The Demilitarization of Costa Rica

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The Demilitarization of Costa Rica

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Abstract

Costa Rica is one of the few developed countries in the world to be completely demilitarized. In the first chapter, this thesis explores why the country decided to demilitarize and how effective their demilitarization has been. Further statistical analysis is applied in Chapter 2 to determine the effect military spending has on growth in Latin America. With Costa Rica experiencing great stability and growth following their demilitarization and the statistical analysis showing military spending to have a negative impact on growth in Latin America, the third and final chapter explores other Latin American countries that could benefit from demilitarization.
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The Implications of Demilitarization
Introduction

According to the Stockholm International Peace Research Institute, in the years from 1988-2015, the world spent roughly $30,000,000,000,000 (that’s 30 trillion) on military spending (SIPRI Military Expenditure Database). The small Central American country Costa Rica spent $0. Military spending continually ranks highly among the spending budgets of developed and developing countries. In all countries, big and small, the military seems an absolute necessity. Demilitarization, for the most part, seems out of the question for most countries. As such, the potential economic and social impacts of a less militarized or even demilitarized country are rarely explored.

The most prevalent example of demilitarization to explore is Costa Rica. In 1948, President Jose Figueres Ferrer abolished the military in the Central American country and it has existed without armed forces ever since. The lack of a military makes Costa Rica distinct from nearly every other country in the world in terms of not only defense, but also economics. Not having to spend millions or even billions of dollars (in the case of larger countries) every year on defense, in theory, frees up the government budget greatly. The goal in Costa Rica was to replace military spending with spending on education (Høivik and Aas 342).

This thesis will explore how effective this plan has been. In other words, how much has demilitarization aided the economy and country in general? And, with an answer to the first question, it will make it much easier to determine the answer to the second question of the project: is this an advisable model for other countries to follow?
This is an important topic to explore because in this day and age demilitarization does not seem realistic, yet Costa Rica has been without armed forces for nearly 70 years. Larger and more geopolitically ascendant countries such as the United States would likely not be able to become completely demilitarized, but it is possible that many other countries can follow Costa Rica’s model to both their own economic benefit and the benefit of the world in general. Trading in defense spending for other projects could not only lead to a better economy, but also a more peaceful world. No process of demilitarization would be easy, but if this thesis confirms the effectiveness of the Costa Rican model, then gradual demilitarization of countries worldwide could have significant impacts on the world economy.

This first chapter will focus primarily on the history of Costa Rica—why they decided to demilitarize and what implications the demilitarization had on the country and the region. Before even analyzing the economic benefits of demilitarization, it is important to know whether it is even practical. That is to say, it would be of little consequence that the absence of a military could help an economy if it left the country constantly vulnerable to being taken over by any militarized nation. However, if Costa Rica has been able to maintain sufficient control over its territory and sovereignty without a military, then it is worth exploring how much (if any) the lack of military has helped the country’s development.

The second chapter will focus on statistical analysis of the variables that have (or have not) affected growth in Latin America over the past 55-years and if military spending is among them. Additionally, regressions will be run on the subsamples of Central America and Latin American countries with populations 1-20 million.
The third and final chapter will conclude on the historical and economic findings from the first two chapters and attempt to pinpoint other countries which could follow the Costa Rican model of demilitarization.
Chapter 1

The History of Costa Rica
When one thinks of Costa Rica, several things may come to mind: beautiful beaches, national parks, tourism, etc. And even with no knowledge of the Spanish language, a translation of the country’s name is not hard to deduce: the “Rich Coast”. Intuitively, this name seems to make sense for those who have ever seen postcards or photographs of either of Costa Rica’s two coasts—the Pacific Coast and Caribbean Coast. Both coasts are truly rich with natural, pristine beauty. Today, the name is fitting. In 1502, it was not.

The Spaniards, who originally colonized and named Costa Rica, soon realized that it was a misnomer—at least for their purposes. Despite the natural beauty of Caribbean and Pacific coasts, their new colony was not as “rich” as those of Mexico and Peru in terms of natural resources to exploit. Moreover, the small indigenous population of Costa Rica proved hard to force into labor, as many would run into the mountains where the colonizers could never find them (Watkins).

The reason for this misnomer, in fact, came from a man famous for one of the most significant misnomers in history—Christopher Columbus, who ten years before named the Native Americans Indians, convinced he was in India, despite all evidence pointing to the contrary. This famous inaccuracy has lived on ever since.

In 1502, Columbus sailed to the New World for the final time. When a storm struck the ships off the Caribbean coast of Limon, Columbus’ ships changed course and soon found themselves on the Caribbean coast of what they would soon name Costa Rica. The name was inspired, as with the “Indians”, by the first people they saw. To their amazement, these people wore gold pendants.

Gold, the exact scarce resource that the explorers were searching for seemed to be in such abundance in this small country that tribes of natives could casually wear
it. For Columbus and his men, there could not have been a more encouraging sight upon first seeing the native people. Columbus excitedly told the king of Spain that he “saw more signs of gold in the first two days [in Costa Rica]” than he “saw in Espanola during four years” (Wilson 10).

For this reason, Columbus decided once again to give a name that—despite its accuracy or inaccuracy—would stick forever. Costa Rica would be its name, for a coast that has so much gold that the natives wear it must be called the “Rich Coast”.

However, there was one problem with his quick naming of the country—first contact did not come with natives of Costa Rica as they believed them to be. In fact, the first people Columbus and his men saw were Caribs, a tribe of warriors from South America.

These Caribs had made their way up to Costa Rica, conquering other tribes in the process. Thus, the gold had not come from the supposed rich coast. Rather, the Carib tribe had accumulated gold through their conquests. Despite its new name, none of the gold had come from Costa Rica, a fact the eager explorers would soon be disappointed to find out (Watkins).

Christopher Columbus’ own brother, Bartolome, stayed with a ship and some men to further explore the region. To his surprise, he found no gold. Every further expedition failed to find gold. The Spainairds also found that with countless tribes—rather than one centralized power—it was nearly impossible to conquer the area.

Eventually, after almost two centuries of little luck in mineral exploitation by Spain, Costa Rica became a farmer’s colony. It is important to note that most of the farming did not involve forced labor, as the encomienda system—which marginalized the native population—failed to have the same success as in other colonies. The
natives and small number of migrants, despite some distinctions in class, were more or less on a similar playing field; that is, they were all relatively poor (due to the types of farming available, bad trade, taxes, and raids from pirates). The three exports that kept the rich coast from collapsing economically were cacao beans, tobacco, and mules. Yet, as Bruce Wilson points out, “at the close of the colonial period Costa Rica had no major export products and remained the poorest province in Central America” (Wilson 16).

On September 15, 1821, Costa Rica gained independence from Spain. Interestingly, the now demilitarized country initially became independent without firing a single weapon. After the Mexican War of Independence, Central America, by default, also became independent. In fact, Costa Rica was so removed from the War of Independence that it took nearly a month for news of their independence to reach them (Wilson 16). The sole fighting Costa Rica had to do was over whether they would be a part of the Mexican Empire or completely independent. The capital, Cartago, and Heredia were in favor of joining Mexico while the cities San Jose and Alajuela wanted to be independent.

In the end, San Jose and Alajuela won out and Costa Rica, for the first time, became its own autonomous country. Also, soon after, the capital city changed from Cartago to San Jose, where it has stayed ever since.

Another important development of the 19th Century in Costa Rica was the rise in importance of coffee. Coffee was easy to grow in Costa Rica and quite profitable. Soon it became the staple of the Costa Rican economy. In fact, Wilson points out that “by 1890, coffee accounted for more than 90 percent of export earnings” (Wilson 24).
As a result, the once poorest country in Central America “became the wealthiest country in the region” (Wilson 24).

Not only that, but it became a source of great wealth and political influence for the few families with the biggest coffee plantations—known as “coffee-barons” (Wilson 24). Juan Rafael Mora Porras, a coffee-baron himself, was president of Costa Rica in the mid-1800s.

Also important during the mid-19th century was one of Costa Rica’s few military confrontations. In this instance, the power-hungry William Walker from Tennessee, sought to take over all of Central America to export slaves. A force of 9,000 Costa Rican soldiers defeated Walker, though not without significant costs—both monetarily and in terms of lives lost, including the deaths of around half of the army (Watkins).

In fact, the economic cost of the war was so high that it resulted in a coup d’état against President Mora Porras, who had authorized it. Though around one hundred years before the formal ridding of the military, this was an early lesson to Costa Rica of the negative consequences of war—socially and economically (Watkins).

In 1870, another military coup occurred in Costa Rica, lifting Tomas Guardia to power. Guardia had a significant impact for two reasons: he supported universal public education and helped arrange the building of the railroad to the Port of Limon.

It is important to note that, according to Wilson, “although Costa Rica’s geography and climate were well suited to the cultivation of high-quality coffee, the infrastructure was not” (Wilson 24). With coffee cultivated mostly in the mountains, it
had to be transported to a port in order to be exported which was neither convenient nor efficient with Costa Rica’s lacking infrastructure.

Fortunately for Costa Rica and its economic development, the government took an interest in improving the infrastructure for coffee-exporting purposes. One such example of an ambitious infrastructure project with aiding the coffee sector in mind was the construction of a railroad from the Port of Limon (on the Caribbean side) to the capital of San Jose.

The railroad construction brought the enterprising Minor Cooper Keith to the country, whom the government contracted in 1883 after one failed attempt at financing in the 1870s (Wilson 26). Though the cost of the railroad seemed at times too much for the Costa Rican economy to handle, Keith was persistent and saw to it that it be completed. One such action he took was bringing in workers, particularly from Jamaica, which would have an impact on the demographics of the country going forward.

The railroad, which was completed in 1890, also served as the perfect infrastructure for Keith’s next business venture in Costa Rica: the United Fruit Company—the result of the merging of Keith’s Tropical Trading Company with the Boston Fruit Company (Wilson 26). Through this company, Keith helped establish bananas as a product that rivaled coffee in the Costa Rican economy. Regardless of Keith’s motivations, it is impossible to talk about the history or economy of Costa Rica without discussing the profound impact of the U.S. businessman. The construction of the railroad, the costs both monetarily and in lives lost, the further development of the banana market, and the demographic changes in the country can all be partially attributed to Keith’s time in Costa Rica.
The next fifty years in Costa Rica saw many short-lived presidents, another
coup d’etat, more reforms, and economic crises.

World War I had a large impact on Costa Rica as its biggest coffee importers
in Europe imported much less during the war. The government’s response to this
crisis was to raise taxes on the wealthy. The wealthy’s reaction to the higher taxes was
to move their money out of Costa Rica—thus making the economic crisis even worse
(Watkins). It was this economic turmoil that led General Tinoco to seize power,
though only briefly.

Tinoco’s military dictatorship was short-lived due to the United States, for the
first time, intervening in the affairs of Costa Rica. “President Woodrow Wilson
refused to recognize Tinoco’s government, which effectively prevented Costa Rica
from accessing much-needed foreign capital from U.S. markets or developing new
markets to replace the loss of its traditional ones in Europe as a result of World War
I” (Wilson 29). With the economic pressure so high, Tinoco only lasted 18-months.
Despite its short reign, Tinoco’s military dictatorship had many important
implications for Costa Rica, including the “discrediting…of the army” (Wilson 30).
Costa Rica’s wariness of too much military power and further military dictatorships
increased as a result of Tinoco.

Unfortunately, the economy still struggled and the Great Depression resulted
in even more years of economic trouble for Costa Rica. The government responded by
creating a minimum wage, distributing unused land, and forming political parties
(Wilson 31).

In 1940, Rafael Calderón won the election and began to enact policies not in
line with the classic liberalism of his party. In all, Calderón made 15 amendments to
the Constitution, creating his “Social Guarantees”, consisting of many social entitlements. His actions created great controversy and dissent, as members of Calderón’s own party opposed him while Communists and Social Democrats believed his policies were not strong enough (Watkins).

In 1941, Costa Rica declared war against Japan, Germany, and Italy following the attacks on Pearl Harbor. Though likely not expecting to be a part of the World War taking place in Europe and the Pacific, a German submarine sunk a United Fruit Company ship in the Port of Limon.

Calderón found himself the center of controversy once again when he responded to the sinking by passing the Alien Properties Act. This act gave the government the right to confiscate property owned by German or Italian citizens in the country.

The act was widely criticized, to the point that even a rancher named Jose Figueres Ferres felt compelled to buy air time on the radio to condemn Calderón. His broadcast was short-lived as he was arrested partway through it and sent to exile in Mexico. This was Figueres’ first moment in the political spotlight in Costa Rica. It would not be his last.

Calderón continued to be deserted by the right side of the political spectrum. His only recourse was to ally himself with Mora Valverde and the Communist Party. The newly formed party ran Teodoro Picado for the presidency, who won the election.

In response to Picado’s win, the opposition formed the Partido Social Demócrata (PSD). Upon his return from exile, the previously politically unknown Jose Figueres became the leader of the young PSD.
Meanwhile, unrest in the country and distrust in the government was at an all-time high. There were unsuccessful coups. There were two civilian deaths during public protests against the government. Political opponents were sent into exile. And when businesses staged a shutdown, the Communist militia took goods from the businesses and gave them away (Watkins). With the 1948 Election coming up, it was a make or break time in Costa Rica’s history.

Calderon could once again run for president and decided to do so. Figueres, who had risen to prominence, decided not to run, to shift his focus on less political channels of change. This left Otilio Ulate Blanco as the opposing candidate, who, despite his conservatism, received widespread support due to the sole fact that he was not Calderon or Picado.

Ulate won by nearly 10,000 votes and the Election Commission validated the results. However, the legislature branch voted to not accept the election’s results. Instead, they chose the president: Calderon.

With democratic institutions failing in the 1948 elections, it was time for Figueres’ long awaited revolution. He had arranged an army of around 600 loyal soldiers on his ranch. This was enough to outnumber the Costa Rican army, but a couple thousand short of standing up to the Communist militia that supported the Picado government.

To Figueres’ advantage was the poor organization of the Costa Rican army and Communist militia. Additionally, his forces effectively retreated into the mountains when the government invaded the ranch.

As it turned out, Figueres’ pesky force proved impossible to beat and Figueres was the victor of the bloodiest conflict in the country’s history with around 2,000
dead in just 44 days of fighting. The short-term effect of Figueres’ triumph was that Ulate would become president. The long-term effect of the civil war on Costa Rica as a country is immeasurable, except to say that it was likely the most significant moment in modern Costa Rican history. However, the civil war was made significant by what happened immediately after it.

Before Ulate became president, there was to be an 18-month interim government to prepare the new Constitution. Figueres would be the head of this government, handing it over to Ulate after the transition period.

Many changes came about during the 18-months of the social democratic government. The welfare programs of Calderon stayed in place, heavier wealth taxes were put in place, many industries—including banking, higher education, and land management—were nationalized, and, most importantly for the purpose of this paper, the Costa Rican army was abolished and replaced with a national police force of 1500. Upon making the decision, Figueres emphatically stated:

“It is time for Costa Rica to return to her traditional position of having more teachers than soldiers. Costa Rica, her people and her government, always have been devoted to democracy and now practice their belief by dissolving the army because we believe a national police force is sufficient for the security of the country. We uphold the idea of a 'new world' in America” (Høivik and Aas 334).

Article 12 of the new Constitution, though less quotable than the eloquent Figueres, officially abolished the military, declaring that, “the army as a permanent institution is proscribed. For vigilance and the preservation of public order, there will be the necessary police forces” (Høivik and Aas 334). The draft commission also
expanded on the abolition of the army, stating: “Costa Rica, fortunately lacking all military tradition, and observing the grave damages militarism has caused in all our countries, we have come to the conclusion that there exists no reason to maintain an army” (Høivik and Aas 342).

The action, put simply, had no precedent and, in fact, still hardly does.\(^1\)

Furthermore, it was an action that could have considerable consequences on the future of Costa Rica. To explore this action, it is important to analyze the purposes of an army and why nearly every country in the world has one.

Intuitively, the army serves to prevent both internal and external threats and increase security of the country overall. Additionally, an army can be used to aid other countries in large-scale wars.

At the time of the promulgation of the new constitution, there were several reasons for and against the abolition of the army. On the one hand, Nicaragua supported Calderon and remained a threat to the new government. However, the remainder of the official army also supported Calderon, making their disbanding a possibly good recourse as there was a fear that the army would stage a coup to restore Calderon to power (Wilson 43). In other words, a standing army cannot rise up against its government if it does not exist. After bad experiences with military dictatorships, the Costa Rican people were perhaps keen to this concept.

Figueres’ decision was made easier by the fact that he “maintained his own Army of National Liberation and incorporated its members into the new Rural and Civil Guards” (Wilson 43). When asked to turn over this army, Figueres was quoted

\(^1\) Panama is an example of another country that has followed Costa Rica’s example. Their demilitarization will be discussed in Chapter 3.
as saying that if a delegate “wanted the arms he might come with his friends and get
them” (Wilson 44).

Thus, regardless of how noble the motivations were or how complete the
abolition was at first, Costa Rica was on the path to demilitarization—with just a civil
guard remaining to act as both the country’s police force and coast guard (Høivik and
Aas 342-3). Almost immediately, the practicality of demilitarization was put to the
test by both internal and external threats.

In fact, “the first test of Costa Rican demilitarization came only ten days after
the policy had been announced. On December 12, 1948 a force of 800 men invaded
Costa Rica from Nicaragua” (Høivik and Aas 338). The force supported Calderon and
wanted to overthrow the newly formed junta. However, they failed to get large
support from the Costa Rican population. Not to mention, Costa Rica was not yet
demilitarized seeing as how the civil war had just ended and the forces had not yet
been completely disbanded. Additionally, the day after abolishing the army, Costa
signed the Rio Treaty (Inter-American Treaty of Reciprocal Assistance with the
Organization of American States). Upon the invasion, the junta called upon the
activation of this treaty, such that “the whole affair ended with the retreat of the
invasion force into Nicaragua and a formal peace agreement between the two
countries” (Høivik and Aas 339).

The Inter-American Treaty has played a large role in the effectiveness of Costa
Rica’s lack of a standing army. Signed by 14 countries in North and South America
(Pan American Union), the treaty ensures protection in the case of invasion for all
signees. Article 3 of the treaty states that “an armed attack by any State against an
American State shall be considered as an attack against all the American States and,
consequently, each one of the said Contracting Parties undertakes to assist in meeting the attack in the exercise of the inherent right of individual or collective self-defense” (“Inter-American Treaty of Reciprocal Assistance, Adopted by the Inter-American Conference for the Maintenance of Continental Peace and Security at Rio de Janeiro, Brazil, September 2, 1947”).

The idea for such a treaty had been discussed over the years as there were often concerns of common protection against external threats. World War II increased the concerns of common defense in the Americas, thus, in 1945, the Inter-American Conference on Problems of War and Peace met in Mexico City to discuss such concerns (Groff). The result of this meeting was the Act of Chapultepec, a framework of mutual defense to later be finalized. In 1947, after the end of World War II, the nations—which consisted of Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the United States, Uruguay, and Venezuela—met in Rio de Janeiro, Brazil and formalized the treaty. What came to be known as the “Rio Treaty”, for the city is was signed in, went into full effect on December 3rd, 1948 a mere nine days before Nicaragua invaded Costa Rica (Groff).

According to the book Applications of the Inter-American Treaty of Reciprocal Assistance, the invasion of forces from Nicaragua in 1948 was the first time that the treaty came into play. Initially, Nicaragua denied that it had knowledge of or provided any aid to the force that invaded Costa Rica (Pan American Union 21). After extensive investigation, the committee ordered the Nicaraguan government to improve security of their border with Costa Rica, apprehend and imprison the Calderonist force that had invaded from Nicaragua, and prevent the taking of arms by rebellious forces (Pan American Union 45). Additionally, the two countries signed a
Pact of Amity, putting the whole matter to rest in the first display of the Rio Treaty (Pan American Union 47).

In sum, the support of the treaty proved vital to stave off the invasion of rebels from Nicaragua that could have greatly threatened the fragile post-civil war Costa Rica. Additionally, the alliance with the American countries has provided a nice safety blanket for Costa Rica over the years and allowed them to safely maintain their sovereignty without an army.

In terms of internal threats, the minister of public security, Edgar Cardona, attempted a military coup. After a mere 12 hours, the coup “collapsed in a mutiny when Otilio Ulate, the president designate, refused to support it” (Wilson 44). Thus, with hardly any damage inflicted, Costa Rica survived both an internal and external threat to their newly-formed, demilitarized government.

The history of Costa Rica leading to this point—including their colonial struggles, agricultural-based economic development, focus on education, and wariness of military dictatorships—sheds light on the direction that post-civil war Costa Rica took. And it is this modern, demilitarized Costa Rica that is the center of this paper. As one of the only long-term examples of a demilitarized country, how the country has developed and performed economically since its demilitarization is incredibly important in determining what (if any) merits of demilitarization exist.

As mentioned earlier in this chapter, Costa Rica had its fair share of economic struggles, starting as a neglected colony and then relying on just one or two exports. Economically, there was little distinction between the Costa Rican economy and those of its neighbors. In fact, “before the civil war, Costa Rica’s economy grew at much the same rate as the economies of other countries in the region” (Wilson 44). Notably,
after the war “the country’s economic growth significantly overshadowed that of its regional neighbors” (Wilson 44). From 1948 on, a stronger economy, a more stable government, and a lack of armed forces set Costa Rica apart from its neighbors.

After the 18-month period ended, the newly constitutionalized Costa Rica officially began. The legitimate winner of the original election, Ulate, took power, true to the original agreement. With his conservative stance he slightly pushed policy back towards the center, but did not make massive changes. Nor did he have to, as the economy once again benefitted from rising coffee prices (Wilson 86).

In 1953, Figueres, now affectionately referred to as “Don Pepe” ran to be president and won easily. He pushed for Costa Rica to be a welfare state, greatly increasing spending on education and public housing while raising the minimum wage. This was made possible by nearly doubling taxes on individuals and corporations and the continued increase of coffee prices (Watkins).

Additionally, despite the continued success of the coffee market, Don Pepe remained wary of the country’s reliance on it and for good reason, seeing as how much a drop in international coffee prices could affect the economy as they did during World War I. Thus, one of the goals of his presidency was to “diversify national production, so that we do not depend so heavily on coffee, bananas, and cocoa” (Wilson 88). The move for diversification, though one that required many years (extending beyond Figueres’ presidency) and faced great opposition, was one example of effective forward-thinking that would benefit the country in the long-run.

Outside of the economic sphere, one of the more relevant and interesting parts of Don Pepe’s presidency was Nicaragua’s attempted invasion in 1955. It was a further test of Costa Rica’s demilitarization.
The invasion and its aftermath were similar to what transpired between Costa Rica and Nicaragua in 1948. On January 11th, 1955, around 500 anti-Figueres rebels, harbored and armed in Nicaragua, attacked several locations in the northern part of Costa Rica and captured the town of Villa Quesada (Brecher, Wilkenfield 134). Costa Rica responded by mobilizing its police force and a volunteer force and appealing to the OAS. The OAS responded swiftly by calling upon Nicaragua to stop the flow of arms to the rebels, providing Costa Rica with four F-51 Mustang fighter-planes from the United States, and creating a demilitarized zone around the Nicaragua-Costa Rican border (Breacher, Wilkenfield 134-5). These actions by the OAS, Costa Rica’s own civil guard, and the contribution of military personnel from Brazil, Ecuador, Mexico, Paraguay, and the United States all helped put an end to the conflict by January 20th, a mere nine days after it began (Pan-American Union 198).

According to Michael Brecher and Jonathan Wilkenfield in their book *A Study of Crisis*, Figueres, whose government had prevailed, was pleased with the result and thankful of the OAS and the United States for their essential help; his counter-part in Nicaragua, Anastasio Somoza, the eldest of the Somoza family that would rule Nicaragua for many more decades, was disappointed that the rebels failed and Figueres remained in power (Brecher, Wilkenfield 135). As far as the question of how practical demilitarization is in the modern world, this invasion was an additional threat to the practicality of not having a military. Even without a military, Costa Rica was still able to stop another invasion from the northern neighbor Nicaragua. Once again, the OAS and the Rio Treaty proved vital to ensuring the safety and sovereignty of the demilitarized Costa Rica.

In the 1962 election, two of the most important issues were industrialization and whether or not to ratify the CACM (Central American Common Market)
integration treaties. The United States was influential in the CACM debate as President John F. Kennedy “threatened to withhold Alliance for Progress benefits from Costa Rica if it refused to join [CACM]” (Wilson 93). In the end, the United States’ influence was effective and the pro-industrialization, pro-CACM, Francisco Orlich won the election.

The treaty proved to be useful to both the United States and Costa Rica. With regard to the Alliance for Progress, the U.S. Embassy in Costa Rica points out that “nowhere was the Alliance for Progress more successful than in Costa Rica” and that “nowhere in the Americas did the U.S. find a more able partner in implementing development assistance than in Costa Rica’s government and local organizations” (U.S. Embassy). The aid from the United States is certainly a factor in Costa Rica’s growth, but more important than the funds themselves is the efficient use of them. By focusing the aid on infrastructure projects (such as the Inter-American highway), education, health, and the environment, Costa Rica was able to efficiently utilize the aid in a manner true to their identity, for “the two countries were careful that activities supported by the U.S. would respect Costa Rica’s independence and national identity, while responding directly to local needs” (U.S. Embassy).

(Note: Though Costa Rica undoubtedly benefitted from U.S. aid and the Alliance for Progress, the source detailing the extent of the success of this aid is the U.S. Embassy. As such, it can be taken with a grain of salt.)

What the United States received in return requires a bit more speculation. On the one hand, the U.S. has a reputation of a country that provides economic aid to lesser developed countries—in 2014, for example, the United States provided aid to 184 countries (96% of countries in the world) (Forbes 2014)—and acquiring good-
will with fellow American countries is useful. However, perhaps more relevant as an incentive was the fight against communism in the context of the Cold War. In his remarks to the University of Costa Rica on March 20th, 1963, President Kennedy proclaimed that “the great myth of the 1950's was that through a system of communism it was possible to produce a better life for our people” (John F. Kennedy: Remarks at the University of Costa Rica in San Jose). Making sure that communism did not spread too far into Latin America was important to the United States. Thus, helping other Latin American countries develop capitalistically while fostering positive relationships in the region could be seen as a counter-measure to the spread of communism. Luckily for Costa Rica, the country benefitted from this Cold War action, despite little threat of them turning to communism, mainly due to a strong belief in democracy (even among the Communist Party in Costa Rica led by Manuel Mora who sought to establish communism not by force, but by democratic process).

The fear of communism in Latin America stemmed from the recently successful Cuban Revolution, through which Fidel Castro took power and transformed Cuba into a communist nation (Levinson & Knight 2016). The Cold War context and Latin America’s proximity to the United States made the region particularly susceptible to conflict. Thus, after Costa Rica completed its demilitarization, Latin America was riddled with military coups, turmoil, and conflict—all of which the demilitarized Costa Rica was immune to. This was because the country lacked an army that could engage in war, carry out a military coup, or threaten the security of its own people.

Guatemala, for example, faced a long period of unrest and military dictatorships with 36 years of civil war and over 200,000 dead in the end (Malkin 2011). It all started with the CIA planned coup to oust President Jacobo Arbenz.
Guzman, who the US feared leaned too closely to communism with his redistribution of land, some of which was owned by the United Fruit Company (Malkin 2011).

However, as Scott Hunt points out in *The Future of Peace*, the story is far more complicated and shameful than just a typical Cold War deposition of a communist ruler and provides a strong argument for not allowing too much power to rest in the military, a goal Costa Rica clearly held from 1948 onward.

In fact, Guatemalans had chosen a democratically elected president after a long line of dictatorial regimes which had left the country in bad economic shape. Roughly half of the population was composed of illiterate, landless peasants. Arbenz’ plan was simple, to take the unused land in the country and divide it among the landless peasants, who would, in turn, work the land and pay the government a fraction of their earnings. Of course, the owners of the unused land would also be compensated for the land based on the value in the tax records.

Much of the unused land to be redistributed was owned by the United Fruit Company (interestingly, Arbenz himself had to give up around 1700 acres under the redistribution). According to the United Fruit Company’s own tax records, the land was valued at $600,000, which the government planned to compensate them with. However, claiming they undervalued the land for tax purposes, the United Fruit Company demanded around $16 million as compensation—the Guatemalan government refused.

Supposedly, this conflict between the Guatemalan government and the United Fruit Company was what caught the United States’ attention. Hunt points out the startling number of connections between President Dwight D. Eisenhower’s administration (particularly the State Department) and the United Fruit Company. The
Secretary of State, John Foster Dulles, had been chief legal counsel in a United Fruit Company transaction. His brother Allen Dulles would go on to be on the board of the company. At the time of Arbenz’s ousting by the CIA, Allen Dulles was none other than the head of the CIA. The former president of the company was the brother of the Assistant Secretary of State. The Undersecretary of State was later appointed to the board of directors of the United Fruit Company. And the connections go on and on.

These powerful connections to the United Fruit Company put the United States at odds with the Guatemalan government and likely played a role in the CIA’s actions. However, the CIA would not have been successful had it not been for the implicit support of the Guatemalan army. In fact, Ralph Lee Woodward Jr., author of *Central America: A Nation Divided*, argues that “it is unlikely that the Arbenz government would have fallen if all or part of the military had not defected” (Woodward 237) for when the invasion occurred “the [Guatemalan] army refused to resist” (Woodward 240). Thus, as a result of the army’s lack of intervention and implicit support of the CIA-backed coup, Arbenz was ousted as president.

It is important to note that the new leader the US practically handpicked for Guatemala did not support land reform and caused no trouble for the United Fruit Company. But while the United Fruit Company benefited from the coup, the country as a whole suffered greatly under the ensuing dictatorships. Post-coup Guatemala was anything but stable for decades (Hunt 202).

The example of Guatemala in the 1950’s shows the negative internal impact that an army can have when it acts independently of its government. In this instance, the Guatemalan army’s implicit support of the CIA-backed coup and refusal to defend the president resulted in the ousting of a democratically elected leader in the short run.
and decades of violence in the long run. In other words, the actions of the army in the political sphere had dire consequences. Thus, another important benefit of Costa Rica’s demilitarization is that no army could internally negate an entire democratic process by overseeing a coup.

Meanwhile, coups and violence continued to occur in other Latin American countries. In Argentina, President Juan Perón was overthrown by the military in 1955 after losing the support of the country. His increasing authoritarianism was not the only factor that did him in. Not coincidentally, he fell out of favor soon after his beloved wife, Eva Perón, passed away from cancer (“Perón Deposed in Argentina”).

Fellow South American country, Colombia, had a period between 1946 and 1964 known as “La Violencia” in which Conservatives and Liberals fought. The result was rioting, violence, and economic struggles. In the end, it is estimated that over 200,000 Colombians lost their lives during the conflict (Garavito & McGreevey 2017).

In 1958, Venezuela experienced a bloodless coup to overthrow military dictator Marcos Perez Jimenez. Aside from no loss of life, the coup also ushered in 43 years of democracy in Venezuela, an unlikely but much celebrated result in the largely undemocratic Latin America at the time (“Marcos Perez Jimenez, 87; Ex-Dictator of Venezuela”).

With democracy prevailing following the coup in Venezuela, it serves as a counterpoint to what occurred in Guatemala. Though the Guatemalan coup and many others only led to increased violence, the positive impacts from the Venezuelan coup show that Venezuela serves as the exception to the rule that coups are dangerous (note: the current situation in Venezuela will be explored in Chapter 3). However, one
important difference is that the Venezuelan army overthrew a dictator whereas the Guatemalan army helped overthrow a democratically elected president. Nevertheless, with a stable democracy and no army, neither type of coup would be necessary or possible in Costa Rica.

Finally, in 1963, the year JFK visited Costa Rica, fellow Central American country Honduras experienced their own military coup overthrowing elected president Ramon Villeda Morales. The Honduran military would go on to rule for the next two decades, a much more common result of a coup than in Venezuela (Caceres 2010).

The coups and violence in Latin America did not stop in the 1960s. In fact, the region experienced these conflicts with just as much frequency in the coming decades. With loss of life, economic downturn, suppression, and sometimes military rule, the negative impacts of these conflicts were occasionally devastating to the affected countries.

In the time that many other Latin American countries were struggling with violence and military dictatorships, Costa Rica was experiencing great social and economic development. From the civil war to 1970, the population doubled, manufacturing and commerce increased their share of the GDP, a more diverse array of exports emerged (coffee and bananas went from 97% of exports in 1950 to 61% in 1970), and poverty fell from half of all families to below 30% (Wilson 99). In short, the Costa Rican economy became more diverse, less dependent on coffee and bananas, and began to work for a larger share of the growing population—impressive feats to achieve in just 20 years.

In order to combat the continuing problem of poverty, the continually active Jose Figueres began a “War on Poverty”—the only war the army-less nation would
take part in. One policy increased wages of workers in poverty by 41% (Wilson 101). In addition, the Instituto Mixto de Ayuda Social “provided education, food, and housing subsidies to families without incomes” (Wilson 102) while the Fondo de Desarrollo Social y Asignaciones Familiares helped provide medicine, school meals, pensions, and safe drinking water to those in need. In terms of agrarian reform, the Instituto de Tierras y Colonización (ITCO), now INDER, implemented a piecemeal land reform to distribute largely unused lands to peasants (Seligson 163). These programs served an admirable purpose and the benefits that the peasantry saw from these programs made them less likely to join communist groups. Notably, the economy was booming when they were implemented, so the costs were not fully felt right away.

However, in the late 1970s and early 1980s, Costa Rica experienced a severe recession. The economy suffered in large part due to the violent revolutions occurring in the rest of Central America—which converted itself into a Cold War battleground. Between the Sandinista revolutionary war in Nicaragua and the revolution in El Salvador, there were an estimated 100,000 casualties. An additional casualty was the CACM, which Costa Rica had previously relied so heavily on for trade. During this time, the price of oil soared and the price of coffee fell drastically.

However, the situation was made worse when Paul Volcker, U.S. Federal Reserve Chairman, raised interest rates significantly to combat inflation in the United States. Though he was successful in reducing inflation, the higher interest rates made loans taken out by Latin American countries more difficult to pay back and banks, who could experience stable returns elsewhere (even U.S. Treasury Bonds paid close to 16%), became less likely to lend further to developing countries (Streithorst 2014). It was a highly unfortunate combination of events that led to economic struggle. The
debt skyrocketed as the economy finally felt the burden of the massive increase in social expenditures; unemployment more than doubled, inflation nearly hit 100 percent and income fell by over 40 percent (Wilson 104).

In a shocking move, the PLN (the National Liberation Party)—the party that had driven economic policy in the country—instituted reform that ran completely contrary to their previous policy stances. The PLN government made reforms that reduced the role of the state, emphasized the free-market, and reduced the welfare state in the country (Wilson 113). The policies were unpopular, but considering the desperate times, the government was given significant leeway. With the cutbacks to the welfare state, many did fear that the poorest Costa Ricans would suffer greatly. However, this was never the case as the economy began to experience more stability (Wilson 116).

Despite an economic crisis more severe than in neighboring countries, Costa Rica remained politically stable when the rest of the region was anything but. The aforementioned militarization and political instability had come to a head in Central America with the Contras fighting against the Sandinista government in neighboring Nicaragua, similar guerilla conflicts in El Salvador and Guatemala, and an oppressive military dictatorship in Panama. In 1986, as the conflicts were worsening, Costa Rica elected Oscar Arias as president—an election that would have considerable consequences on the country, the region, and even the world. Notably, he beat out Rafael Calderon, son of the Costa Rican president from 1940-1944, who at the time of the election supported remilitarizing Costa Rica (Hunt 216).

Arias was well educated, studying both Economics and Political Science at universities in his home of Costa Rica (University of Costa Rica), the United States
(Boston University), and England (University of Essex and London School of Economics). He worked under Jose Figueres in his second presidency as the Minister of Planning.

Upon entering the presidency, Arias was immediately thrust onto the worldwide stage. He sought economic reform to further diversify and stabilize the economy, but, above all, his presidency and legacy were defined by his work to stabilize the rest of Central America. True to the Costa Rican way, Arias wanted a peaceful resolution to the violent conflicts in the neighboring countries. In order to achieve peace, Arias needed to not only negotiate with his fellow Central American countries, but also with the United States—which proved to be one of his biggest adversaries.

Central America was a large part of then President Ronald Reagan’s foreign policy (Woodward 265), including the funding of the Contra rebels in Nicaragua which the U.S. hoped would overthrow the Sandinistas and the threat of communism. Arias did not fully support the Sandinistas nor did he approve of the actions of the contras and the U.S. funding of them. However, neutrality and peace-seeking came at a price, especially when dealing with the United States, which had other motives.

According to the 1987 New York Times article “Costa Rica’s Return to Neutrality Strains Its Ties with Washington”, disputes began when contra commanders were arrested in Costa Rica and Arias shut down contra bases and an airstrip recently built by Lieutenant Colonel Oliver North—who had been dismissed for his role in the Iran-Contra scandal, in which the U.S. government sold weapons to Iran, in part, to help finance the contras in Nicaragua. In doing this, Arias proclaimed that Costa Rica was “a welfare state, not a garrison state” (LeMoyne 1987). Equally
straining was Arias’ call for funding to the contras be cut off. Although unconfirmed, it is believed that the US responded with their own threat of cutting off aid—aid to Costa Rica that is (LeMoyne 1987).

Arias, staring down the most powerful country in the world, was unfazed. In a 2012 Washington Post Article, “Oscar Arias Sanchez reflects on 25 years since Central American Peace Accords”, Arias “recalls the tense White House meetings and the showdowns with American diplomats and high-ranking officials” (Roig-Franzia 2012). The small, peaceful Costa Rica was a threat to the plans of the behemoth United States and the unflappable Arias was right in the middle of it. It was Costa Rica and Oscar Arias as David and the United States and Ronald Reagan as Goliath.

In the same Washington Post article, Arias happily recounts a quote from a U.S. diplomatic cable about himself that read “Alert Ollie [North that] Pres. Arias will attend Reagan’s dinner in New York Sept. 22. Boy needs to be straightened out by heavy weights” (Roig-Franzia 2012). Worse than David versus Goliath, it was Boy versus Goliath. “Boy” refused to be straightened out, though, no matter how many “heavy weights” the U.S. sent his way. To his favor, despite differences in opinion, Arias did manage to have a good relationship with both President Ronald Reagan and Vice President George H.W. Bush. He recalls that Bush was the first U.S. official he told about his Central American Peace plan, over gin-and-tonics, no less.

The plan had eleven points crucial to it: “cessation of hostilities, the democratization of governments throughout the region, and the cessation of assistance—whether from other Central American governments or from governments outside the region—to insurgent forces seeking to overthrow established
governments” additionally, “the signatories also committed themselves to resolving the educational, health, employment, and security problems of the refugees and displaced persons created by the regional crisis. In addition, the agreement emphasized…economic development and a significant lessening of inequality and poverty” (Andersen 2015).

With cutting off of aid to insurgent forces included, the United States was not initially pleased with the plan. However, the revelation of the Iran-Contra scandal weakened the stature of the United States in the region. At around the same time, Arias assembled all of the Central American presidents (except for Daniel Ortega of Nicaragua) to discuss his peace plan. Soon thereafter, the United States Senate voted 97-1 in favor of Arias’ plan. The Central American presidents followed suit and Arias’ plan, which became known as the “Esquipulas II Accords” (named for the city in Guatemala where the meetings took place), was put into place (Arias 2011).

In just the first year of his presidency, Arias stood up to the United States and stood up for the good of his own region. His commitment to peaceful resolutions to the conflicts in Central America was admirable as was his determination to see his plan prevail, against the initial wishes of the United States. Though his plan did not create peace immediately, it did over time create more stability and less violence in the region. Within ten years, all of the conflicts came to an end. The triumph for Arias was followed by yet another surprising victory—the Nobel Peace Prize. Though not seen as a frontrunner for the prize, Arias’ dedication to creating peace in Central America won him the prestigious honor.

The honor—besides the great prestige—came with two great benefits for Arias. First, it solidified his plan even further, to the point that even the United States
fully backed off. According to the write-up of Arias’ victory in *Time*, the United States was planning on sending an additional $270 million to aid the contras. But after the announcement of the Nobel Prize, House Majority Whip Tony Coelho of California, in reference to sending more aid to the Contras, remarked “this kills it. It's dead” (Smolowe, Moody & Traver 1987).

The second benefit was a check for $341,000 that came with the prize. Arias used this money to start the Arias Foundation for Peace and Human Progress. The foundation is still in existence today. For the past 30 years, it “has been dedicated to promoting democracy, gender equality, disarmament and demilitarization”. And, according to its website, its mission is to “promote more just, peaceful and equitable societies” (“Fundación Arias”). In other words, Arias’ did not just seek peace, democracy, and an end to violence in 1987 for his Central American neighbors. Rather, he has carried these goals with him for his entire life, both in office and out of office. And it would be hard to find a country more conducive to these goals than the idyllic Costa Rica.

While Arias certainly represented the best of Costa Rica, two of his four successors did not. Arias’ immediate successor was Rafael Ángel Calderón Fournier. Though the name Rafael Calderon is not entirely uncommon, it was no coincidence that the president in 1990 shared his name with the president from 1940-1944 (who was one of the reasons for the outbreak of the civil war)—the elder Rafael Calderon was his father. Unfortunately, both Rafael Calderons would end up with controversial reputations. The younger Calderon led an administration that focused on further privatization, while still maintaining many of the welfare programs already set up (some even set up by his own father). However, trouble would come for Calderon
after his presidency ended. In 2004, Calderon was arrested for corruption (“Calderón Fournier, Rafael Ángel (1949–)”).

Calderon’s successor was Jose Maria Figueres. Yes, the son of that Jose Figueres, also known as Don Pepe. Indeed, the history of the civil war and genetics would end up playing a large role again in Costa Rica during the 1990s. And true to how it played out 50-years before, the younger Figueres would end up with a much more positive and lasting impact on the future of Costa Rica.

In 2012, The Guardian wrote a piece about the younger Figueres and his sister, Christiana, and their impact on Costa Rica. Unsurprisingly, they grew up surrounded by politics. Jose recalls that “every conversation was about politics, the challenge of development, inequalities and legislation” (Vidal 2012). What is surprising is that Jose, the son of the man who abolished the Costa Rican army, decided to attend West Point, the U.S. Military Academy. However, after further education at Harvard, he soon found his way into politics and became president at the young age of 39 in 1994.

It was a much different world in 1994 than in 1948 when his father took over and Costa Rica was a much more stable and successful country. Yet, his presidency, like his father’s, still would impact Costa Rica’s direction as a country greatly. During his four years as president, Figueres focused on conservation of land and eco-tourism. Both goals were successful and forward-thinking policies. Furthermore, conservation and eco-tourism are now hallmarks of Costa Rica. In fact, today, “eco-travel is the country's biggest industry, worth billions of dollars a year” (Vidal 2012). Visitors to Costa Rica, of which there are millions every year, are drawn by the opportunity to enjoy the great preserved beauty of the country in the form of national parks and other
pristine lands and beaches—which is to say that the country itself is Costa Rica’s greatest asset both from an economic and a practical point of view. Thus, it is of great importance that the young Figueres placed such a heavy importance on conservation efforts.

Today, nearly 25% of the country is protected lands of all types, which contributes to the great biodiversity of the country ("President Jose Mara Figueres"). Also, efforts to protect the land helped put an end to deforestation which was a problem in the region. Other measures he took during his presidency had similar positive impacts on the country. For example, he increased support for public education, adding English and computer classes while also educating the population about the environment and conservation. Furthermore, he supported vaccination campaigns, which would have lasting impacts on the health of the population ("President Jose Mara Figueres").

After his presidency, Jose and his sister Christiana remained quite influential in the world. Jose went on to head the World Economic Forum. There, he famously said “there’s no Planet B” (Vidal 2012). Continually dedicated to the environment and climate change, Figueres then became the Chairman of Richard Branson’s “climate change business thinktank ‘Carbon War Room’” (Vidal 2012). His sister, Christiana, is even more important in the green-revolution. She served as the Executive Secretary of the UN Framework Convention on Climate Change. Her work helped lead to the landmark Paris Agreement (Figuieres 2016).

Nearly 70 years after the elder Jose Figueres waged a revolution that ended in the abolition of the armed forces and forever changed the course of history in Costa
Rica, there is little doubt that Don Pepe would be immensely proud to see his legacy live on through his children.

Though hard to follow up a Figueres, the next Costa Rican president fell far short of his predecessor. Miguel Angel Rodriguez, who served as president from 1998-2002, was a fiscal and social conservative. After serving as president, he was the Secretary General of the Organization of American States. However, his tenure was short-lived as he was arrested in 2004 for corruption and sentenced to five years in prison. The scandal involved a deal between the Costa Rican Electricity Institute (ICE) and the French company Alcatel (“Ex-Prez Miguel Ángel Rodríguez receives 5-year jail term in bribe case”). With his arrest, two of the three Costa Rican presidents of the 1990s went to jail for corruption.

Now in the 21st century, Costa Rica elected Abel Pacheco by a narrow margin. Pacheco was a true renaissance man who did not even become involved in politics until the age of 64. Prior to that Pacheco was a doctor, a psychiatrist, an author, a songwriter, popular television figure, entrepreneur, and, finally, politician (“Abel Pacheco de la Espriella”). His presidency had two major results. The first was that the budget deficit continued to grow. The second result, though not as a result of his actions, was the Supreme Court annulling the reform that only allowed one four-year term per president. As a result of this annulment, the electoral rules returned to those in the 1949 constitution, which allowed a second term if the president had been out of office for at least eight years (Karnes & Elbow 2016).

This presented the perfect opportunity for the beloved Oscar Arias to run for president once again. Arias had been far from idle since his term ended in 1990. In fact, he was hard at work with his foundation that he had formed with the Nobel Prize
money. As an outspoken supporter of demilitarization, Arias and his foundation helped both Panama and Haiti, both now without standing armies, with their demilitarization efforts. Additionally, he was active in speaking about the benefits of reducing military spending and trying to convince countries in other regions to follow Panama and Haiti (Hunt 228).

His second presidency did not present the same immense challenges as his first. One of the major events of his second term was the country’s first national referendum, on whether or not to join the Central America-Dominican Republic Free Trade Agreement (CAFTA-DR). Arias was in strong support of joining. In the end, just enough Costa Ricans agreed with him and the referendum passed, making Costa Rica the last Central American country to join (“Oscar Arias Sanchez” 2010).

Similar to in his first term, Arias was once again called on to be the mediator in another political crisis. This time he was asked to intervene in the military coup in Honduras that deposed President Manuel Zelaya. However, unlike in Nicaragua, Honduras decided against taking Arias’ advice (“Oscar Arias Sanchez” 2010).

Around the same time, Arias gave a speech at the “Summit of the Americas” in Trinidad and Tobago entitled “We’ve Been Doing Something Wrong” (author’s translation). In front of his fellow Latin American leaders, he discussed the many mistakes Latin America has made which have led to their poor development over the years. Not surprisingly, two of the main causes, in his eyes, were overspending on the military and underspending on more vital aspects of society such as education. It was a fairly harsh speech in which he bluntly stated that Latin America had no one to blame for its poor development besides itself—not even the United States. However, the mistakes, he believed, could be fixed with time and he urged his fellow leaders to
waste no time in trying to reverse the direction of the region’s development (Arias 2009).

Towards the end of his presidency, the International Court of Justice attempted to settle a longtime border dispute between Costa Rica and Nicaragua. The settlement gave Costa Rica the right for complete use of the San Juan River—including for commerce and tourism. However, the issue would come up just one year later in what turned out to be a bizarre cause of an international incident. Nicaragua once again encroached in the San Juan River, which they began dredging in 2010 near the Costa Rican island of Calero. Their justification for the action? Google Maps (Jacobs 2012). The popular map service had mistakenly placed the border several miles in Nicaragua’s favor, which Nicaragua also mistakenly believed to now be the official border.

Thus began what the New York Times would call “the first Google Maps war”, as Nicaragua doubled down and sent soldiers to the area. Costa Rica responded by sending a small police force and filing complaints, first with the Organization of the American States and then with the International Court of Justice (ICJ) over the presence of soldiers in the area and the potential environmental damage of the dredging. Nicaragua ignored the OAS’ request that it remove its troops. Notably, with border disputes, the ICJ is typically more effective than the OAS, as the OAS mostly deals with clearcut invasions. Thus, it did later adhere to the ICJ’s ruling which stated that the country must remove its troops from the area and could only continue dredging under Costa Rican environmental supervision (Karnes & Elbow 2016).
A strange border dispute that could have ended in disaster for the army-less Costa Rica ended peacefully. Thus, once again, both peace and international jurisdiction prevailed in place of war.

Notably, the conflict goes beyond the blind-trusting of Google Maps as an official source of border location. In *Border Disputes: A Global Encyclopedia*, author Emmanuel Brunet-Jailly points out that “the Nicaragua-Costa Rica border became a particularly thorny issue in the second half of the nineteenth century” (Brunet-Jailly 554). The backdrop for the reemergence of tensions between Costa Rica and Nicaragua came following the conflict in Nicaragua. Facing serious economic problems, many Nicaraguans, who had recently obtained the right to emigrate after the democratization of their country, did just that—both legally and illegally. Estimates state that in 2011, around 500,000 Nicaraguans had emigrated to Costa Rica, roughly half of which did so illegally (Brunet-Jailly 556). Costa Rica had been in the process of tightening its policy on immigration and blamed the “chronic political and institutional instability of Nicaragua” for the need to do so (Brunet-Jailly 556). However, this had its price as Nicaragua has responded by “denouncing the harsh treatment that migrants are subjected to and the expulsions organized by the Costa Rican government” (Brunet-Jailly 556). Tensions rose further when the Nicaraguan border town of Cardenas requested to be annexed by Costa Rica—a request that never came to fruition.

The brewing conflict took the form of the disputed territory surrounding the San Juan River, where several small conflicts led to court proceedings to determine which country had sovereignty over which area. In most cases, Nicaragua was the aggressor which Nicaraguan sociologist Oscar Rene Vargas attributed to his country’s “shrinking-country complex” (Brunet-Jailly 559). These tensions had not always been
Nicaragua’s fault, however, as evidenced by Costa Rica’s 2011 attempt to build a road along the disputed territory and name it after Juan Rafael Mora Porras, the Costa Rican president who halted the invasion of Nicaragua by William Walker (Brunet-Jailly 560). Since then, a lack of funding has doomed the construction of the highway, while the most recent court rulings have come out—claiming that Nicaragua has sovereignty over some of the disputed area but Costa Rica has navigation rights of said area and sovereignty over the island of Calero, which might become a national park (Brunet-Jailly 559).

Despite facing Nicaragua in a conflict that could have resulted in violence or war, not one single shot was fired during the two decades of tension. Moreover, one would think that Nicaragua could take advantage of Costa Rica’s lack of army and take by force any territory it believed was part of Nicaragua, or even any territory it wanted to be part of Nicaragua. But there was no invasion of any sort—only briefly posting a small force of soldiers on Calero.

There are several possibilities as to why Nicaragua did not attempt to use real force to take disputed territory, including the remembrance of the fruitless invasions in 1948 and 1955 and the fear of the invoking of the Rio Treaty. Also of note in a general sense is that wars to “conquer” territory are becoming less common. Regardless of their reasoning behind not exploiting Costa Rica’s lack of army, the fact that they did not further legitimizes demilitarization.

With Nicaragua to the north not wanting to engage in armed conflict and the also demilitarized Panama to the south, Costa Rica is essentially safe from invasion from any neighbor. And their security comes at a cost far less than many other countries that dedicate significant portions of their budgets towards their military.
The most recent victory Costa Rica, Oscar Arias, and the world all shared against militarization and violence came on Christmas Eve of 2014 when the landmark Arms Trade Treaty (ATT) was ratified. The first of its kind, the ATT internationally regulates the roughly $85 billion a year arms trade and includes all kinds of arms (small weapons, tanks, combat aircrafts, warships, etc.). Although the triumph of the deal came in 2014, the fight for it started much earlier. In fact, Arias recalls the Contra War as a major influence on the deal—as the United States provided weapons to the contras completely unchecked. In an interview, Arias remarked that the Contra war “was a proxy war where the superpowers [the United States and the Soviet Union] supplied the weapons, and we Central Americans the blood” (Dyer 2014). Thus, Arias was motivated to push for regulation by his experience with conflict, in which the increase in weapons usually caused a greater spread of violence.

In 1997, the effort gained serious traction after Arias met with many fellow Nobel Laureates, including Elie Wiesel and the Dalai Lama. When Arias became president once again in 2006, he submitted the treaty to the United Nations. Eight years later, 154 countries voted in favor of the treaty and 60 countries ratified it, making it now international law and making Costa Rica once again, a major player promoting global peace and prosperity.

Though not usually an influence on the global stage, Costa Rica, since its civil war, has been actively seeking peace and prosperity within its own borders. Most countries want peace and prosperity, but, despite a few notable exceptions, none would consider demilitarizing to help achieve that aim.
In this chapter, the histories of both the pre and post-civil war help to explain why Costa Rica demilitarized and how it has affected the country ever since. Starting as a neglected colony the economy took hundreds of years to even reach that of its neighbors. In the meantime, Costa Rica saw both in their own country and the surrounding ones the immense costs of wars and military dictatorships, both in money spent and lives lost. As such, they never developed too large of a standing army. With around 2,000 dead, the civil war was the bloodiest conflict in Costa Rica—and the last.

Removing the small army was relatively easy, especially considering that it was loyal to Rafael Calderon and that Jose Figueres had his own loyal army and 1500 civil guards (which was much more significant in 1948 Central America than it seems). These small forces, which dwindled the more demilitarized the country became, were able to stave off invasion attempts from Nicaragua and the threat of a coup. From then on, Costa Rica never looked back on the demilitarization decision.

Instead, the country remained forward-thinking in trying to develop their country both socially and economically. Diversification and industrialization became important early goals of the post-civil war government that paid great dividends in the future as the economy became less dependent on the fluctuations of coffee prices. Socially, several welfare programs as well as a continued emphasis on good public education helped to support and develop the growing population.

During this time, as Costa Rica was focusing on development, most of its fellow Latin American countries were just trying to achieve peace—often to no avail. Civil war, military dictatorships, and violence remained constant in the region for the latter half of the 20th century. Meanwhile, U.S. and Soviet intervention only served to
fan the flames of the growing violence. The United States’ biggest enemy, besides communism, became Oscar Arias as he fought for an end to violence.

Arias’ dedication to peace and disarmament is essential to the story of Costa Rica. Over the past 30 years, he has been the spokesman for the Costa Rican model. Today, the country continues to be forward thinking (thanks in part to another generation of Figuereses) with their dedication to preserving the environment and fighting climate change. Environmental friendly policies have also helped eco-tourism become one of its economy’s most important aspects.

Millions of tourists visit the beautiful country every year. For many, they return year after year, captivated by the beauty, the tranquility, or the simplicity of it all. Anyone who visits the country will hear the phrase “Pura Vida”. Literally, it means “pure life” in English, but the phrase is so much more encompassing than that. In just two words, it captures the way of life, the peacefulness, and the optimism of a nation that decided it did not need soldiers and arms. A nation that wanted peace, prosperity, and education for its entire people instead. And a nation that, despite how impossible it may have seemed, has prospered without an army for nearly 70 years.

In the next chapter the focus will shift to the economic impacts of the past 60 years and what exact role the lack of military spending has played on the country’s development. That is, does military spending in Latin America help or hurt growth?

Anecdotally, from this chapter, it seems that the lack of an army has helped Costa Rica significantly in avoiding conflicts, forging their national identity, and pursuing important developmental projects. In practical terms, too, demilitarization has been successful, even in the face of conflict. Though the complete impacts of the
lack of an army could never be accurately measured, in the next chapter, this thesis
will attempt to measure just the economic implications of the change.


Chapter 2
The Economic Impacts of Demilitarization on Growth in Latin America
Introduction/Theory

In order to do a proper analysis of the economic impacts of demilitarization, it is necessary to investigate the overall role that military spending plays in the health of an economy. Aizenman and Glick’s (2003) paper “Military Expenditure, Threats, and Growth” provides a precedent for studying the effects of military expenditure on growth of an economy. They conjecture that the impact of military spending is a “non-linear function of the effective militarized threat posed by foreign countries and other external forces” (Aizenman and Glick 2003, p. 2). In other words, military expenditure, threats, and growth are related in the following way: “threats without expenditure for military security reduce growth, military expenditure without threats would reduce growth, while military expenditure in the presence of sufficiently large threats increases growth” (Aizenman and Glick 2003, p. 2). Their conjecture leads them to the following:

\[ gy = a_1 \text{mil} + a_2 \text{(thr)}(\text{mil}) + b_1 \text{thr} + BX \]

(1)

where \( a_1 < 0, a_2 > 0, b_1 < 0 \), \( gy \) is Annual Real GDP Per Capita growth, and \( X \) is a vector of control variables of growth (Aizenman and Glick, p. 2). Thus, if the estimators \( a_1 \) and \( b_1 \) are negative then threats and military spending have negative impacts on growth while \( a_2 > 0 \) would signify that if there is both military spending and threat then there is growth. This model serves as a mathematical representation of Aizenman and Glick’s conjectures. They empirically test the model by using data on a cross-section of countries from 1989-1998.

This thesis will utilize the groundwork that Aizenman and Glick have laid with their model while expanding on it for the purposes of Latin America.
Importantly, the data set for this thesis includes Latin American countries (a smaller sample), but with a broader range of years (1960-2015) to include more data and account for the majority of Costa Rica’s demilitarized state. Furthermore, this thesis uses Solow growth theory to select control variables which are population growth, education (investment in human capital, denoted by Leduc), and investment in physical capital (denoted by Inv/GDP) (Mankiw 2003 p. 214-5). Furthermore, as is custom in controlling for initial level of GDP, log of real GDP Per Capita is used as a control. Additionally, in the second half of the model, the threat variable (ACTTOTAL) and (mil/GDP)(ACTTOTAL) interaction is replaced with a good government variable (Polity 2) and a (mil/GDP)(Polity 2) interaction. The notion of good government institutions has been connected to growth in the Solow model (see e.g. Mankiw 2003 page 222).

The resulting empirical models to be tested consist of six equations:

1. \[ gy = \beta_0 + a_1 \frac{mil}{GDP} + a_3 \text{PopGrowth} + a_4 \log GDPPC + a_5 \text{Leduc} + a_6 \frac{Inv}{GDP} \]
2. \[ gy = \beta_0 + a_1 \frac{mil}{GDP} + b_1 \text{ACTTOTAL} + a_3 \text{PopGrowth} + a_4 \log GDPPC + a_5 \text{Leduc} + a_6 \frac{Inv}{GDP} \]
3. \[ gy = \beta_0 + a_1 \frac{mil}{GDP} + a_2 (\frac{mil}{GDP})(\text{ACTTOTAL}) + b_1 \text{ACTTOTAL} + a_3 \text{PopGrowth} + a_4 \log GDPPC + a_5 \text{Leduc} + a_6 \frac{Inv}{GDP} \]
4. \[ gy = \beta_0 + b_1 \text{Polity2} + a_3 \text{PopGrowth} + a_4 \log GDPPC + a_5 \text{Leduc} + a_6 \frac{Inv}{GDP} \]
5. \[ gy = \beta_0 + a_1 \frac{mil}{GDP} + b_1 \text{Polity2} + a_3 \text{PopGrowth} + a_4 \log GDPPC + a_5 \text{Leduc} + a_6 \frac{Inv}{GDP} \]
6. \[ gy = \beta_0 + a_1 \text{mil/GDP} + a_2 (\text{mil/GDP})(\text{Polity2}) + b_1 \text{Polity2} + \\
a_3 \text{PopGrowth} + a_4 \text{LogofGDP}_{pc} + a_5 \text{Leduc} + a_6 \text{Inv/GDP} \]

With the aforementioned data, these equations are regressed using Ordinary Least Squares to establish how each of these variables or interactions affect growth in three samples (Latin America, Central America, and Latin American countries with populations between one and twenty-million). The exact variables and results of the regressions are detailed below.

Variables

**GDP_PC Growth (%)**

For the dependent variable, this thesis uses Annual Real Gross Domestic Product per Capita Growth to capture the growth over time of the countries. The data are from the World Bank (2016) and are in inflation-adjusted 2010 dollars. Using per capita GDP puts each country’s production into per person terms which ensures that larger countries are not weighted more heavily due to their larger aggregate GDP. For the Latin American sample this is particularly important as there is a great variety of country size in Latin America from a small island like Jamaica to one of the world’s largest country’s like Brazil.

Running the regression with GDP per Capita growth as the dependent variable shows the impacts (positive or negative) that each of the independent variables have on growth and which factors are significant or not. Additionally, Aizenman and Glick’s (2013) study on military spending and growth uses Annual GDP per Capita Growth as the dependent variable.
Mil/GDP

With the level of military spending being central to this paper, it is necessary to include an independent variable that accounts for it. Keeping the measure of military spending as a percentage of GDP is another good way to control for different sizes of countries. Data are drawn from the World Bank (2016).

The values are in percentage terms and range from zero (Costa Rica) to 6.5% (Cuba).

ACTTOTAL

For the threat variable, this thesis uses ACTTOTAL which is drawn from the Center for Systemic Peace’s (CSP) (2016) Major Episodes of Political Violence. Of all the conflict data available from the CSP, ACTTOTAL was chosen because it captures the total of all of the political violence variables including societal (civil violence, civil war, ethnic violence, ethnic war) and interstate (interstate violence and interstate wars) episodes of violence.

These episodes of violence are rated based on their magnitude, with 1 being the lowest and 10 being the highest. Seeing as how ACTTOTAL is the sum of Societal Episodes of Violence (CIVTOT) and Interstate Episodes of Violence (INTTOT), the value for ACTTOTAL can reach as high as 20. However, in our sample, the highest value is 6.

A threat variable is important to determine acts of violence impact the growth of a country and if more or less military spending can help or hurt. Aizenman and Glick (2003) use a similar variable for threat. However, their threat variable only accounts for external threats.
This thesis uses a variable that accounts for internal threats as well because some Latin American countries between 1960-2015 saw several instances of internal violence and military coups which should be included in this model.

**Log of GDP_PC**

Another control variable is the log of Real Per Capita GDP which controls for the initial size of a country’s Real Per Capita GDP. Data are, once again, drawn from the World Bank (2016). Following Aizenman and Glick (2003), this thesis takes the log of the real per capita GDP data.

**Pop. Growth**

For the same reason GDP per Capita growth is utilized to control for the different sizes of countries, population growth is used as a control variable against increasing sizes of countries accounting for GDP per capita growth (or decline). If a country’s population were to grow substantially in one year, then it could drive down their GDP per Capita due to a proportionally higher increase in the overall population compared to the increase in labor force. On the other hand, population is a growth variable in Solow Growth Theory which can cause Aggregate Real GDP to increase. Controlling for this can assure whether the other independent variables account for GDP per capita growth, irrespective of the population growth. The data for population growth come from the World Bank (2016).

**Leduc**

Aizenman and Glick (2003) use the log of the number of years of schooling attained by males 25+ at the secondary and higher levels. However, this thesis uses
the “Index of human capital per person, based on years of schooling and returns to education” from the Penn World Tables (2016).

This variable was chosen because it accounts for both genders (not just males 25+) and it accounts for the return on education based on the average years of schooling. With this variable, this thesis can determine the impact that education has on growth which is of particular importance for a country such as Costa Rica which places a particular focus on education.

The index values range from a low of 1.14 (Haiti) to a high of 3.4 (Belize).

**Inv/GDP**

The variable on the relationship between investment and GDP for this thesis is the “share of gross capital formation”, also drawn from the Penn World Tables (2016). This variable measure is essentially equivalent to Aizenman and Glick’s (2003) measure of the average real investment/GDP ratio.

This variable shows the impact of investment on the annual per capita GDP growth. Values range from 0.044 (Panama) as the lowest to 0.55 (Suriname) as the highest.

**Polity 2**

Polity 2 serves as the measure of good government, similar to Aizenman and Glick’s (2003) goodgov variable. Polity 2 is on a scale of -10 to 10 with a score of -10 signifying completely autocratic government and a score of +10 signifying complete democracy. The Polity 2 data are drawn from Marshall, Gurr, and Jaggers (2016).

A measure of governance is important as it shows how important the political structure is to the growth of the country. For the purposes of Latin America it is of
particular interest because much of the autocracy in the region came as a result of military coups or threats of violence.

Notably, Costa Rica is the only country to score a perfect 10 for democracy every single year from 1960-2015. On the other end of the spectrum, Cuba has been at a -7 for every single year expect for 1960 where it was a -4 and Haiti at -10 for 1971-1976.

Results

Table 1 (below) provides the summary statistics for the variable measures used in empirical analysis of the Latin American sample. The summary statistics include the mean, the standard deviation, the minimum, the maximum, and the number of observations of each variable to show the average magnitude, the spread, the range, and amount of data available for each variable. Additionally, below Table 1 are the means of the variables for Costa Rica in order to compare Costa Rica to the sample as a whole.

<table>
<thead>
<tr>
<th>Table 1. Latin America Summary Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>GDP_PC Growth</td>
</tr>
<tr>
<td>Mil/GDP</td>
</tr>
<tr>
<td>ACTTOTAL</td>
</tr>
<tr>
<td>Log of GDP_PC</td>
</tr>
<tr>
<td>Pop. Growth</td>
</tr>
<tr>
<td>Leduc</td>
</tr>
<tr>
<td>Inv/GDP</td>
</tr>
<tr>
<td>Polity 2</td>
</tr>
</tbody>
</table>

Costa Rican Averages:
- GDP_PC Growth: 2.310
- Mil/GDP: 0
- ACTTOTAL: 0
- Pop. Growth: 2.355
- Leduc: 2.12
- Inv/GDP: 0.142
- Polity 2: 10
Note: *Mil/GDP* is the military spending/GDP ratio; *ACTTOTAL* measures the number of internal or external military actions 1960-2016; *Log of GDP_PC* is the log of real per capita GDP; *Leduc* is the index of human capital; *Pop. Growth* is population growth rate; and *Inv/GDP* is the share of gross capital formation.

**Empirical Analysis of Latin America Summary Statistics**

Perhaps the most important statistic for this study is the GDP Per Capita Annual Growth for it captures how strongly an economy is growing. As the dependent variable, it is the center of the investigations in determining which factors lead to either more or less growth.

The summary statistics provide an important baseline for all of Latin America in terms of average GDP Per Capita Annual Growth between 1960-2015 which is a modest 1.870 percent per year. This growth rate is by no means extraordinary, nor is it dismal. Generally, a real growth rate of between two and three percent per year is considered healthy. Thus, the average of all Latin American countries falls slightly short of this benchmark.

While the mean of the growth rate itself is not particularly high, its standard deviation of 4.571 is. This large standard deviation means that there is great volatility in the levels of growth among these countries. That is to say, not every Latin American country is growing at around one to two percent annually. Rather, some countries experience great growth certain years while others might fall dramatically during those same years.

Part of the cause and a good illustration of this phenomenon is the massive spread between the minimum and maximum value of growth (-28.6 to 24.4 percent). The minimum level of growth (-28.6%) is frankly astounding. A decline of that rate is unprecedented and devastating. The circumstances surrounding this massive decline prove to be quite relevant to this paper.
In fact, this drop in growth occurred directly north of the demilitarized Costa Rica, in the militarized country of Nicaragua, in 1979. Though no severe economic downturn can be attributed to one sole factor, this decrease in GDP is largely due to the violent military coup against the Somoza dictatorship.

For 1979 and the surrounding years, Nicaragua had high levels of threat and low levels of stable democracy—two important independent variables in the regression. Thus, this minimum value of growth, beyond just being an outlier that partially accounts for a high standard deviation, also provides an important anecdote into economic devastation in Latin America due to military action, political instability, and general unrest—three categories in which Costa Rica is different from some of its Latin American counterparts.

Importantly, Costa Rica also holds an average Annual GDP Per Capita Growth Rate of 2.310, nearly half a percentage point higher than the Latin American average. This provides necessary evidence to ask the question: why has Costa Rica seen above average growth over the past 55 years? And, can this partially be explained by low (or no) military spending and by political stability?

These questions lead to the several independent variables used in the regressions. Their summary statistics are also important in seeing how Costa Rica relates.

For military spending (as a percentage of GDP), it is not surprising that Costa Rica provides the minimum with zero percent from 1960-2015. Notably, Costa Rica’s southern neighbor Panama has also reduced their military spending to zero over the past fifteen years as has Haiti for the past twenty years.
On the other end of the spectrum, Cuba had the highest level of military spending in terms of GDP at 6.53 percent in 1989. In fact, Cuba’s defense burden remained around 6.5 percent between the years 1988-1991, the culminating years of the Cold War. In the years following the Cold War, Cuba experienced a massive recession with growth in the negative double digits for three years straight.

Though there was no fighting and countless other significant factors leading to Cuba’s recession, especially the fall of the Soviet Union, this provides another example of war or the potential for war and unstable political conditions hurting a country’s growth in Latin America.

With the amount of acts of war or violence in a country potentially important, ACTTOTAL deserves attention. The mean for this variable is 0.469 which is quite low as the range is from zero to six. There are seven countries in which there were zero acts of violence or war from 1960-2015 (Bolivia, Costa Rica, Guyana, Paraguay, Trinidad and Tobago, Uruguay, and Venezuela) of which Costa Rica is one.

The only country to record the highest score of six is El Salvador from 1979-1992. This devastating 13 years of violence was a result of a civil war between the military government and left-wing guerrillas. This destructive period was also met with largely negative GDP growth.

However, despite the brutal violence, atrocities, and countless negative impacts of the civil war, El Salvador did eventually achieve better democracy and political stability as measured by Polity 2. Specifically, the country went from a -6 pre-conflict to a 7 at the war’s conclusion in 1991, a significant systematic change towards high stability and fair democracy. This increased level of Polity 2 for El Salvador elevated them above the region’s mean of 3.211.
The only country to have a Polity 2 score of -10 is Haiti from 1971-1976, while Jean-Claude Duvalier was in power. And the only country to have a Polity 2 score of 10 for every year from 1960-2015 is Costa Rica.

Aside from just government stability, the role of government in promoting education and investment are also relevant independent variables. For education (Index of Human Capital), Costa Rica is slightly above average which is encouraging considering education has been a long-term goal of the country.

Interestingly, the only independent variables that Costa Rica is below-average in is the level of investment as it relates to GDP, which is usually highly correlated with growth.

Finally, the average population growth from 1960-2015 in Latin America is 1.558%. Costa Rica tops this value by nearly a full percentage point.

With all of the variables and their summary statistics explained, what remains to be seen is how significant and robust all of these independent variables are in determining growth to hopefully answer the question of what causes growth in Latin America and if military spending and political stability/democracy have anything to do with it.

Table 2 (below) contains the results from the first three regressions. The first column indicates the coefficient estimate, standard deviation, and P-value of each variable from equation 1 whereas the next two columns correspond with equations 2 and 3 from the theory section. All three regressions are run with data from the full Latin American sample.
<table>
<thead>
<tr>
<th></th>
<th>Coefficient (Std. Dev.)</th>
<th>[P Value]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mil/GDP</strong></td>
<td>-0.177 (0.173)</td>
<td>[0.306]</td>
</tr>
<tr>
<td></td>
<td>-0.213 (0.184)</td>
<td>[0.246]</td>
</tr>
<tr>
<td></td>
<td>-0.282 (0.207)</td>
<td>[0.174]</td>
</tr>
<tr>
<td><strong>ACTTOTAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.076 (0.140)</td>
<td>[0.588]</td>
</tr>
<tr>
<td></td>
<td>-0.094 (0.274)</td>
<td>[0.732]</td>
</tr>
<tr>
<td><strong>Mil*ACTTOTAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.086 (0.119)</td>
<td>[0.471]</td>
</tr>
<tr>
<td><strong>Log of GDP_PC</strong></td>
<td>-0.112 (0.274)</td>
<td>[0.683]</td>
</tr>
<tr>
<td></td>
<td>-0.156 (0.281)</td>
<td>[0.580]</td>
</tr>
<tr>
<td></td>
<td>-0.146 (0.282)</td>
<td>[0.605]</td>
</tr>
<tr>
<td><strong>Leduc</strong></td>
<td>1.863*** (0.501)</td>
<td>[0.000]</td>
</tr>
<tr>
<td></td>
<td>2.380*** (0.634)</td>
<td>[0.000]</td>
</tr>
<tr>
<td></td>
<td>2.410*** (0.636)</td>
<td>[0.000]</td>
</tr>
<tr>
<td><strong>Pop. Growth</strong></td>
<td>0.075 (0.295)</td>
<td>[0.798]</td>
</tr>
<tr>
<td></td>
<td>0.260 (0.341)</td>
<td>[0.446]</td>
</tr>
<tr>
<td></td>
<td>0.288 (0.343)</td>
<td>[0.402]</td>
</tr>
<tr>
<td><strong>Inv/GDP</strong></td>
<td>19.128*** (3.274)</td>
<td>[0.000]</td>
</tr>
<tr>
<td></td>
<td>18.197*** (3.313)</td>
<td>[0.000]</td>
</tr>
<tr>
<td></td>
<td>18.013*** (3.325)</td>
<td>[0.000]</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>-5.073** (2.324)</td>
<td>[0.030]</td>
</tr>
<tr>
<td></td>
<td>-5.994** (2.389)</td>
<td>[0.012]</td>
</tr>
<tr>
<td></td>
<td>-6.061** (1.94)</td>
<td>[0.012]</td>
</tr>
<tr>
<td><strong># of obs.</strong></td>
<td>531</td>
<td></td>
</tr>
<tr>
<td></td>
<td>507</td>
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</tr>
<tr>
<td></td>
<td>507</td>
<td></td>
</tr>
<tr>
<td><strong>Adj R2</strong></td>
<td>0.0897</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.092</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.091</td>
<td></td>
</tr>
</tbody>
</table>

Note: Estimation by OLS. Standard errors in parentheses. *** indicates significance at 1%, ** at 5%, * at 10%. Dependent variable is $g_y$, the annual average real per capita GDP growth over 1965-2015. Independent variables include $Mil/GDP$, military spending/GDP; $ACTTOTAL$, which measures the number of internal or external military actions 1960-2015; $mil*ACTTOTAL$, an interaction of the two variables; $Log of GDP_PC$, log of real per capita GDP; $Leduc$, the index of human capital; $Pop. Growth$, population growth rate; and $Inv/GDP$, the share of gross capital formation.
Empirical Analysis of Latin America Determinants of Growth, Military Spending and External Threats

For the first core regression, the independent variables designed to explain growth are Military Spending as a percent of GDP, the log of real GDP per capita, the Index of Human Capital, Population Growth, and the Share of Gross Capital Formation in GDP. This regression is similar to the first regression in Aizenman and Glick’s (2003) paper.

The first column of Table 2 reports the empirical results of the growth model based on ordinary least squares (OLS) estimation. In this case, the two most significant variables affecting the GDP Per Capita Annual Growth for these Latin American countries are Index of Human Capital and Share of Gross Capital Formation. The coefficient estimate for each variable is positive as expected and statistically significant at the one percent level.

Both coefficients being positive means that an increase in a country’s Index of Human Capital and an increase in the Share of Gross Capital Formation (all else equal) each leads to an increase in GDP Per Capita Annual Growth. Also notable is the size of the coefficient for the Share of Gross Capital Formation (19.128), which signifies that even a small increase in this investment variable can create great growth, making it not only statistically significant, but economically significant as well.

A variable of primary interest in this study is Military Spending as a percent of GDP. Note in column 1 of Table 2 that the coefficient estimate is negative (-0.117), which suggests that greater defense burden tends to reduce growth (all else constant). The coefficient estimate, however, is not statistically significant at standard levels of significance (p-value=0.306). Nevertheless, given that the p-value is not drastically
high, it is reasonable to include a measure of defense burden in the econometric model.

In the next regression shown in column 2 of Table 2, threat variable is added (ACTTOTAL). However, this variable is insignificant with a p-value of 0.588. One impact of the addition of the threat variable, though, is that it increases the negativity of the coefficient estimate on military spending and it reduces that estimate’s p-value. Note also in column 2 of Table 2 that the coefficient estimates on the Index of Human Capital and Share of Gross Capital Formation remain positive and statistically significant at the one percent level.

In column 3 of Table 2 a mil*threat interaction variable is added. Results are similar to the effect of adding a threat variable in column 2. The investment and education variables remain positive and significant in explaining growth. Meanwhile, the coefficient estimate on Military Spending in terms of GDP (which in the presence of the interaction variable measures the average effect of military spending on growth for a country facing no threats) remains negative and the estimate’s p-value shrinks as well.

Thus, from these three regressions, we can conclude that education and investment are the two most important variables positively accounting for growth in the model. This result is not necessarily unexpected, but it is nonetheless interesting for the purposes of this thesis in explaining Costa Rica’s growth. One of the goals of its demilitarization was to focus more on education, which can be seen as somewhat achieved in their above average Index of Human Capital. With this in mind, it is clear that Costa Rica’s emphasis on education contributed to their growth. On the other hand, Costa Rica’s investment or Share of Gross Capital Formation is below average,
leading to less growth than they could otherwise achieve with an average or above average level of investment.

The next, and most intriguing, suggestion from these regressions is that Military Spending, though failing to achieve conventional levels of statistical significance, does achieve persistently negative coefficient estimates. In other words, more military spending per GDP seems to lean in the direction of less growth while less military spending per GDP may lean toward more growth. Such being the case, perhaps one aspect of Costa Rica’s growth is their complete lack of military spending.

Table 3 (below) works in the same way as Table 2, but with the regression results for equations 4, 5, and 6 from the theory section. Again, these regressions are run with the full Latin American sample.

<table>
<thead>
<tr>
<th>Coefficient (Std. Dev.)</th>
<th>P Value</th>
</tr>
</thead>
</table>

Table 3. Determinants of Growth, Military Spending and Corruption

65
<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>Std. Error</th>
<th>t-Value</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mil/GDP</td>
<td>-0.125</td>
<td>0.172</td>
<td>-0.714</td>
<td>0.496</td>
</tr>
<tr>
<td>Polity 2</td>
<td>-0.0297</td>
<td>0.024</td>
<td>-0.0297</td>
<td>0.697</td>
</tr>
<tr>
<td>Mil*Polity 2</td>
<td>0.237***</td>
<td>0.065</td>
<td>3.656</td>
<td>0.000</td>
</tr>
<tr>
<td>Log of GDP_PC</td>
<td>-0.108</td>
<td>0.226</td>
<td>-0.471</td>
<td>0.631</td>
</tr>
<tr>
<td>Leduc</td>
<td>0.875*</td>
<td>0.384</td>
<td>2.294</td>
<td>0.010</td>
</tr>
<tr>
<td>Pop. Growth</td>
<td>0.032</td>
<td>0.247</td>
<td>0.032</td>
<td>0.974</td>
</tr>
<tr>
<td>Inv/GDP</td>
<td>13.792***</td>
<td>2.128</td>
<td>6.523</td>
<td>0.000</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.690</td>
<td>1.974</td>
<td>-0.868</td>
<td>0.392</td>
</tr>
<tr>
<td># of obs.</td>
<td>1035</td>
<td>507</td>
<td>1035</td>
<td>507</td>
</tr>
<tr>
<td>Adj R2</td>
<td>0.043</td>
<td>0.115</td>
<td>0.119</td>
<td></td>
</tr>
</tbody>
</table>

Note: Estimation by OLS. Standard errors in parentheses. *** indicates significance at 1%, ** at 5%, * at 10%. Dependent variable is gy, the annual average real per capita GDP growth over 1965-2015. Independent variables include Mil/GDP, military spending/GDP; Polity 2, the level of democracy in a country; Mil*Polity 2, an interaction of the two variables; Log of GDP_PC, log of real per capita GDP; Leduc, the index of human capital; Pop. Growth, population growth rate; and Inv/GDP, the share of gross capital formation.

**Empirical Analysis of Latin America Determinants of Growth, Military Spending and Corruption**
For the next set of three regressions, which are shown in Table 3, the threat variable is replaced with a good government variable that deals with how democratic and stable a country’s governmental system is. Aizenman and Glick (2003) make a similar change in independent variables in order to explore the impact of government in growth.

The first regression in column 1 of Table 3 provides the same basic results as the first model—that education and investment significantly account for growth. The Polity 2 measure of good government has a negative coefficient estimate, but it is statistically insignificant.

In the next regression, the coefficient estimate on Polity 2 has the expected positive sign and is statistically significant at the one percent level (with a p-value of 0.000). The implication of this result is that the more democratic and stable a country’s government is, the more growth it will experience.

This good governance finding in column 2 stays consistent in the third regression in which the coefficient grows even more positive to 0.376 while remaining significant at the one percent level (note: with the interaction variable, the coefficient estimate on Polity 2 shows the effect of good government on growth for countries with no military spending). The addition of the mil*polity interaction provides interesting results. It does not change the usual significance of the positive independent variables education and investment, but its significance and negative value of -0.114 implies a negative effect on growth and, thus, requires an explanation.

The negative effect comes from the military spending variable, not the good government variable. Essentially, the impact of Polity 2, which has a coefficient of 0.376, is more strongly positive than the impact of the mil*polity interaction, which
has a coefficient of -0.114, making its negative impact weaker. However, this is not taking into account military spending, which should be multiplied by -0.114.

Mathematically, by taking the partial derivative with respect to Polity 2, this means that in order to ensure that the impact of good government is positive, then military spending must be less than 3.30% of the country’s GDP.

Perhaps more relevant to the research question of this paper is the partial derivative of Military Spending which is: \( \frac{\delta gy}{\delta Mil} = 0.714 - 0.114(\text{Polity 2}) \). This means that military spending has a positive effect on growth as long as the Polity 2 score of a country is below 6.3. In other words, less democratic countries benefit more from military spending whereas more democratic countries see adverse effects on growth from military spending.

These findings are encouraging to a country such as Costa Rica which has a strong democracy (the only Latin American country with a Polity 2 score of 10 every year from 1960-2015) and low (specifically, zero) military spending. In this model, Costa Rica benefits from not only their stable democracy, but also from the fact that their military spending does not overshadow the good government impact as is possible for some highly militarized, but democratic countries.

<table>
<thead>
<tr>
<th>Table 4. Central America Summary Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
</tr>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Mil/GDP</td>
</tr>
<tr>
<td>ACTTOTAL</td>
</tr>
<tr>
<td>Log of GDP_PC</td>
</tr>
<tr>
<td>Pop. Growth</td>
</tr>
<tr>
<td>Leduc</td>
</tr>
<tr>
<td>Inv/GDP</td>
</tr>
<tr>
<td>Polity 2</td>
</tr>
</tbody>
</table>

Costa Rican Averages:
- GDP Growth: 2.310
- Mil/GDP: 0
- ACTTOTAL: 0
- Population Growth: 2.355
- Leduc: 2.12
- Inv/GDP: 0.142
- Polity 2: 10

Note: Mil/GDP is the military spending/GDP ratio; ACTTOTAL measures the number of internal or external military actions 1960-2015; Log of GDP_PC is the log of real per capita GDP; Leduc is the index of human capital; Pop. Growth is population growth rate; and Inv/GDP is the share of gross capital formation.
Empirical Analysis of Central America Summary Statistics

One of the first aspects to note about the Summary Statistics for the Central American sample is how much smaller the sample is. While each variable in the Latin American sample has around 1000 observations, the variables in the Central American sample have around 300, a big difference in scale. With just seven countries in the sample, it will be harder to run regressions with the same significance as in the previous section.

Despite the differences in size of the samples, most of the mean values are quite similar. Two exceptions to these similarities, however, are level of military spending and threat level.

Central America, on average, spends nearly half a percentage point of GDP lower on military than the whole Latin American sample. One possible explanation for this discrepancy is that demilitarized countries Costa Rica and Panama (since 2000) are weighted more heavily in a sample with only seven countries, compared to all of Latin America. Two out of seven countries spending zero percent of their GDP on military accounts for a significant downshift in mean military spending.

As for the heightened level of threat in Central America, with an ACTTOTAL mean of nearly 0.5 higher, this can also be explained by the greater impact of Central American countries with high threat levels on the smaller sample.

In the previous section, violent and lasting conflicts in both Nicaragua and El Salvador were mentioned. Both cases resulted in large ACTTOTAL scores. Thus, the history of violence and war in these two Central American countries drive up the mean value for the entire region.
Table 5. Determinants of Growth, Military Spending and External Threats in Central America

<table>
<thead>
<tr>
<th></th>
<th>Coefficient (Std. Dev.)</th>
<th>[P Value]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mil/GDP</strong></td>
<td>-1.260***</td>
<td>(0.475)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[0.009]</td>
</tr>
<tr>
<td></td>
<td>-1.550***</td>
<td>(0.456)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[0.001]</td>
</tr>
<tr>
<td></td>
<td>-1.721***</td>
<td>(0.480)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[0.000]</td>
</tr>
<tr>
<td><strong>ACTTOTAL</strong></td>
<td>0.449**</td>
<td>(0.220)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[0.044]</td>
</tr>
<tr>
<td></td>
<td>-0.376</td>
<td>(0.750)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[0.618]</td>
</tr>
<tr>
<td>Mil(\times)ACTTOTAL</td>
<td>Log of GDP_PC</td>
<td>Leduc</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td>-0.115</td>
<td>-0.418</td>
</tr>
<tr>
<td></td>
<td>(0.647)</td>
<td>(0.852)</td>
</tr>
<tr>
<td></td>
<td>[0.860]</td>
<td>[0.625]</td>
</tr>
<tr>
<td></td>
<td>-0.418</td>
<td>-0.494</td>
</tr>
<tr>
<td></td>
<td>(0.852)</td>
<td>(0.853)</td>
</tr>
<tr>
<td></td>
<td>[0.625]</td>
<td>[0.564]</td>
</tr>
<tr>
<td></td>
<td>-0.494</td>
<td>-0.494</td>
</tr>
<tr>
<td></td>
<td>(0.853)</td>
<td>(0.524)</td>
</tr>
<tr>
<td></td>
<td>[0.564]</td>
<td>[0.524]</td>
</tr>
</tbody>
</table>

Note: Estimation by OLS. Standard errors in parentheses. *** indicates significance at 1%, ** at 5%, * at 10%. Dependent variable is \(g_y\), the annual average real per capita GDP growth over 1965-2015. Independent variables include \(\text{Mil/GDP}\), military spending/GDP; \(\text{ACTTOTAL}\), which measures the number of internal or external military actions 1960-2015; \(\text{mil*ACTTOTAL}\), an interaction of the two variables; \(\log\text{ of GDP\_PC}\), log of real per capita GDP; \(\text{Leduc}\), the index of human capital; \(\text{Pop. Growth}\), population growth rate; and \(\text{Inv/GDP}\), the share of gross capital formation.

**Empirical Analysis of Central America Determinants of Growth, Military Spending and External Threats**

Before analyzing any of these regressions, it is important to note that the Adjusted R-Squared values of these regressions are much higher and, thus, more of the variation in Central American GDP Per Capita growth can be explained by the model. This may in part be explained by the fact that Central America represents a
smaller sample with less variation for the model to explain. In any case, the findings of these regressions are intriguing and relevant.

For the first time, the regression produces a coefficient estimate on the Military Spending variable that is, in fact, negative and significant (statistically and economically). Beyond just being significant, it is also even more heavily negative than in the Latin American sample with a coefficient of -1.260. This means that Military Spending has a largely negative impact on growth for Central American countries.

One explanation of this finding is that in the smaller sample, demilitarized countries Costa Rica and Panama, who have both experienced above average growth, form a larger proportion of the sample and, thus, make the impact of military spending on growth largely negative.

Another interesting finding from not just the first regression, but all three, is that education, or the Index of Human Capital, remains positive, but loses its significance. This means that in the Central American sample, the level of education does not have the same impact on growth as it does for the entire Latin American sample.

In the second regression, ACTTOTAL is not only significant, but also positive. This puzzling result implies that an increase in violence in a country leads to more growth in that country.

Yet, despite this finding, the impact of Military Spending only gets more significant and more negative in the second and third regressions (in the third regression, the coefficient measures the effect of military spending for countries facing no threats). However, another potentially important impact of Military
Spending is its interaction with threat in the third regression being positive. Though this is far from being significant, the mil*threat coefficient being positive merits attention. With both Military Spending negative on its own, a positive mil*threat interaction implies a high value of ACTTOTAL is necessary to outweigh the negative impact of military spending on growth. In other words, if a country faces a high level of threat, military spending is necessary to preserve growth. However if a country does not face a high level of threat, military spending only leads to less growth. This is important to countries that face low threat levels, such as Costa Rica.

These results, while not as significant as in the first sample, are still relevant and show, for the first time, that military spending has a robustly significant and negative impact on growth. This suggests, at least in this model, that lack of military spending may play a role in Central American growth, a region that has two demilitarized countries.

Table 6. Determinants of Growth, Military Spending and Corruption in Central America

<table>
<thead>
<tr>
<th></th>
<th>Coefficient (Std. Dev.)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>P Value</td>
</tr>
<tr>
<td>Mil/GDP</td>
<td>-0.489</td>
<td>0.332</td>
</tr>
<tr>
<td></td>
<td>(0.492)</td>
<td>[0.001]</td>
</tr>
<tr>
<td></td>
<td>-5.011***</td>
<td>(1.423)</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>[0.001]</td>
</tr>
<tr>
<td>Polity 2</td>
<td>0.251***</td>
<td>0.133</td>
</tr>
<tr>
<td></td>
<td>(0.047)</td>
<td>[0.144]</td>
</tr>
<tr>
<td></td>
<td>0.456***</td>
<td>[0.001]</td>
</tr>
<tr>
<td></td>
<td>-0.429</td>
<td>[0.292]</td>
</tr>
<tr>
<td></td>
<td>(0.133)</td>
<td>[0.001]</td>
</tr>
<tr>
<td></td>
<td>-0.429</td>
<td>[0.144]</td>
</tr>
</tbody>
</table>

74
<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Standard Error</th>
<th>t-statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mil*Polity 2</td>
<td>0.597***</td>
<td>(0.177)</td>
<td>[0.001]</td>
<td></td>
</tr>
<tr>
<td>Log of GDP_PC</td>
<td>3.072***</td>
<td>(0.642)</td>
<td>[0.000]</td>
<td>0.925</td>
</tr>
<tr>
<td></td>
<td>0.644</td>
<td>(0.772)</td>
<td>[0.406]</td>
<td></td>
</tr>
<tr>
<td>Leduc</td>
<td>-5.786***</td>
<td>(1.240)</td>
<td>[0.000]</td>
<td>0.006</td>
</tr>
<tr>
<td></td>
<td>-1.603</td>
<td>(1.365)</td>
<td>[0.243]</td>
<td></td>
</tr>
<tr>
<td>Pop. Growth</td>
<td>0.395</td>
<td>(0.580)</td>
<td>[0.497]</td>
<td>0.782</td>
</tr>
<tr>
<td></td>
<td>0.858</td>
<td>(0.708)</td>
<td>[0.228]</td>
<td></td>
</tr>
<tr>
<td>Inv/GDP</td>
<td>36.203***</td>
<td>(4.546)</td>
<td>[0.000]</td>
<td>18.265***</td>
</tr>
<tr>
<td></td>
<td>24.358***</td>
<td>(4.788)</td>
<td>[0.000]</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-19.814***</td>
<td>(3.852)</td>
<td>[0.000]</td>
<td>-5.894</td>
</tr>
<tr>
<td></td>
<td>-8.967**</td>
<td>(4.413)</td>
<td>[0.044]</td>
<td></td>
</tr>
<tr>
<td># of obs.</td>
<td>270</td>
<td></td>
<td></td>
<td>125</td>
</tr>
<tr>
<td>Adj R2</td>
<td>0.232</td>
<td></td>
<td></td>
<td>0.347</td>
</tr>
<tr>
<td></td>
<td>0.399</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Estimation by OLS. Standard errors in parentheses. *** indicates significance at 1%, ** at 5%, * at 10%. Dependent variable is gy, the annual average real per capita GDP growth over 1965-2015. Independent variables include Mil/GDP, military spending/GDP; Polity 2, the level of democracy in a country; mil*Polity 2, an interaction of the two variables; Log of GDP_PC, log of real per capita GDP; Leduc, the index of human capital; Pop. Growth, population growth rate; and Inv/GDP, the share of gross capital formation.

**Empirical Analysis of Central America Determinants of Growth, Military Spending and Corruption**

Following the pattern from the models in the Latin America sample, the attention now shifts to the role of government in growth. The first regression, interestingly, has nearly every variable achieve significance at the one percent level, with the exception of population growth.
First, Polity 2 is both positive and significant, echoing the finding from the Latin America sample that strong democracy is correlated with strong growth. Next, for the first time in the regressions so far, the coefficient estimate on the log of the GDP per capita is significant and positive. This means that the higher a country’s GDP per capita is, the more they will grow in the future. In other words, the strong economies still grow faster than the weaker economies in Central America.

In terms of inexplicable results, the high and negative coefficient for education is somewhat of a mystery. Despite its significance, it is hard to understand why an increase in a country’s education would lead to a decrease in their growth. But, alas, that is the result from the regression.

In a more expected result, the level of investment is once again highly correlated with growth. This has been the case in every regression thus far and is the case in the second and third regressions of this category as well.

In the second regression, good government again is significantly and positively correlated with growth. The third regression has the mil*Polity 2 interaction as significantly positive (the opposite result from the Latin American regression). Based on the coefficient estimates of Mil/GDP, Polity 2, and the interaction of the two of them, more military spending hurts growth in interaction with government (at mean of Polity 2) while higher Polity 2 positively affects growth even in a model that has mil*polity interaction.

Table 7. Latin America (Populations 1-20mil) Summary Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
<th># of obs.</th>
</tr>
</thead>
</table>

76
<table>
<thead>
<tr>
<th>Variable</th>
<th>Observation 1</th>
<th>Observation 2</th>
<th>Observation 3</th>
<th>Observation 4</th>
<th>Observation 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP_PC Growth</td>
<td>1.819</td>
<td>4.245</td>
<td>-28.626</td>
<td>19.095</td>
<td>819</td>
</tr>
<tr>
<td>Mil/GDP</td>
<td>1.297</td>
<td>1.120</td>
<td>0</td>
<td>6.530</td>
<td>412</td>
</tr>
<tr>
<td>ACTTOTAL</td>
<td>0.377</td>
<td>1.252</td>
<td>0</td>
<td>6</td>
<td>894</td>
</tr>
<tr>
<td>Log of GDP_PC</td>
<td>8.088</td>
<td>0.659</td>
<td>6.496</td>
<td>9.726</td>
<td>835</td>
</tr>
<tr>
<td>Pop. Growth</td>
<td>1.796</td>
<td>0.842</td>
<td>-0.064</td>
<td>3.601</td>
<td>896</td>
</tr>
<tr>
<td>Leduc</td>
<td>2.018</td>
<td>0.463</td>
<td>1.144</td>
<td>3.052</td>
<td>770</td>
</tr>
<tr>
<td>Inv/GDP</td>
<td>0.180</td>
<td>0.063</td>
<td>0.0437</td>
<td>0.386</td>
<td>770</td>
</tr>
<tr>
<td>Polity 2</td>
<td>3.087</td>
<td>6.86</td>
<td>-10</td>
<td>10</td>
<td>894</td>
</tr>
</tbody>
</table>

Costa Rican Averages:
- GDP Growth: 2.310
- Mil/GDP: 0
- ACTTOTAL: 0
- Pop. Growth: 2.355
- Leduc: 2.12
- Inv/GDP: 0.142
Note: Mil/GDP is the military spending/GDP ratio; ACTTOTAL measures the number of internal or external military actions 1960-2015; Log of GDP_PC is the log of real per capita GDP; Leduc is the index of human capital; Pop. Growth is population growth rate; and Inv/GDP is the share of gross capital formation.

**Empirical Analysis of Latin America (Populations 1-20mil) Summary Statistics**

Following the regressions from the Central America sample, which included seven countries, this next sample is much larger, containing 16 countries. In order to select countries similar to Costa Rica, only those countries with populations between 1-20 million people in 2015 are included. By doing this, the small island countries of Latin America with only a few hundred thousand people as well as the large countries, such as Brazil with over 200 million people, are eliminated.

In this way, one can see the impacts that our independent variables have on the growth of mid-sized Latin American countries like Costa Rica. As an ancillary benefit, the following regressions, with many more observations, may be able to detect more variables of significance than those from the Central American sample.

As for the summary statistics, they are remarkably similar to the summary statistics from the full Latin American group, suggesting that, at least on average, the mid-sized Latin American countries do not differ too much from their larger or smaller counterparts.

**Table 8. Determinants of Growth, Military Spending and External Threats in Latin America (Populations 1-20 Million)**

<table>
<thead>
<tr>
<th>Mil/GDP</th>
<th>Coefficient (Std. Dev.) [P Value]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mil/GDP: -0.171 [0.191] [0.370]</td>
</tr>
<tr>
<td></td>
<td>ACTTOTAL: -0.196 [0.192] [0.308]</td>
</tr>
<tr>
<td></td>
<td>Log of GDP_PC: -0.212 [0.195] [0.276]</td>
</tr>
</tbody>
</table>
### Table

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Standard Error</th>
<th>95% CI</th>
<th>90% CI</th>
<th>99% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACTTOTAL</td>
<td>0.293</td>
<td>(0.240)</td>
<td>[0.223]</td>
<td></td>
<td>[0.909]</td>
</tr>
<tr>
<td>Mil*ACTTOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log of GDP_PC</td>
<td>0.666**</td>
<td>(0.367)</td>
<td>[0.071]</td>
<td></td>
<td>[0.622]</td>
</tr>
<tr>
<td>Leduc</td>
<td>1.452**</td>
<td>(0.754)</td>
<td>[0.055]</td>
<td></td>
<td>[0.023]</td>
</tr>
<tr>
<td>Pop. Growth</td>
<td>0.595*</td>
<td>(0.313)</td>
<td>[0.058]</td>
<td></td>
<td>[0.078]</td>
</tr>
<tr>
<td>Inv/GDP</td>
<td>13.455***</td>
<td>(3.137)</td>
<td>[0.000]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-9.974***</td>
<td>(2.489)</td>
<td>[0.000]</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of obs.</td>
<td>346</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj R2</td>
<td>0.114</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Estimation by OLS. Standard errors in parentheses. *** indicates significance at 1%, ** at 5%, * at 10%. Dependent variable is gy, the annual average real per capita GDP growth over 1965-2016. Independent variables include Mil/GDP, military spending/GDP; ACTTOTAL, which measures the number of internal or external military actions 1960-2016; mil*ACTTOTAL, an interaction of the two variables; Log of GDP_PC, log of real per capita GDP; Leduc, the index of human capital; Pop. Growth, population growth rate; and Inv/GDP, the share of gross capital formation.

### Empirical Analysis of Determinants of Growth, Military Spending and External Threats in Latin America (Populations 1-20 Million)

The results for this regression are fairly consistent with other results so far.

Military Spending remains negative in all three regressions, yet never reaches standard levels of significance.
Unlike Military Spending, Population Growth is significant in all three regressions for the first time. It also has a positive coefficient, meaning that for mid-sized countries, more population growth leads to more GDP Per Capita growth. This is another interesting result, as population growth is generally associated with less GDP Per Capita growth.

However, with positive education and investment in capital, two variables that once again correlate strongly with growth, an increasing population can lead to improved growth in the long run.

Additionally, the log of GDP per capita is significant and positive in the first regression while remaining positive (but not quite significant) in the following two. Thus, the trend of strong economic countries growing strongly is true for these Latin American countries of similar size.

<table>
<thead>
<tr>
<th>Coefficient (Std. Dev.) [P Value]</th>
<th>Mil/GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.041 (0.191) [0.832]</td>
<td>0.443 (0.571) [0.439]</td>
</tr>
</tbody>
</table>

Table 9. Determinants of Growth, Military Spending and Corruption in Latin America (Populations 1-20 million)
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Polity 2</strong></td>
<td>0.013</td>
<td>0.295***</td>
<td>0.372***</td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
<td>(0.082)</td>
<td>(0.119)</td>
</tr>
<tr>
<td></td>
<td>[0.633]</td>
<td>[0.000]</td>
<td>[0.002]</td>
</tr>
<tr>
<td><strong>Mil*Polity 2</strong></td>
<td></td>
<td></td>
<td>-0.060</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.067)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[0.508]</td>
</tr>
<tr>
<td><strong>Log of GDP_PC</strong></td>
<td>1.077***</td>
<td>0.320</td>
<td>0.252</td>
</tr>
<tr>
<td></td>
<td>(0.335)</td>
<td>(0.374)</td>
<td>(0.381)</td>
</tr>
<tr>
<td></td>
<td>[0.001]</td>
<td>[0.396]</td>
<td>[0.508]</td>
</tr>
<tr>
<td><strong>Leduc</strong></td>
<td>-0.237</td>
<td>0.905</td>
<td>0.739</td>
</tr>
<tr>
<td></td>
<td>(0.622)</td>
<td>(0.756)</td>
<td>(0.779)</td>
</tr>
<tr>
<td></td>
<td>[0.703]</td>
<td>[0.233]</td>
<td>[0.343]</td>
</tr>
<tr>
<td><strong>Pop. Growth</strong></td>
<td>0.455*</td>
<td>0.738</td>
<td>0.625*</td>
</tr>
<tr>
<td></td>
<td>(0.261)</td>
<td>(0.310)</td>
<td>(0.335)</td>
</tr>
<tr>
<td></td>
<td>[0.082]</td>
<td>[0.018]</td>
<td>[0.063]</td>
</tr>
<tr>
<td><strong>Inv/GDP</strong></td>
<td>16.135***</td>
<td>16.745***</td>
<td>17.357***</td>
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<tr>
<td></td>
<td>(2.507)</td>
<td>(3.214)</td>
<td>(3.287)</td>
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<td></td>
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</tr>
<tr>
<td><strong>Constant</strong></td>
<td>-10.220***</td>
<td>-9.160***</td>
<td>-8.798***</td>
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<td></td>
<td>(2.542)</td>
<td>(2.456)</td>
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<tr>
<td><strong>Adj R2</strong></td>
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<td>0.144</td>
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</table>

Note: Estimation by OLS. Standard errors in parentheses. *** indicates significance at 1%, ** at 5%, * at 10%. Dependent variable is gy, the annual average real per capita GDP growth over 1965-2015. Independent variables include Mil/GDP, military spending/GDP; Polity 2, the level of democracy in a country; mil*Polity 2, an interaction of the two variables; Log of GDP_PC, log of real per capita GDP; Leduc, the index of human capital; Pop. Growth, population growth rate; and Inv/GDP, the share of gross capital formation.

**Empirical Analysis Determinants of Growth, Military Spending and Corruption in Latin America (Populations 1-20 million)**

The final group of regressions continues to have a strong Adjusted-R Squared score. Share of Gross Capital Formation also continues to have a robust significance and positive impact on growth in the model. This measure of investment is the only
variable in the model to be significant and positive in every single regression run. Thus, investment seems to be the most important factor in Annual GDP Per Capita growth in this model.

The next most important factor in the previous regressions, education, does not reach significance in any of the final three regressions. Log of GDP per Capita and Population Growth once again are significant and positive in the first regression, meaning that a higher initial GDP and a faster growing population lead to more growth.

Finally, in the third regression, our good government measure (which tracks the impact of democracy for countries with no military spending) is significant and positive again, making it another one of the few variables to more often than not achieve significance. The fact that Polity 2 is significant and positive in nearly every regression shows that a strong democracy is quite important towards strong economic growth.

Thus, Costa Rica, having the most stable and democratic government of Latin America from 1960-2015 can thank a lot of its economic growth to their government among, as we have seen, many other factors.

Conclusion

Through the eighteen regressions in this chapter (six for each of the three samples) there are several takeaways. First and foremost, education and investment show up as robust predictors of growth in nearly all of the regressions, showing that
increasing either of these variables can be an effective way of promoting growth in Latin American countries. For the purposes of this thesis, it is important that most of the coefficients for military spending are negative, meaning that higher military spending is typically correlated with less GDP Per Capita growth in Latin America. More significant, is that the results for military spending in the Central American sample are not only negative, but also statistically and economically significant. These results show that Central American countries can benefit the most from lessening their military spending. One final relevant result is that Polity 2 (stable democracy) also typically carried a positive coefficient which shows the positive effect that democracy has on GDP Per Capita growth.

These findings paint a plausible picture of Costa Rica’s economic growth. Being a Central American country, the economy has benefitted from demilitarization. Additionally, the investments in education and stable democracy that have been present in the country since demilitarization have aided in their growth as well.

Importantly, these results from the regressions not only help show how Costa Rica benefitted from demilitarization, but can also help identify what other countries could experience similar benefits from lessening their military spending. This topic will be explored in the third and final chapter.

Works Cited
Chapter 3

The Implications of Demilitarization
Over the past two chapters, this thesis has explored demilitarization from a couple of different perspectives. In Chapter 1, the history of Costa Rica was detailed, both leading up to and following the decision to part ways with the standing army. The pre-civil war history of Costa Rica was important for two reasons. First, their bad experience with a military dictator provoked a wariness of militarization in the
country. As such, Costa Rica never developed a large army. Second, the Costa Rican economy struggled before the civil war due, in part, to their starting as a neglected colony in their early history and their excessive reliance on coffee in the years leading up to the civil war.

The actual demilitarization process was important to explore as well. For such an unprecedented action, it is relevant to understand why and how Costa Rica demilitarized. The why is complicated, but seems to be a combination of factors including: a lack of a strong military tradition to begin with, the army’s loyalty to the deposed president Calderon, and the desire to dedicate more funds to goals such as education. Once the decision was made, it was added to the new constitution and the army slowly disbanded, morphing into a Civil Guard of around 1,500 members.

Since the landmark decision in 1949, Costa Rica has been a beacon of peace and prosperity. Their economic growth soon surpassed that of many of its neighbors and it avoided the numerous violent confrontations which ravaged Latin America during the latter half of the 20th century. The lack of an army has been a feasible model for Costa Rica. Despite a few invasion attempts, border disputes, and wars in neighboring countries, Costa Rica remained peaceful and intact. In other words, the fears of not having an army for protective purposes were never realized.

The practicality of not having a standing army was a relevant prerequisite to analyzing its economic effects. With three different samples (Latin America, Central America, and Latin American countries with populations of 1-20 million) regressions were run to determine which factors influenced growth in the sample countries. Education and investment were nearly always significant correlates of growth in the samples.
Military spending typically had a negative coefficient and in the Central America sample had a *significantly* negative effect on growth. Stable democracy also proved to be an important factor in growth for several of the regressions.

Thus, the conclusion from these first two chapters is that not having an army is, in fact, feasible and that in certain instances (i.e. when there is a stable democracy and the government focuses on education and investment instead of military spending) it can help a country grow at a higher rate than it otherwise would have. The implications of this conclusion are potentially significant and far reaching. It means that there are countries missing out on the benefits of a “peace dividend.” Moreover, if these countries undergo a process of demilitarization, the world could see both more growth and more peace.

There are many advocates for demilitarization. One of them was the famously brilliant Albert Einstein. He suggested that all nations should pool forces to create one supranational force with each individual country “keeping for themselves only local police” (Hunt 199). He argued that this would reduce aggressive and preventative wars. In regards to preventative wars, Einstein also declared that “striving for peace and preparing for war are incompatible with each other” (Hunt 200).

Einstein’s model is interesting and would likely be effective in cutting out the countless unnecessary wars—for a supranational force would only be beholden to the world’s interests, not one country’s. However, despite its potential merits, it is doubtful that most countries would agree to pool their forces, especially those countries with larger armies.

But even that Einstein thought of this issue shows that demilitarization is worth even the greatest of scientific minds contemplating. One of the great minds of
Costa Rica has also been contemplating it for over 30 years now. Still alive, today, Oscar Arias continues his advocacy of less military spending around the world. He has given many speeches on the topic in which he continues to emphasize that “excessive defense spending diverts resources that are desperately needed for essential social services” (O. Arias 18). Strongly, he states that “military spending represents the single most significant perversion of worldwide priorities known today” and calls it “a global tragedy” (O. Arias 18).

In another interview, Arias reflected on the Costa Rican model, saying that it can “show the rest of the world what is possible. Instead of buying a tank, you could build a hospital; instead of buying a fighter jet you could lay 50 kilometers of highways” (Dyer 2014). He concluded by saying that the choice between spending on military or other goals is “obvious” (Dyer 2014).

This line of thinking—that military spending detracts from poverty-alleviating efforts—has been shared by other world leaders in the past. One notable and seemingly unlikely example of a world leader who thought this way, decades before Arias rose to prominence, is President Dwight D Eisenhower. As one of the most prominent generals and commanders during World War II, one would not expect Eisenhower to speak about the potential danger of military spending. Yet, he once proclaimed that “every gun that is fired, every warship launched, every rocket fired signifies, in the final sense, a theft from those who hunger and are not fed, those who are cold and are not clothed” (Andrews 19). Thus, from great physicist to great general, the merits of reducing military spending have been considered by diverse minds.
Yet as was mentioned in Chapter 1, Eisenhower was president during the CIA backed-coup in Guatemala. In this instance, there is a notable discrepancy between discourse and action for Eisenhower. Though advocating for demilitarization, he participated in war at the highest level as a commander and oversaw the coup in Guatemala which had disastrous consequences for the country. In the same way as Eisenhower acting contrary to his discourse, fellow contemplator of demilitarization, Albert Einstein, played a role in the creation of the atomic bomb, one of the deadliest instruments ever used in war. He did so by signing a letter to President Franklin Roosevelt in both 1939 and 1940 (when progress following the 1939 letter was slow) urging the construction of an atomic bomb due to the fear that the Germans would make one. These letters served as a call to action that accelerated the creation of the atomic bomb in time for use in World War II. In 1954, shortly before his death, Einstein expressed his regret, saying “'I made one great mistake in my life... when I signed the letter to President Roosevelt recommending that atom bombs be made; but there was some justification - the danger that the Germans would make them” (Clark 752).

However, in the case of Panama in 1989, President Guillermo Endara and Vice Presidents Guillermo Ford and Ricardo Arias Calderon (no relation to the aforementioned Costa Rican politicians bearing those last names) led by action, not discourse. They took power in Panama after the United States invaded to end the Noriega dictatorship. Throughout his rise to prominence, Noriega was on the CIA payroll, despite allegations of him being a drug trafficker. Soon after, he became military dictator of Panama and given his former work for the CIA, he retained U.S. support. However, when the relationship broke down (due to many allegations against Noriega, including his annulment of a legitimate presidential election in Panama),
President George H.W. Bush authorized “Operation Just Cause” to overthrow the dictator. After an invasion of over 20,000 troops, several hundred casualties, and condemnation of the invasion by the rest of the world, the United States forced Noriega and his forces out and allowed the legitimately elected Endara to take power (“The US Invades Panama”).

Given the poor experience Panama had endured under military dictatorship, it is not surprising that their new leaders would consider demilitarizing. Furthermore, with Costa Rica to the north of them and a jungle separating the eastern part of the country from Colombia, there was nearly zero chance of invasion from either side (Berryman 1990). Also of note is that, demilitarization can, in certain cases, strengthen national sovereignty for it helps to avoid more powerful countries from influencing regime change through implicit or explicit support of the army, as was the case in Guatemala.

Not only was the lack of threat posed by Costa Rica important, but also the example they set for their southern neighbor—helping them to see that it was a possible and advisable model. As mentioned in Chapter 1, Oscar Arias even helped with the planning of the demilitarization efforts.

One of the Vice-Presidents at the time, Ricardo Arias Calderon, detailed the process of getting rid of the army in Panama. Importantly, demilitarization in 1989 for Panama was more difficult than in 1949 for Costa Rica because the Panamanian army was much bigger and represented a much larger amount of spending.

Ricardo Arias details that the Panamanian army had around 16,000 soldiers and accounted for $150 million of spending public funds, with more funds coming from drug-trafficking and money-laundering (Arias 101). Savings in 1989 were $121
million and in 1991 it went up to $201 million. This savings was largely dedicated towards increasing the budget of the Ministry of Health (Arias 106).

Additionally, similar to Costa Rica, Panama converted part of its army to a civil guard dedicated to public security. This was important to internally stabilize the country after the United States invasion. Moreover, the complete disbanding of all armed forces could have led to resistance groups forming from former, disgruntled soldiers. The creation of the civil guard gave new employment opportunities for the demobilized soldiers and provided a potential defense force in case resistance groups did form (Arias 103).

As with Costa Rica, Panama has survived peacefully in the nearly 30 years since its demilitarization. In 1998, Ricardo Arias noted a few of the positive impacts the lack of an army had had on Panama. Among the impacts were a lack of military intervention in elections (as had happened under Noriega), stronger democracy, and less corruption and violations of human rights (both of which were at an all-time high for Panama under Noriega) (Arias 109).

With both Costa Rica and Panama benefitting from demilitarization, Central America has gone from a site of violent conflict, to a potential model to the rest of Latin America and even the world. Costa Rica provided the initial precedent for doing away with the army, while Panama proved that even with an army much larger, it is possible to demilitarize. Surely, there are other countries that could benefit from abolishing or, at least, reducing their army both from a social and economic perspective.

The regressions in this paper focused on just Latin America and the subsamples of it. Therefore, when looking at potential candidates for demilitarization,
only countries within Latin America will be examined, though there could be many others around the world. Important criteria in determining a country’s aptitude for demilitarization will include stability of government (Polity 2 score, which measures how democratic a country is, ranging from -10—complete autocracy—to 10—complete democracy), population (smaller population would make for an easier demilitarization process), the last conflict the country had (i.e. are they prone to violence, necessitating armed forces?) with the magnitude measured by ACTTOTAL (which ranges from 0 to 6), and the bordering countries (and their tendency towards conflict).

First, the focus will be on a few candidates in the Caribbean (mainly larger islands because more data is available for them). The islands of the Caribbean present a conducive environment towards surviving without an army because, in most cases, they have no neighboring countries and a small population. Many of the islands could benefit from only having a civil guard instead of a complete standing army. Here are a few examples of candidates:

(Note: All values are from the year 2015 and in terms of constant 2010 US $ unless otherwise specified).

**Island Nations**

**Dominican Republic**

Population: ~11,000,000  
GDP Per Cap (2010 US$): ~6,500  
Mil/GDP: 0.66%  
Total Military Spending (Constant 2010 US$): ~450,000,000  
Polity 2: 8  
Last Conflict: 1965 (Civil- magnitude of 2)
Bordering Countries: Haiti

Mentioned before was that most Caribbean countries could make good candidates because they have no bordering nations. However, one notable exception is the Dominican Republic as it shares a border with Haiti. This shared border poses little security threat to the DR, though, as Haiti is already demilitarized. Thus, except for the unlikely event in which another country launches a naval attack on the Dominican Republic, there is no threat of invasion. Additionally, with over 50 years since significant civil violence has occurred in the country and a fairly stable democratic government, there is not a large internal threat either.

As Costa Rica and Panama did, the Dominican Republic would have to convert some of their army into a civil guard or amplify the police force. Nevertheless, the annual savings of demilitarization could save the country hundreds of millions of dollars—money that could be quite beneficial to an economy whose GDP Per Capita could use improving. As we found in the regressions, using the savings in military budget to increase spending on investment or education are two effective ways to help growth. In any case, with relative stability, no threats of invasion, and an economy that has room for growth, the Dominican Republic has little to lose by attempting to demilitarize.

**Jamaica**

Population: ~2,700,000
GDP Per Cap (2010 US$): ~5,000
Mil/GDP: 0.844%
Total Military Spending (Constant 2010 US$): ~115,000,000
Polity 2: 9
Last Conflict: 1980 (Civil- magnitude of 1)
Bordering Countries: None
The argument in favor of Jamaica is much the same as that for the Dominican Republic. There is approximately zero chance of an outside invasion and it has not seen internal violence since the 1980 elections. With stable democracy and little strife in the nearly 40-years since, the country does not seem prone to more civil violence. In any case, a civil guard, as is customary to install after demilitarizing, should be sufficient to handle any internal threats of violence.

A few aspects make Jamaica a particularly interesting candidate for demilitarization. First, it is much smaller than the Dominican Republic, yet spends a higher fraction of its GDP on its military. Though the gross budgetary savings from cutting out military spending would be less than in the Dominican Republic, the proportionate savings would be higher, possibly resulting in a greater impact. And, with a GDP Per Capita of only around $5,000, Jamaica could use the economic help, particularly for its poorest citizens.

**Trinidad and Tobago**

- Population: ~1,400,000
- GDP Per Cap (2010 US$): ~16,200
- Mil/GDP: 0.915%
- Total Military Spending (Constant 2010 US$): ~200,000,000
- Polity 2: 10
- Last Conflict: None registered
- Bordering Countries: None

Trinidad and Tobago has one of the highest GDP Per Capita levels in Latin America. Additionally, its perfect Polity 2 score indicates a country with the utmost democracy and stability.
However, a recent “New York Times” article sheds more light on the Caribbean nation and provides a compelling argument against demilitarization. The February article, entitled, “Trying to Stanch Trinidad’s Flow of Young Recruits to ISIS” details how the small island is one of the most prominent sources of recruits for ISIS and ISIL. In fact, Trinidad and Tobago, per capita, has the most fighters in the Islamic state of the Western Hemisphere (Robles 2017). These numbers are startling and have certainly caught the attention of the United States, given the fairly close proximity.

With this in mind, for the time being, it might be best for Trinidad and Tobago to maintain their own army, for protection against potential extremist attacks and so they do not have to rely on United States intervention if the problem becomes worse. Thus, Trinidad and Tobago represents a good example of a country that, on paper, seems to be a good candidate for demilitarization, but due to other factors should remain militarized for the foreseeable future.

Non-Island Nations

As for the other island nations, it is hard to say without full data, but most of them have populations of less than one million people. Likely, this means that their military presence is small. Yet, anything more than a civil guard for these countries without threat of invasion would seem to be superfluous.

The many non-island nations present a more difficult selection process with having to take into account concerns of border disputes or conflicts in neighboring countries. However, besides this notable difference, the same criteria will be used to evaluate their candidacy for demilitarization.

Bolivia
Population: ~11,000,000
GDP Per Cap (2010 US$): ~2,400
Mil/GDP: 1.61%
Total Military Spending (Constant 2010 US$): ~410,000,000
Polity 2: 7
Last Conflict: 1952 (Civil- magnitude of 2)
Bordering Countries: Brazil, Paraguay, Chile, Argentina, Peru

Sharing a border with five different countries, Bolivia’s situation is markedly different from the situations of the islands just analyzed. However, another great difference is that Bolivia spends much more on military and is significantly poorer per capita than the island nations mentioned above. Thus, the economic payout from reducing their over $400 million of military spending could be quite significant for the landlocked country.

Though being landlocked does present more reason for trepidation over demilitarization, it is important to remember that Costa Rica demilitarized and survived during a period of time in which violent conflicts ravaged nearly all neighboring countries. In other words, it is possible to remain peaceful and avoid conflict without a military, even when landlocked. It is also important to remember that Latin America has matured a fair amount since the 20th century. Wars and military dictatorships, for the most part, no longer dominate the region. Additionally, Bolivia surviving the past 65 years without a conflict represents a rarity in the region.

One important last note about Bolivia’s candidacy for demilitarization is that they currently have a case with the World Court over a border dispute with Chile (Kozak 2015). Assuming this matter does get resolved diplomatically, it will be an end to the dispute and the threat of Chile breaking a World Court ruling and invading any disputed territory would likely be small.
Honduras

Population: ~8,100,000
GDP Per Cap (2010 US$): ~2,300
Mil/GDP: 1.57%
Total Military Spending (Constant 201 US$): ~300,000,000
Polity 2: 7
Last Conflict: 1970-1990 (Civil- magnitudes of 1 and 2 each year)
Bordering Countries: El Salvador, Nicaragua, Guatemala

In the regressions of Chapter 2, the evidence suggested that the effect of military spending on growth of Central American countries to be the most significant and most negative. Thus, it stands to reason that Honduras, a Central American country with relatively high military spending, could benefit from demilitarization. Unlike Bolivia, which is surrounded by large nations such as Brazil and Argentina, Honduras’ neighbors El Salvador, Guatemala, and Nicaragua. These countries might not be as formidable, but they do suffer from higher rates of violence and greater political instability, which could potentially be more threatening.

It is important to note that Honduras did have a bloodless military coup recently, in 2009. Military coups ended in demilitarization for Costa Rica and Panama. Although now eight years removed from the coup, it could provide solid justification for Honduras to at least reduce the size of their military.

Then again, in 2013, Honduras had the highest homicide rate in the world due to the power of gangs in the country (Nazario 2016). The question becomes: what is the best way to cut down on such high violence? Certainly there is no definitive answer and opinions differ in theory and practice. However, there is evidence in Honduras that more pacifistic methods of reducing crime are working. In the 2016 *New York Times* article “How the Most Dangerous Place on Earth Got Safer”, Sonia
Nazario details United States’ funded programs that have aided in a 62% reduction in homicides (Nazario 2016). Programs include: neighborhood outreach centers which provide mentoring and vocational trading, construction of soccer fields, installation of streetlights, counseling of youth most at risk to join a gang, and supporting the non-profit “Association for a More Just Society” (A.J.S.) (Nazario 2016).

Though hard to prove direct causality between these programs and the dropping crime rates, it seems that they have been far more effective than the Honduran police force that lost their U.S. funding due to “gross human rights violations” (Nazario 2016). In fact, there is such distrust in the Honduran police that most crimes go unreported for fear of inaction, or worse, the police turning those who report crimes over to the gangs (Nazario 2016).

In all, Honduras is an extremely complicated situation as it relates to demilitarization. The fear of having no real counterforce to the powerful gangs in the country is justified and seems to favor continued funding of the military. On the other hand, the armed forces working “against” the gangs often are not working against them or are prone to just as much violation of human rights. With this in mind, perhaps pacifist methods, similar to the programs already implemented through U.S. aid, may be more efficient in promoting peace in the country than spending on the armed forces.

Paraguay

Population: ~6,600,000
GDP Per Cap (2010 US$): ~3,800
Mil/GDP: 1.672%
Total Military Spending (Constant 2010 US$): ~425,000,000
Polity 2: 9
Paraguay is another example of a country that, on the surface, seems to be a great candidate for demilitarization with a strong democracy, seventy years since a major conflict, and an economy that could use some growth in terms of GDP Per Capita. However, the insurgent communist guerilla army in the north of Paraguay known as the Ejército del Pueblo Paraguayo—(in English: Paraguayan People’s Army) or EPP for short—provides solid reasoning against demilitarization.

In a 2015 article, Laurence Blair writes that the EPP has killed over 50 people since its official founding in 2008 (Blair 2015). Though the guerilla group is small (with the article estimating only seven remaining fighters) and only operates in a remote region, the military has still been unable to completely eradicate the threat. Some argue that the task force set up to take out the EPP—the FTC or Combined Task Force—want to “hold back from eliminating the group, and continue to line their pockets with public money” as the EPP is seen as a “convenient, controllable enemy” (Blair 2015). Whether this notion is true or not, the fact that the military—which receives around $425 million of public funding annually—does not fully eliminate these threats of kidnaping and murder shows that all of the military funding might be inefficient, especially if the FTC continues to allow the EPP to operate so that their funding continues.

In this case, Paraguay has two options, increase military spending to finally take out the seven or so remaining guerilla fighters or abolish the army in favor of a civil guard which would have public funding even with a fully eradicated EPP. The second option provides more of an incentive to eliminate the threat. Additionally, the
hundreds of millions of dollars could help aid economic development in the country as well.

Though it is a complicated situation in Paraguay, the EPP is far too small to threaten the country as a whole and certainly not too large for a civil guard to handle—perhaps in a more efficient way than the military and the FTC. With this in mind, Paraguay’s relatively large percentage of military spending for the region could certainly be reduced, leaving more money for investment or education.

**Uruguay**

Population: ~3,400,000  
GDP Per Cap (2010 US$): ~13,900  
Mil/GDP: 1.801%  
Total Military Spending (Constant 2010 US$): ~860,000,000  
Polity 2: 10  
Last Conflict: None registered  
Bordering Countries: Brazil, Argentina  

With nearly double the military spending of any other Latin American country previously analyzed, Uruguay could save nearly one billion dollars in funding to go towards more efficient development efforts such as education. Moreover, with the second highest 2015 GDP Per Capita level among Latin American countries with populations over 1 million (behind Chile), it is probable that the Uruguayan economy utilizes funds efficiently and an increase in investment or education of a large magnitude could only help development. Finally, with a stable democracy and no recent conflicts, there is hardly any threat of internal coups or external invasions to threaten an army-less Uruguay.

**Venezuela**

Population: ~31,100,000
GDP Per Cap (2010 US$): ~12,800
2013 Mil/GDP: 1.43%
2013 Total Military Spending (Constant 2010 US$): ~6,300,000,000
Polity 2: 4
Last Conflict: None registered
Bordering Countries: Colombia, Brazil, Guyana

Venezuela is a country in economic and political turmoil. Recently, any mention of Venezuela in the news has been coupled with images of long lines of people waiting for food, tours of hospitals virtually without medical supplies, or interviews with citizens who have lost hope. While the causes of such a devastating crisis are multiple, the once oil-rich nation has suffered greatly from lowered oil prices. According to Index Mundi’s 2016 economic profile of Venezuela, oil revenues make up nearly all export earnings and account for around half of the government revenue (Venezuela Economy Profile 2016). In other words, Venezuela never diversified their economy away from oil as Costa Rica did with coffee half a century ago. Reliance on one commodity works if that commodity stays constant or increases in value, but once it starts to fall, the ripple effects on an economy can be devastating as they have been in Venezuela.

There are other factors at play in this situation, too, most of which are beyond the scope of this paper. Yet, seeing as how militarization is the central focus, an examination of Venezuela’s recent military history could provide another important distinction between the crisis-ridden country and Costa Rica. In a 2014 interview, former Costa Rican president Oscar Arias bluntly stated: “one of the things that most offends me in Latin America is the buying of weapons. Venezuela buys weapons when there is no need, and their country is in an economic crisis that’s the worst in Latin America” (Dyer 2014). A 2015 Business Insider article backs up Arias’ claims,
stating that between 2010 and 2014, Venezuela “imported $349 million worth of arms from China and $1.96 billion worth of arms from Russia” including $1 billion of Russian arms imported in 2013 alone (Bender 2015).

Without the benefit of proper evidence, such spending would seem to have the most negative impact on the economy. Intuitively, paying military personnel can help the economy by part of that income circulating through the economy. The purchase of arms, on the other hand, has no circulatory effect. Put more simply, over $2 billion in soldiers’ income would at least help those soldiers afford scarce food and supplies. However, $2 billion spent on tanks, fighter jets, and advanced weaponry helps no one. If anything, it makes it easier for the government to control rioting over the lack of basic necessities. With this in mind, one can see how this type of spending “offends” Arias.

Unsurprisingly, this model of heavy militarization has been unfit for the crisis. In 2015, the Stockholm International Peace Research Institute reported that Venezuela had to cut military spending by 34% (SIPRI 2015). Such a large cut was borne out of necessity, but it is an important step nonetheless. It is unclear what effect future cuts or even a demilitarization effort would have on the country. With the unstable government, violent crime, and general unrest, it may not be wise to cut military spending further. What is clear, however, is that Venezuela could have certainly benefitted from following the Costa Rican model over the past couple decades. Less of a reliance on one commodity and more money being dedicated towards the citizens rather than Russian arms could have only helped soften the blow of what has turned into a complete crisis with little end in sight. Furthermore, the army, as has been the case in other examples, is instrumental in the carnage under the Maduro government.
as they have worked against the democratic process and even pledged “unconditional loyalty to the president” (Sanchez 2017).

Conclusion

These eight countries hardly scratch the surface in terms of worldwide candidates for demilitarization. Though the scope of this paper was limited to Latin
America, it is likely that all around the world there are countries that could benefit from reducing or eliminating their standing army in favor of spending on goals such as education. Despite concerns of the practicality of lacking a standing army, Costa Rica has proven over the past nearly seventy-years that a country can survive and thrive without the presence of armed forces. Panama, too, has followed Costa Rica’s example to similar success.

Seventy-years ago a country without an army seemed to be a recipe for disaster, an example only another foolish country would follow. Today, that bold country is ranked as the happiest country in the world (Happy Planet Index). And, now, there is proof that their ground-breaking idea has, in fact, worked for two countries. Likely, this will not be enough for all countries, or even just the eight candidates discussed above, to replace their soldiers with teachers as Costa Rica sought to do. However, gradually, over time, the benefits of countries around the world reducing their military spending in favor of efforts more fulfilling to their citizens could result in a world filled with countries similar to Costa Rica—happier countries with stronger economies, higher literacy rates, less people going hungry, and less violence. A more peaceful world for all people. A better world for all people.

Works Cited


