that improving education systems in very poor countries may increase brain drain since it makes it easier for high-skilled people to obtain visas from rich countries. Despite this, Hanson (2009) proved that countries with higher “emigrant stocks” abroad still have faster growth in the number of educated adults and those emigrants abroad may help the country lower its barrier to trade, investment, and technology flow. Furthermore, the emigrants abroad are also helping their own countries through remittance. Data shows that more educated immigrants send more money home more (Bollard, McKenzie, Mortan, & Rapoport, 2011).

Although some students choose to stay in their host countries, others are still willing to return, and developing countries can benefit from them. In the famous book “Innovation”, Barnett (1953) claimed that overseas experience can be a major stimulant

fostering social change. Kim (1998) constructed economic models to estimate the benefits developing countries get from the advanced knowledge of returning students and found a nonlinear relationship between the human capital gap and knowledge import. His model shows that common developing countries can benefit from the import of knowledge while those who are too far behind may not benefit. Similarly, Fry (1984) used both case studies and analytical models (quasi-longitudinal) to prove that studying abroad over the long term has positive economic and political effects and “investments [in study abroad for individuals from developing countries] have been well justified.” Through case studies, scholars have discovered positive impacts of returning scholars on the country’s development as well. Guo (1998) looked into the returning educated students in China and concluded that they played a key role in the modernization of higher education in the country. Zweig, Chen, & Stanley (2004) also argued that China benefited a lot from foreign capital invested in the cohort of returnees. Heaton & Throsby (1998) used data of postgraduate students from Fiji studying at Australian universities and also found that sending countries can benefit from students studying abroad.

Adding to prior literature, this study will further narrow down the returnee group into those who came back to the country and became the leader of the nation. In this study, my first goal is to investigate the impact of a leader’s foreign degree on the economic freedom of the country. Most of the developed countries in the world have better functioning markets than those of developing countries. Having received an education in a developed country, these leaders should, in theory, be more open to free market ideas, and make sure the market plays a more important role than government regulations. The second goal of this study is to evaluate the impact of a leader’s foreign

degree on the nation's economic growth. Economic reforms typically lead to economic growth. This study will explore the impact of a foreign education on leaders and how it influences economic growth of their countries.

4. Data Description

For this study, I collected data of the educational experiences of leaders from countries in South America, Asia, and Africa from 1970 to 2015¹. Many developing countries have both religious and political leaders. Thailand, for instance, has a Monarch and a Prime Minister, both of whom possess great power. In these countries, the educational experiences of political leaders are chosen in the dataset, over religious leaders. Unlike the United States, whose presidential election happens in November, the end of the year, many power exchanges happen in the middle of the year in developing countries. The dataset only keeps one value for foreign education variable each year, and some years, a nation has multiple leaders. In these cases, the education experience of whoever has ruled the longest during that year is taken. Since the education data comes from various sources and the collection of 4,416 data points was done manually, the data may not be entirely accurate.

**Table 1. Summary Statistics for Regression Variables
1970-2015**

Variable	# of	Standard			
	Observations	Mean	Deviation	Minimum	Maximum
Year	4,416	1,992.5	13.27742	1970	2015
Foreign_Education	4,073	0.4986	0.5000596	0	1
CountryID	4,416	48.5000	27.71445	1	96
GDP	3,798	4.2950	7.11575	-64.05	106.28
Freedom_Index	1,142	6.0223	1.10163	2.47	8.88

¹ Countries with less than 2 million populations are excluded. Certain regions are also excluded since data is not available. Overall, nations (regions) excluded are Cabo Verde, Comoros, Djibouti, Equatorial Guinea, Mauritius, Mayotte, Reunion, Saint Helena, Sao Tome and Principe, Seychelles, Swaziland, Western Sahara, Bhutan, Brunei Darussalam, Hong Kong, Macao, Cyprus, Japan, Maldives, State of Palestine, Timor-Leste, Falkland Islands, French Guiana, Guyana, and Suriname. Japan is excluded since its economic development started well before 1970 so it's data will not provide too much insight into this topic.

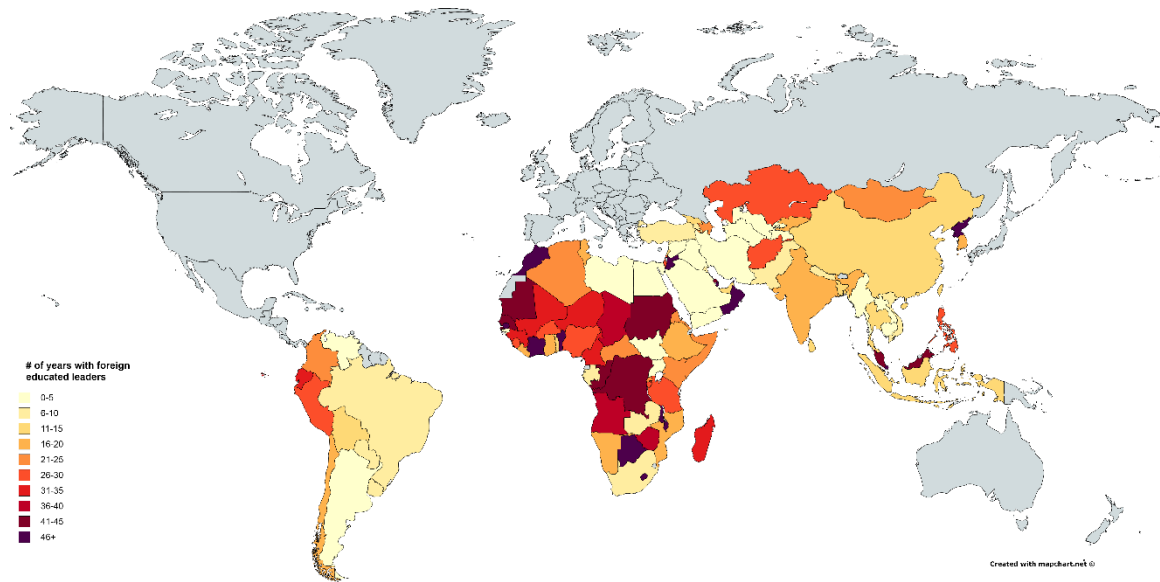
The table above summarizes the variables used in the regressions in this study. The Year variable ranges from 1970 to 2015. Foreign_Education is a dummy variable that takes 1 for leaders educated abroad and 0 for leaders educated domestically. For leaders with no documented education experience, blank is used instead. CountryID assigns a number for each country in the dataset. In total, there are 96 countries. The GDP variable shows the GDP growth rate for each country. The data is in percentage point. Freedom_Index measures the economic freedom of each country. The data is taken from the Fraser Institute.

In the sample, there are 10 South American countries, 42 Asian countries, and 44 African countries. Leaders from different developing countries have different preferences when choosing where to study abroad. In fact, studies show that students choose to study in countries that have a former colonial relationship because of their familiarity with the language and culture (Gribble, 2008). For example, France has been a popular education destination for many from African countries. In 2004, a significant amount of students from Africa went to study in France and 30% of international students in France were from former French colonies (IIE, 2006). Data in this study also supports this finding. One good example is the Republic of Congo, one of the former French colonies. From 1970 to 2015 (46 years), the Republic of Congo has had a French-educated leader except for 1977 and 1978. Instead, leaders in South America tend to attend schools in the United States. Currently, four leaders out of ten countries in South America have received an

education in the United States². In Chile, for example, all the presidents after 2000 have received an education in the U.S.

Graph 1. *Number of years of leaders with foreign educational experiences*

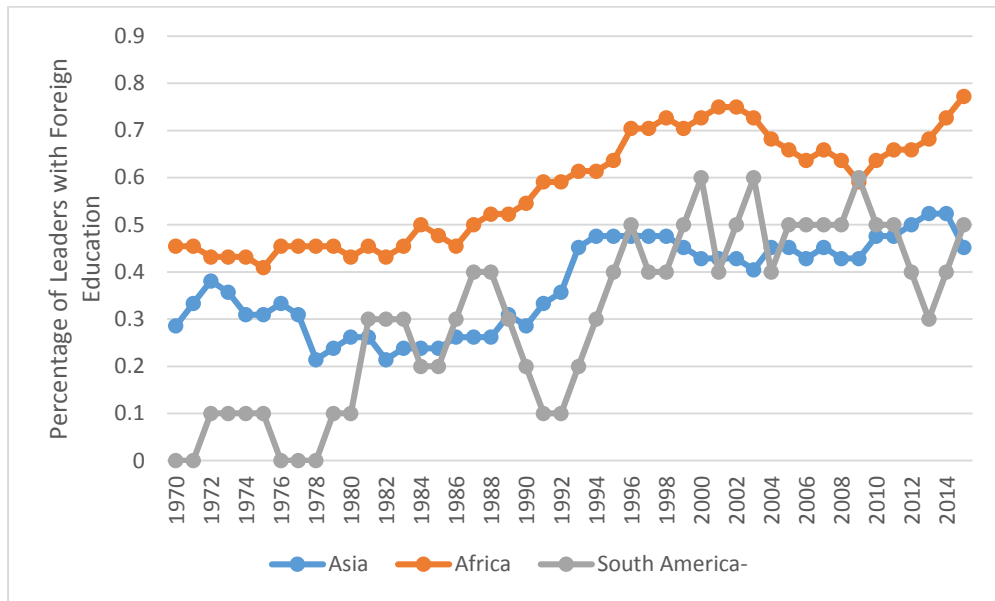
1970-2015



Graph 1 shows the number of years that each country had a leader with foreign education between 1970 and 2015. A darker color is shown in the countries with higher number of years. The graph clearly shows the uneven distribution of foreign educated leaders. In general, Africa has the darkest color, followed by Asia and South America. Many West African countries, Middle Asian countries, and Central African countries have enjoyed many years of leaders with foreign education. On the contrary, for Middle Eastern countries, and certain South American countries, most leaders are domestically educated.

² Mauricio Macri in Argentina, Michelle Bachelet in Chile, Rafael Correa in Ecuador, and Horacio Cartes in Paraguay.

Graph 2. Percentage of Leaders with Foreign Education in Three Continents
1970-2015



The graph above summarizes the percentage of national leaders with a foreign education degree for each continent from 1970 to 2015. The three lines from top to bottom each represent Africa, Asia and South America. The graph shows that the percentage of leaders who have received a foreign education has steadily increased over the past four decades for all three continents. The foreign education rate remains the highest for Africa throughout the four decades. Despite that in early 1970s, the foreign education rate was low for South American countries, it caught up with that of Asian countries' after the mid-1990s.

The two dependent variables used in this study are economic growth rate and economic freedom index. The economic freedom index comes from Fraser Institute's

Economic Freedom of the World index³. On their website, the Fraser Institute describes economic freedom in the following way: “individuals have economic freedom when property they acquire without the use of force, fraud, or theft is protected from physical invasions by others and they are free to use, exchange, or give their property as long as their actions do not violate the identical rights of others. An index of economic freedom should measure the extent to which rightly acquired property is protected and individuals are engaged in voluntary transactions. (Gwartney & Lawson, Economic Freedom of the World: 2001 Annual Report, 1996)” The Fraser Institute index measures five broad areas:

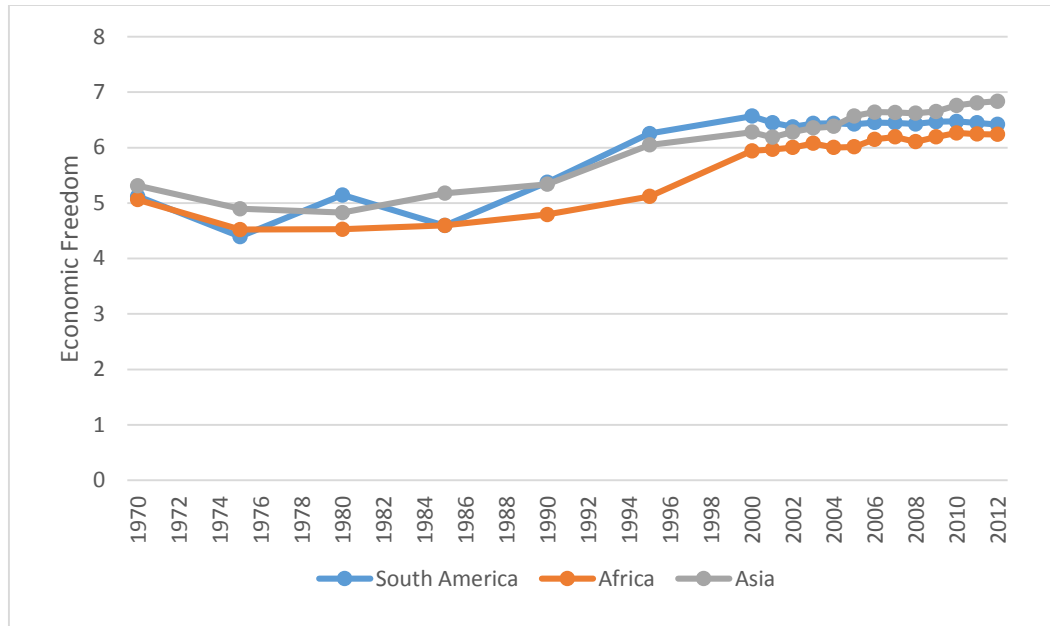
- size of the government: expenditures, taxes, and enterprises
- legal structure and security of property rights
- access to sound money
- freedom to trade internationally
- regulation of credit labor and business (Gwartney, Lawson, & Hall, 2015)

The dataset only includes data from 1970, 1975, 1980, 1985, 1990, 1995, and 2000-2012.

³ <http://www.freetheworld.com/>

Graph 3. Average Economic Freedom Index in Three Continents

1970-2012



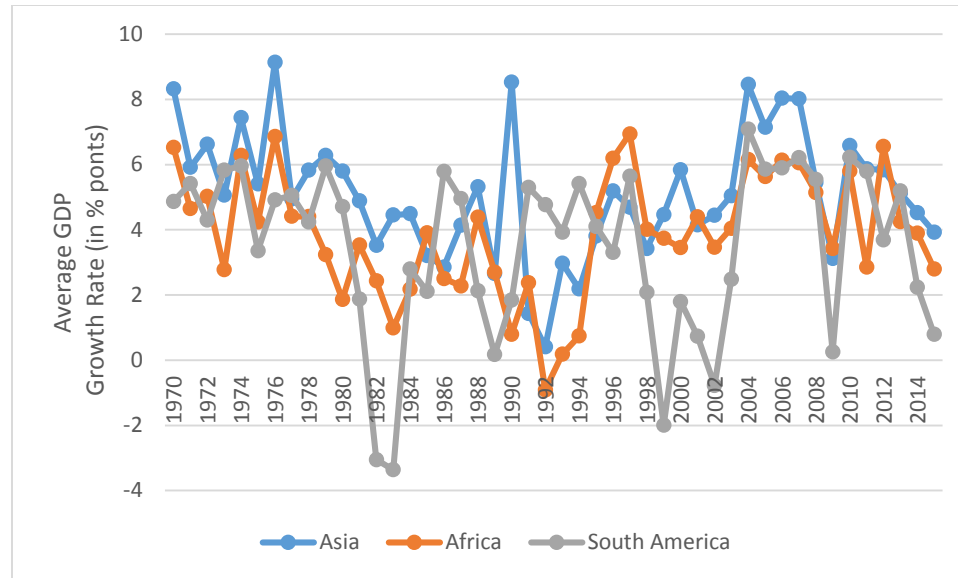
Graph 3 summarizes the change in the average economic freedom index for each continent through 1970 to 2012. Since there is only one data point for each country every five years before 2000, there are gaps in the economic freedom index during that period. The data suggests that there were some big improvements in economic freedom in the 80s and 90s. After 2000, the improvement slowed down and the index even went down for South America.

The economic growth rate used in this study comes from the World Bank's data bank⁴. The dataset contains GDP growth rate (in percentage term) for all the countries in the world from 1960 to 2015.

⁴http://databank.worldbank.org/data/reports.aspx?Code=NY.GDP.MKTP.KD.ZG&id=af3ce82b&report_name=Popular_indicators&populartype=series&ispopular=y#

Graph 4. Average Economic Growth Rate in Three Continents

1970-2015



The graph above plots the arithmetic average GDP growth rate in each continent at different years. While using arithmetic average in the graph may not capture the size of economy, population, and other variables for each country, it provides a good sense of the overall economic conditions in the three continents. Africa and Asia's GDP growth rates have been relatively constant throughout the years. Since there are fewer countries in South America's sample, its data appears more volatile in the graph. In the early 1980s, 1990s, and late 1990s, South American countries experienced a couple waves of recession with a negative GDP growth rate. In 2008's financial crisis, South American countries were also the ones that suffered the most.

5. Data Analysis

To analyze the impact of the foreign education of leader on a country's economic growth, I design a simple panel regression with the equation:

$$d.GDP = \alpha + \beta \times ForeignEducation + \sigma_i + \varepsilon$$

d.GDP measures the percentage point change in each country's annual GDP.

ForeignEducation is a dummy variable that measures whether a foreign leader has received education abroad. σ_i is a vector that controls country-specific characteristics.

Since there may be missing variable issues, this regression is unlikely to indicate any causation effects. However, it can still show some correlation between these two variables. I first ran the regression of *d.GDP* on *ForeignEducation* for all the developing countries in the data sample.

Table 2. Foreign Educational Experience for National Leaders and GDP Growth for All Developing Countries, 1970-2015, Panel Regression
Dependent Variable: GDP Growth Rate in Developing Countries (in %pts)

	1970- 2015 (1)	1970- 1979 (2)	1980- 1989 (3)	1990- 1999 (4)	2000- 2015 (5)
ForeignEducation	0.584* (0.331)	2.100* (1.194)	1.854* (1.014)	0.674 (1.192)	0.490 (0.515)
R squared	0.0566	0.2037	0.2582	0.1584	0.1298

Notes: N=3637 for (1), 623 for (2), 706 for (3), 858 for (4), 1450 for (5). Standard error is shown below the coefficient. *, **, and *** each represents statistical significance level at 0.10 level, 0.05 level, and 0.01 level.

Over the entire period from 1970 to 2015, there is a positive relationship between foreign educational experience of national leaders and their home countries' GDP growth. For countries with a leader that has received a foreign education, their GDP

growth rate is on average 0.58% higher than the other countries. The data is statistically significant at 0.10 level. To further breakdown the data, I divided the years into four periods: 1970-1979, 1980-1989, 1990-1999, and 2000-2015. Interestingly, despite the fact that the percentage of African leaders who received a foreign education increased over the entire period, the data only shows statistically significant effects in the early periods from 1970 to 1979 and 1980 to 1989. In 1970-1979, countries with foreign educated leaders had an on average 2.10% GDP annual growth rate higher than countries that did not. In 1980-1989, the difference was 1.85%. After 1990, the coefficients dropped greatly, primarily because of the slowdown of GDP growth (Graph 4).

To better understand the data and explore the different effects of a leader's education on his nation's GDP growth in different regions, I ran three separate regressions for each continent.

Table 3. Foreign Educational Experience for National Leaders and GDP Growth for South American Countries, 1970-2015, Panel Regression
Dependent Variable: GDP Growth Rate in Developing Countries (in %pts)

	1970- 2015 (1)	1970- 1979 (2)	1980- 1989 (3)	1990- 1999 (4)	2000- 2015 (5)
ForeignEducation	-0.773 (0.509)	2.680 (1.985)	-0.443 (1.685)	-1.146 (1.211)	0.516 (0.931)
R squared	0.038	0.303	0.143	0.116	0.038

Notes: N=459 for (1), 100 for (2), (3), (4), 159 for (5). Standard error is shown below the coefficient. *, **, and *** each represents statistical significance level at 0.10 level, 0.05 level, and 0.01 level.

Data from South American countries does not show any statistically significant results. This is probably due to the small data sample, which only includes 10 countries.

Interestingly, instead of the positive relationship between foreign education experience and GDP growth rate predicted earlier in this paper, some regression coefficients show negative signs in this table. In the past decades, many South American countries, such as Argentina, Brazil, Peru, Uruguay and Venezuela, suffered serious negative GDP growth, most of whose leaders had studied abroad. Recessions in these countries were caused by unstable debt markets, less competitive labor markets, and deteriorating external demand for domestic goods (IMF, 2016). Such economic recessions may cause the negative coefficients of the regression.

Table 4. Foreign Educational Experience for National Leaders and GDP Growth for Asian Countries, 1970-2015, Panel Regression
Dependent Variable: GDP Growth Rate in Developing Countries (in %pts)

	1970- 2015 (1)	1970- 1979 (2)	1980- 1989 (3)	1990- 1999 (4)	2000- 2015 (5)
ForeignEducation	0.099 (0.591)	2.339 (1.686)	2.235 (2.483)	-2.071 (2.005)	0.552 (0.747)
R squared	0.066	0.217	0.322	0.264	0.181

Notes: N=1411 for (1), 194 for (2), 244 for (3), 354 for (4), 619 for (5). Standard error is shown below the coefficient. *, **, and *** each represents statistical significance level at 0.10 level, 0.05 level, and 0.01 level.

Data from Asian countries does not show any statistically significant results either. I believe this is due to the specific nature of Asian countries. Unlike South America or Africa, in which countries share similar characteristics, Asian countries differ from each other in many different aspects. Southeast Asia and the Middle East, for instance, have drastically different cultures, relations, populations and the economic development level varies greatly between countries as well.

**Table 5. Average GDP Growth Rate in different Asia Regions,
1970-2015**

Dependent Variable: Average GDP Growth Rate (in % pts)	
	1970-2015
	Average GDP Growth Rate
EastAsia	3.81*** (1.30)
MiddleEast	1.81* (0.90)
SouthAsia	2.41** (0.93)

Notes: N=40. Standard error is shown below the coefficient. *, **, and *** each represents statistical significance level at 0.10 level, 0.05 level, and 0.01 level. Base case is Central Asia.

The regression above shows that there is a significant difference between average GDP growth rates for different parts of Asia. The data shows that during the past 45 years, East Asia, which includes China, Mongolia, and South Korea, on average, grows 3.8% faster than countries in Central Asia, which include Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. The Middle East, although still growing faster than Central Asia, grows much slower than East Asia and South Asia. This slow growth can be explained by recent violence that has happened in the Middle East. Alternatively, South Asia was relatively peaceful and grew at a decent speed. The diversity in Asia may explain the statistical insignificance shown in the previous regression. However, this study does not go deep into analyze each part of Asia individually.

Table 6. Foreign Educational Experience for National Leaders and GDP Growth for African Countries, 1970-2015, Panel Regression

Dependent Variable: GDP Growth Rate in Developing Countries (in %pts)					
	1970- 2015 (1)	1970- 1979 (2)	1980- 1989 (3)	1990- 1999 (4)	2000- 2015 (5)
ForeignEducation	1.317*** (0.491)	1.663 (2.081)	2.905** (1.344)	3.709* (1.908)	0.446 (0.842)
R squared	0.041	0.164	0.192	0.061	0.095

Notes: N=1767 for (1), 329 for (2), 362 for (3), 404 for (4), 672 for (5). Standard error is shown below the coefficient. *, **, and *** each represents statistical significance level at 0.10 level, 0.05 level, and 0.01 level.

Data from Africa shows that on average, the GDP of countries with foreign educated leaders grew 1.3% faster than countries without foreign educated leaders between 1970 and 2015. From 1980-1999, a stronger correlation between these two variables is seen. Compared with Asia and South America, African countries tend to have more political instability. Unlike Asian countries, most of which were decolonized in the early 20th century, decolonization in Africa happened in the mid-20th century between 1930 and 1970 (Bonneuil, 2000). Decolonization was followed by long periods of war and instability. From 1956 to 2001, there were 80 documented successful coups, 108 failed coup attempts, and 139 reported coup plots (McGowan, 2003). As a result, compared with Asia and South America, the economy of African countries was relatively small and new. Their political systems were less democratic as well. This may explain why the correlation between a leader's educational experience and a nation's GDP growth was high. A benevolent dictator (presumably the ones who studied abroad) can

have a great impact on a country's development. Since the base of the economy in many African countries was so small, it was possible for them to grow at high rates.

Besides GDP growth, this paper also analyzed the impact of a leader's foreign educational experience on the economic freedom of the country. In the past, many scholars have discovered positive relationships between economic freedom and economic growth. Bengoa & Sanchez-Robles (2003) analyzed 18 Latin American countries from 1970 to 1999 and found that foreign direct investments and economic freedom were positively correlated with economic growth in host countries. Haan & Sturm (2000), argued that greater economic freedom fostered economic growth while the level of growth did not have a significant impact on the level of economic freedom. Dawson (2003) conducted a causality analysis and also found that overall levels of freedom appear to cause growth while changes in freedom are jointly determined with growth.

In this study, I construct a panel regression to estimate the effect of leader's educational experience on the economic freedom of the country.

$$EconomicFreedom = \alpha + \beta \times ForeignEducation + \sigma_i + \varepsilon$$

EconomicFreedom index comes from the Fraser Institute and measures each country's degree of economic freedom. *ForeignEducation* is a dummy variable that measures whether a foreign leader has received education abroad. σ_i is a vector that controls country-specific characteristics.

Table 7. Foreign Educational Experience for National Leaders and Economic Freedom for All Countries, 1970-2015, Panel Regression

	1970-2015			
	All Countries (1)	South America (2)	Asia (3)	Africa (4)
ForeignEducation	0.320*** (0.071)	0.973*** (0.176)	0.236** (0.126)	0.085 (0.097)
R squared	0.466	0.378	0.602	0.273

Notes: N=1109 for (1), 184 for (2), 420 for (3), 505 for (4). Standard error is shown below the coefficient. *, **, and *** each represents statistical significance level at 0.10 level, 0.05 level, and 0.01 level.

Data above shows a positive correlation between the two variables and results are statistically significant for both South America and Asia. Whether it is the foreign educated leader bringing in economic reform or greater economic freedoms leading to more talent inflow/outflows remains unknown. Furthermore, despite the fact that previous regressions have shown that foreign educational experience of African leaders usually is correlated with country's economic growth, data here shows a non-statistically significant impact of education experience on economic freedom. This phenomenon is open for interpretation. One possible explanation is that African GDP growth largely relies on agriculture productivity, natural resources, and foreign direct investment projects, which may have little correlation with economic freedom of the country. China, for instance, has invested much capital into Africa over the past decades. China invested greatly in African infrastructure and, in return, received a large amount of natural resources. In 2006, trade between China and Africa totaled more than 50 billion (Zafar, 2007). However, these investments, despite helping African countries grow their GDPs,

may not have helped the local economy environments. Chinese factories in Africa produce low quality products, hurt local businesses, and only pay objectively low salaries to workers (Economist, 2011).

6. Discussion of Results

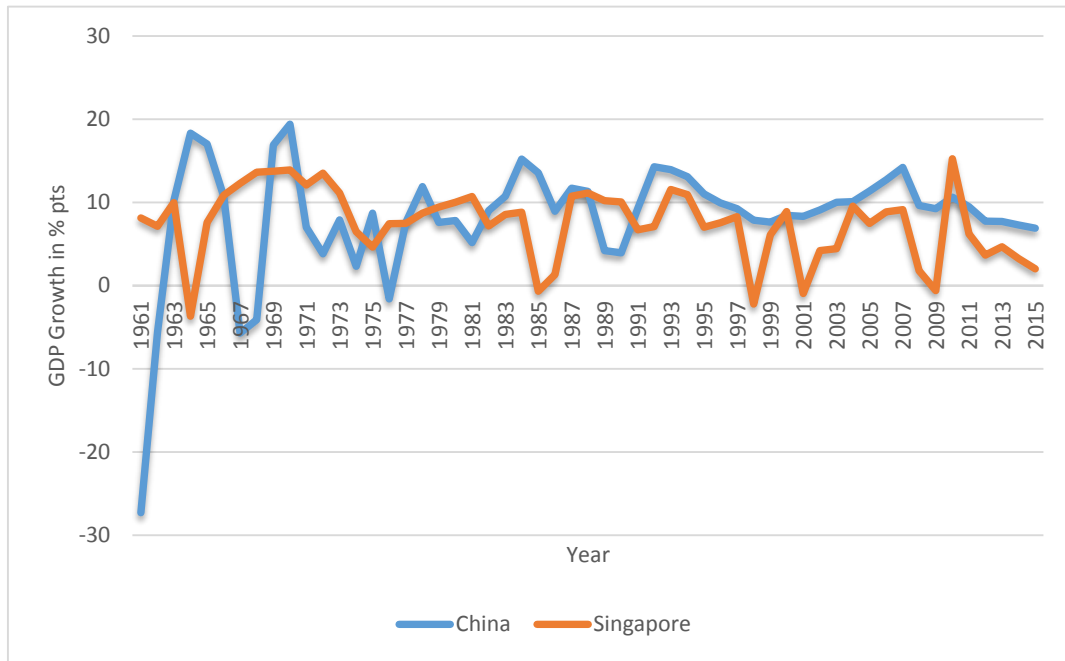
The results from this study show that there is a positive correlation between a leader's foreign education experience and his country's GDP growth and economic freedom. However, the regression results only demonstrate a correlation effect, and do not explain causation. Intuitively, a leader's foreign education should lead to changes in GDP and increased economic freedom. There are many good examples of leaders who changed their countries through individual efforts. China, for instance, suffered years of low or even zero economic growth in the 1960s and early 1970s. According to the World Bank, despite a couple years' high growth, GDP growth in China was -5.7% in 1967, -4.1% in 1968, and -1.6% in 1976. The Great Leap Forward and the Cultural Revolution, two failed communism attempts, destroyed the China's economy. However, in 1978, Deng Xiaoping, who was educated in France, single-handedly ended the Cultural Revolution and implemented a market-oriented economy. His policy, Gaige Kaifang (reform and opening-up), aimed to free the market and give power back to people, ensured three decades of double digit economic growth.

Another similar example is Singapore's economic and political reform initiated by Lee Kuan Yew. Lee Kuan Yew was first briefly educated in London School of Economics before enrolling at Fitzwilliam College, one of the constituent colleges of the University of Cambridge. Lee Kuan Yew claimed that his experience in Britain fundamentally changed his view on capitalism and democracy. He recalled that,

But capitalism benefited the people with the resources and the power ... We decided that capitalism was wrong ... When I found in Britain this idea of doing it [capitalism] the democratic way, by argument, by vote, by gradualism, by taxing the rich and helping the poor, it was so emotionally attractive and conceptually, intellectually sound (Kwang, Fernandez, & Tan, 2015).

In fact, he brought capitalism back to Singapore from his studies abroad. After becoming Prime Minister of Singapore, Lee Kuan Yew shifted the socialist economic approach of Singapore to a capitalist approach and instituted market-oriented policies to direct the economy. This approach helped Singapore enjoy a long period of high employment rate and GDP per capita until 1985 when recession hit (Low, 2001). Besides introducing capitalism to Singapore, Lee Kuan Yew also emphasized on the rule of law. He argued, “Singapore’s reputation for the rule of law has been and is a valuable economic asset, part of our capital, although an intangible one (Silverstein, 2003).” Singapore’s developed market, efficient government, and strong rule of law guarantee the market freedom and have made Singapore one of the most developed countries in Asia and in the world.

Graph 5. Historical GDP Growth for Singapore and China
1960-2015



China and Singapore’s progress may be explained by their leaders with foreign educational upbringing, who function as bridges that help import democracy and capitalism into their countries. In the past, many scholars have examined the impact of returning immigrants on a nation’s economic and political development. Perez-Armendariz & Crow (2009) conducted a case study in Mexico and found that migration alters the political participation and behavior of Mexicans living in Mexico through three ways: migrant returns, cross-border communications, and migrant information networks in high-volume migration-producing communities. Chevannes & Ricketts (1996) also discovered a positive impact of return migration on small business development in Jamaica. A leader with a foreign education from Western countries can be viewed as a special way of importing democracy and capitalism to his own nation. Deng brought in

democracy and free market. Lee brought in capitalism and rule of law. If these leaders can incorporate the knowledge they received from foreign education into their policies, the impact can be greatly positive.

Other than the fact that these leaders have brought in advanced western ideas, the implementation of their policies appears to be very effective. The efficiency of dictatorship may be the reason that leaders such as Deng Xiaoping and Lee Kuan Yew could successfully carry out reforms that many other democratic countries did not have. Many economists have argued that consolidated government is better for reforms. Gilson & Milhaupt (2011) claimed that authoritarian regime might become a critical juncture in the country's development – transiting from small economies to large entities or opening up borders for global trades. Przeworski, Limongi, & Giner (1995) discovered that democratic states could not resist the pressure of immediate consumption, which reduces investments, while authoritarian rulers can set up rules for long-term benefit. In Uganda, people selected benevolent dictatorship over multi-party rule, arguing that, “Museveni's ‘benevolent’ dictatorship is far better than a multipartist who cannot guarantee order and stability (Oloka-Onyango, 1997).” In an authoritarian country, a leader's will is less likely to be objected or dismissed. Orders from the top can be more easily implemented without much obstruction. For the leaders who have received foreign educations, their reforms can have a big impact on the nation's development and lead to higher GDP growth and greater economic freedom.

However, some scholars object to the idea that authoritarian governments can function better. Deacon (2003) found that compared with democratic governments,

autocratic governments under-provide public consumption goods, which is strongly related to per capital income in democracies. Djankov, Glaeser, Porta, Lopez-de-Silanes, & Shleifer (2003) also looked into the economic reform of China and argued that the success of China's economy was credited to the competition among regions, instead of an authoritarian government. However, this argument, in my opinion, was relatively weak. Without Deng, China's reform could not be carried out despite strong competitions among regions. These leaders play a crucial role in their nations' development. Deng later became the symbol of China and Lee Kuan Yew became the representation of Singapore. The world today still benefits from policies they set up decades ago.

However, it is possible that a leader's foreign education does not lead to economic growth. Instead, economic growths prompt the leaders to seek educations abroad. For instance, Lucas (2005) argued that "international migration does not stem from a lack of economic growth and development, but from development itself." It is possible that as the economy grows, more and more people decide to study abroad, which results to an increasing percentage of foreign educated leaders in developing countries. If this is the case, then the high correlation between a leader's foreign education and the nation's economic growth has little policy implication. In the previous case, the correlation can suggest that people should vote for candidates with foreign educations to be their president, while in this case, since international migration happens after economic development, there is not much voters can do.

Overall, it is hard to conclude which causation effect is correct. In real life, it is more likely that both a leader's foreign education and the country's economic

development are reciprocal to each other. Economic development allows more people to study abroad. When they come back, their foreign education allows them to better run the country.

7. Conclusion

Many famous leaders in developing countries who have initiated economic reforms, such as Deng Xiaoping from China and Lee Kuan Yew from Singapore, have received an education abroad. Much previous research has studied the effects of foreign education on individual's development and the impact that these returnees have on their home countries. This study further narrows down the returnee group into those who came back to the country to become the leader of the nation. Using a sample that contains information about the foreign educational experience of leaders, GDP growth, and economic freedom index from 96 developing countries in Asia, Africa, and South America between 1970 and 2015, I find a positive relationship between a leader's foreign educational experience and his country's GDP growth and economic freedom. The effects are particularly strong in African and South American countries.

Even though the regressions did not control for all variables and can only indicate a correlation, instead of causation, further analysis of the results indicates that a leader's education and his country's development can be reciprocal. Theories suggest that countries with open economies and high growth tend to have more students who study abroad, and later come back, often gaining leadership positions within the government of the country and implementing economic reforms.

Due to the limit of data and knowledge, the paper only includes a finite amount of rigorous data analysis. The collection of foreign education experience data was done manually and may not be entirely accurate. Nevertheless, the results of this paper still

shed light on future government policies for developing countries. Ultimately, there is strong evidence that countries should encourage more students to study abroad and be open to appointing qualified people who have studied abroad as important government officials.

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