DR-CAFTA: Implications and Impact Thus Far

Abstract

The signing of the Central American Free Trade Agreement (CAFTA) and its subsequent implementation in 2006 by El Salvador, Guatemala, Honduras, Nicaragua, and the United States, with Costa Rica and the Dominican Republic entering the agreement in 2009, renaming it the Dominican Republic-Central American Free Trade Agreement (DR-CAFTA), continued trade liberalization trends in Latin America. Economists, scholars, and politicians alike view NAFTA and DR-CAFTA as a movement towards an even more ambitious Free Trade Agreement of the Americas (FTAA) and economic integration of the region from Canada to the southern cone. The present study does not discuss NAFTA or FTAA in detail, but rather elucidates the impact DR-CAFTA has had on member nations since their respective entrance. The study does so by first examining historical, economic, and political context and forces in Latin America. Second, DR-CAFTA its stipulations and arguments for and against the agreement are discussed. Next, regression analyses shed light on the impact of DR-CAFTA on trade and GDP growth in participating countries. Finally, future consequences of DR-CAFTA are elaborated.

Historical Context

Import substitution industrialization (ISI) policies from the mid-20th century in most Latin American countries were designed to help stimulate economic growth and decrease dependency on other countries. High tariffs were placed on imports to promote domestic industrial growth. As domestic production grows, capital is reinvested in infrastructure and the modernization and streamlining production processes to help promote other industrial endeavors and become competitive on a a global scale by achieving comparative advantages in

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industries these countries would otherwise not have had. However, ISI policies in Latin America experienced little, if any, success during their implementation due to economic and political volatility as well as natural disasters.

Despite apparent increases in productivity, the lack of reinvestment of new capital due to political forces beyond their control hindered the economic advancement of many Latin American countries. Over half of the Central America's seven countries were plagued by violent civil war and regime overthrow, including El Salvador, Guatemala, Nicaragua, and Honduras. Popular movements, revolutions, and civil wars, some lasting decades, resulted in relative regional insecurity and did not bode well regional economic stability. Mass migrations to the United States were commonplace while domestic and foreign investors alike were hesitant to invest.

Additionally, geographical elements going beyond the scope of economics and politics dampened the effects of ISI and other economic stimulation policies shortly after. The area is beleaguered by constant natural disasters, including frequent earthquakes, volcanic activity, flooding, and hurricanes. As a result, capital investments in infrastructure and modernization are often times relegated useless. Such is the case of Nicaragua. The earthquake of 1972 devastated its capital city, Managua, destroying buildings and factories, claiming many lives, causing thousands of dollars in damage, and served as a catalyst for the violent overthrow of the Somoza regime that has since stressed bilateral relations with the United States. And, in 1998 and 2007, the region was hit with Hurricane Mitch and Felix respectively, the effects of which are still felt today.

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In the late 1980s most Latin American nations repealed protectionist ISI policies, liberalizing trade in large response to lack of economic growth and to the General Agreement on Tariffs and Trade – GATT. The residual effects were an average of 20% reduction of tariffs and the entrance of many nations into numerous free trade agreements (FTA), including MERCOSUR (1991), NAFTA (1994), The United States Chilean Free Trade Agreement (2004), and DR-CAFTA (2006) (Morley 13). Latin America quickly became the global model of FTAs to promote economic growth through trade and become global competitors.

DR-CAFTA: Support, Opposition, and its Impact

The implementation of DR-CAFTA was a triumph for all member nations. Increased regional trade was seen as a way to help developing economies of Central America morph into developed economies by increasing GDP through trade, while still reaping benefits of industrial specialization. Although ratification of the FTA was seen as a triumph, it did not come without staunch opposition to many of its mandated stipulations with some countries even opting to ignore them altogether.

The primary goal of DR-CAFTA was to stimulate trade and thus increase GDP of each member nation by increasing market access to producers, thereby increasing market-based competition through a reduction of tariffs across the board. The agreement affirms that "…lowering barriers to US exports and guaranteeing market access may generate long-term trade and investment opportunities which in turn could lead to higher growth in productivity and output, with both producer and consumer benefits" (Cass-Zamora 1). Increased productivity and market access increases productivity for producers and leads to decreased prices for consumers.

The United States has served as a proponent of FTAs in Latin America. "FTAs with Latin America also support U.S. foreign policy, which has historically viewed much of the region as a strategic 'backyard.' Supporting social stability through trade-led growth and development has been one long-term goal of FTAs, and thereby more broadly supportive of U.S. regional security" (Hornbeck 1). Most supporters of FTAs spanning the north-south divide have long supported the notion that increased bilateral and multilateral trade agreements lead to more trade and subsequently substantial increases GDP. As a result, developing economies stand to gain by entering into FTAs.

Agricultural Subsidies

The United States thus far has not signed DR-CAFTA into law; meaning, Congress has not passed legislation affirming it as U.S. law, but rather view it as an international treaty that is treated more like a contract or binding agreement. Due to the lack of legislation, the United States has yet to eliminate all agricultural subsidies, still spending roughly $20 billion in agricultural subsidies to commercial, rural, and intermediate farms (Farm Income and Costs 1), averaging around $18,000 per farmer annually. The U.S. fears that a repeal of such subsidies obstructs U.S. agricultural products' ability to compete with foreign imports. "… [I]t's become clear to everyone that trade happens to be freest in those sectors where the developed countries have crushing comparative advantages. That's why there is a lot of freedom of movement of capital, but hardly any for labor. That's why there is no free trade when it comes to agriculture, which is why the Doha Round has stalled" (Casas-Zamora 2).

Accordingly, the lack of U.S. compliance with the elimination of agricultural subsidies poses a threat not only to future successes of DR-CAFTA, but to the ratification of the FTAA down the road. Moreover, the ability of emerging economies in Central America and, more generally, in Latin America, to compete with agricultural commodity subsidies is minimal. U.S. subsidization of agriculture must be eliminated to allow for *true* and unrestricted market-based competition. Subsidies to United States agricultural industry put a damper on foreign competition, thus relegating Central American economies to produce in industries where no comparative advantage exists, leading to suboptimal economic outcomes and further delaying hope for economic prosperity of developing nations. National opulence and emergence as competitive economies within the region hinges on the U.S.' willingness to reduce and/or eliminate agricultural subsidies.

Labor Intensive Trap

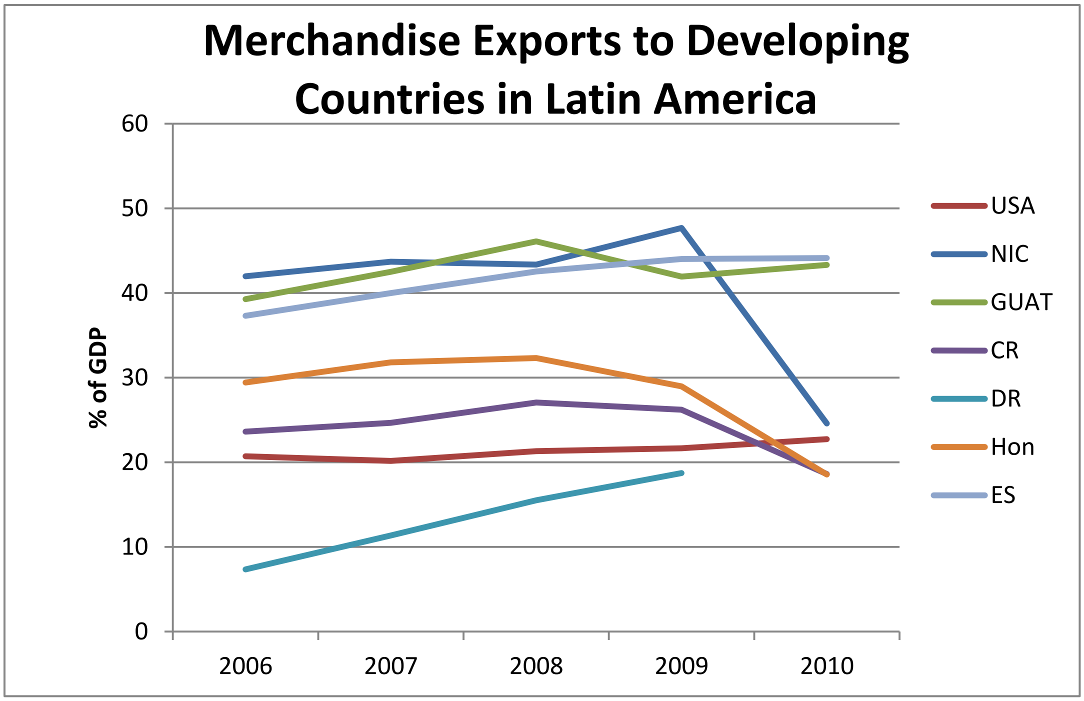
A reduction in tariffs is viewed by many in opposition of the agreement as a hindrance and exploitative measure. Trade capacity in Central America is not at optimal levels and cannot always compete in U.S. markets due in large part to a lack of modernization and streamlined operations, infrastructure investment, technological enhancement, and development of common industry standards. Consequently, developing economies in Central America will fall victim to a labor-intensive trap. Although capital mobility and new reinvestment opportunities are sure to emerge, labor mobility, or lack thereof, hinders economic development and could even increase aggregate unemployment. Laborers who work in agriculture may not be suited for factory work and vice versa.

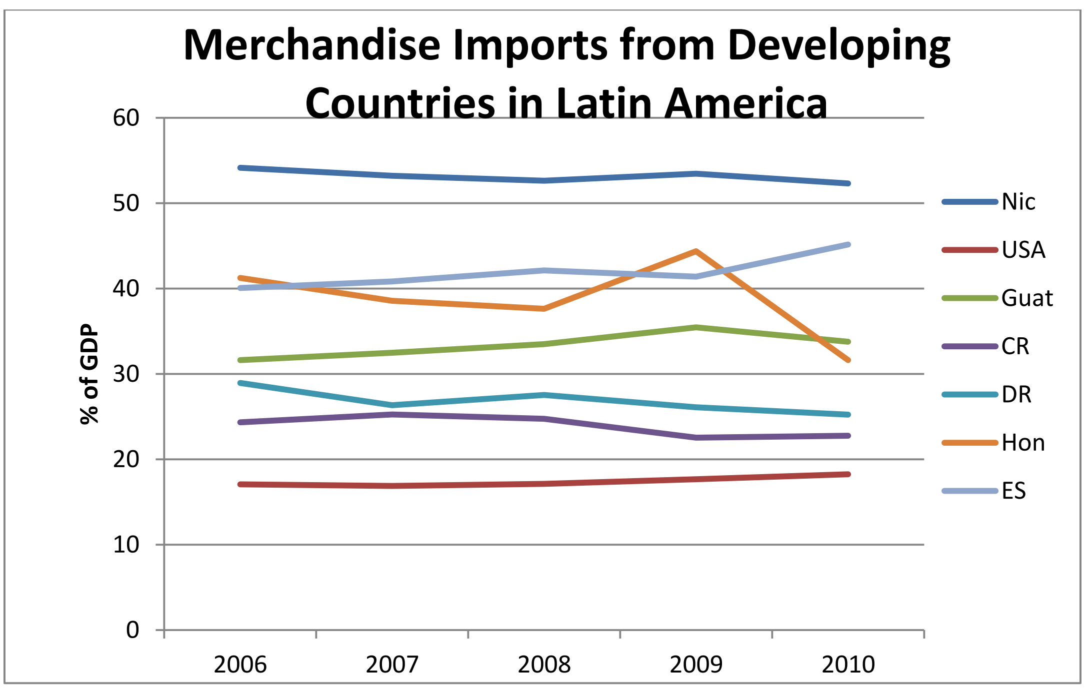
Despite critics' claims that Central American economies will fall into the labor-intensive trap, DR-CAFTA allows time for such economies to adjust by phasing out tariffs over a 5 to 10 year period. The agreement "…immediately eliminates all tariffs on 80% of manufactured goods, with the remainder phased out over a few years" (DR-CAFTA 1), resulting in ample time for economies to adjust and train workers in industries new to them. Though this adjustment does not come without a high learning curve, DR-CAFTA allots sufficient time for Central American economies to increase industrial specialization through labor mobility; however, in order to accomplish this feet, Central American countries must pledge to invest capital in infrastructure and implement efficient educational and training programs for its workforce.

Economic and Political Stability

Supporters of DR-CAFTA cite greater economic and political stability in the region as one of the driving factors for the agreement's ratification. Economic stability is increased with increased trade, GDP, and industrial specialization, allowing countries to specialize in what they produce best. Such stability is exemplified through increased intraregional trade. Merchandise exports to developing countries in Latin America rose since 2006 in all member nations while merchandise imports from developing countries in Latin America remained steady. Despite recent dips in the global economy, reflected from 2008 and forward, there is an evident trend of increased trade activity between member nations in Central America. This relationship can be seen in Figure 1.

Figure 1





*Data from World Bank, World Development Indicators

Residual political volatility as a result of a turbulent past still plagues the region. In 2009, then Honduran President Manuel Zelaya was ousted from office in a military coup attempt after he aligned himself with leftist Venezuelan President Hugo Chavez by trying to promote unlimited presidential terms. Honduras' neighbor to the south, Nicaragua, has yet to experience a relatively stable political atmosphere since 2007 when President Daniel Ortega was reelected. Ortega's Sandinista Party, the FSLN, passed legislation shortly after the 2007 election to allow Ortega to take power with roughly 30% of the vote. And, in the 2008 municipal elections, the Sandinistas claimed 99% of Nicaraguan municipalities victorious only after international observers were kicked out of the country leading to massive voter fraud and non-democratic polling practices. Shortly after, the United States froze nearly one-third of funds dedicated to the Millennium Challenge and improved infrastructural renovations in the nation and massive opposition demonstrations were met with Sandinista resistance in the streets.

Political uncertainty in the region and the lack of necessary infrastructure and standardized operating offices to keep track of economic activity, excluding the U.S., negates supporters' arguments that DR-CAFTA will provide more transparency. As economies increase overall stability, nations can adopt new governing bodies and policies to appropriately account for all activity; however, at the present time, developing economies struggle to do just that. In fact, of the five Central American countries in the agreement, four of those countries, Nicaragua, Honduras, Guatemala, and El Salvador, are four of the poorest nations in the Western Hemisphere (World Bank); and, despite extensive research, data on unemployment, among other economic indicators, is obsolete for these nations. Until the time comes that more capital investments in public and private infrastructure occurs, transparency will be at best minimal.

Human Rights / Unemployment

Opposition of FTAs worldwide often cites human rights atrocities and rising unemployment in sectors in which their respective nations do not have comparative advantages. Although human rights atrocities do occur, they occur worldwide. Employment in a factory where working conditions are not optimal is employment that laborers would not otherwise have. Thus, opportunity costs of such employment, notwithstanding subpar working conditions, are being unemployed and having no disposable income, a far graver situation than working in harsh conditions. Human rights are guaranteed to be protected under DR-CAFTA; however, similar to transparency, until such time that necessary infrastructure, governing and supervisory bodies can be put in place and/or allowed access to monitor their protection in poorer nations, they cannot be fully protected with one hundred percent certainty. And, even when such protection measures are fulfilled, human rights atrocities will still be present though limited.

Furthermore, the opposition claims that unemployment will rise in national industry where that particular country does not have comparative advantage. This is the old adage that FTAs take U.S. jobs away, relocating them south of the border. The hardest hit industries include those where unskilled labor forces can be used in the production processes. However, it is important to point out that given the right infrastructure and training programs, once again, rises in unemployment can be kept at bay due to increased labor mobility across industries.

Infrastructure

Previously discussed ISI policies and FTAs were executed to promote domestic industry so that nations would be more competitive on a global scale. In turn, increased capital inflows would lead to more capital investments on necessary infrastructure in other industries so as to increase trade and therefore GDP and national wealth. However, present economic conditions in Central America do not allow for the improvement upon and/or creation of infrastructure necessary to be competitive. Moreover, due in large part to U.S. agricultural subsidies, Central American economies cannot be competitive in industry where they have compelling comparative advantages. Until Central American economies can be competitive in the exportation of agricultural commodities, capital inflows will remain stagnant and new infrastructural investments will be limited.

Other Free Trade Agreements / Cultural Identity

Although NAFTA and DR-CAFTA are two of the more ambitious FTAs in Latin America, many other FTAs exist. Their existence causes overlapping and sometimes contradictory policies that are too complex to be able to fully grasp. As such, a compelling argument for the FTAA can be made, despite staunch opposition from Venezuela, Bolivia, and Nicaragua. Presidents Hugo Chavez (Venezuela), Evo Morales (Bolivia), and Daniel Ortega (Nicaragua) who have all been quite outspoken, and all of whom have been seen in public stating that the agreement is nothing more than a ploy to annex the region and is a tool of imperialism to subjugate Latin Americans to the imperialist takeover.

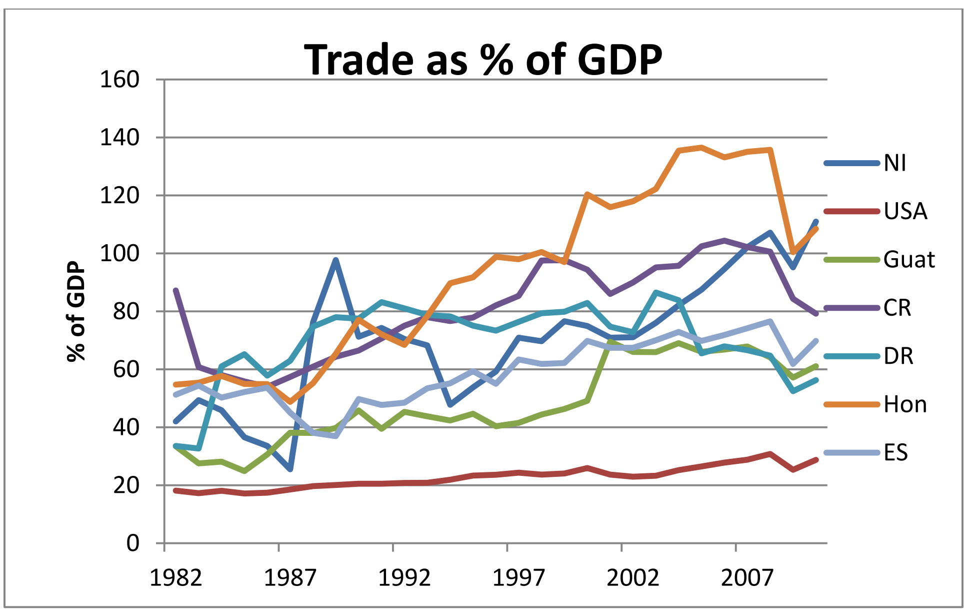
While opposition to the FTAA cites the imperialist takeover of Latin America as its root cause, they also argue that their respective culture heritages will be lost in the fray. Traditions of days gone by will be lost forever and Latin American culture will transform into one similar to that of the United States. Despite their arguments, reality directly disputes these claims. Younger generations have grown up watching television, mostly based out of Hollywood, and have seen not only U.S. cultural icons, but European cultural icons. They mimic what they see on T.V. and have little interest in carrying on traditions of from past generations, but would rather forge on, creating their own traditions, albeit similar to those in the U.S. The loss of cultural identity is surely not the result of endorsement of the FTAA, but rather a more complex symptom of the generational gap.

Analyses

"The classical paradigm of international trade argues that trade promotes growth by increasing the relative price of the good that is intensive in the relatively abundant factor" (Lopez et. al. 85). Trade thus encourages growth by increasing opportunity costs of production and promoting industrial specialization. Accordingly, as trade increases, so too will GDP. A reallocation of resources will ensue from smaller firms and less productive firms to larger and more productive ones that will have substantial impacts on GDP. "[R]egardless of whether exports cause firm-level productivity gains, the fact that exporters are more productive and larger (perhaps exclusively because of self-selection) suggests that, as countries increase their export orientation, larger and more productive firms will produce a larger share of national output. This reallocation of resources from less productive and smaller firms to more productive and larger firms in itself is a source of aggregate gross domestic product (GDP)" (Lopez et. al. 85).

Recent trends to liberalize trade in Latin America have proved marginally successful at best; however, their successes cannot solely be attributed to multilateral and regional trade. Global economic factors have influenced markets and since 2007 nearly every nation has experienced downward trends in productivity and GDP. As a result, analyses conducted on the impact of DR-CAFTA on member nations since their inception reflect the idea. And, although the analyses indicate that trade is on the rise within each of these nations and has been so since 1982 (Figure 2), we cannot conclude definitively that increased trade results in statistically significant increases in annual GDP growth over the 6-year period.

Figure 2



Four fixed effects regression models test the effect of DR-CAFTA on trade (% of GDP), GDP growth (annual %), and merchandise exports and imports to developing countries in Latin America (% of GDP). Such analyses help shed more light on perceived increases to regional economic integration and growth as a direct result of DR-CAFTA's implementation in 2006 and 2009 respectively. Panel data was taken from the seven member nations and eight additional countries with similar economies in the region from 1982 – 2010. The models use a dummy variable, X_1, adjusting for the year of entry of each country to DR-CAFTA while the remaining eight countries help serve as a baseline measurement. Urban population growth, X_2, is an exogenous control variable to help calculate the true impact of X_1 by accounting for dual causality of variables. The models tested are represented below:

Figure 3

$$\boldsymbol{Trade = \beta 0 + \beta 1X2 + \beta 3X2}$$

$$\boldsymbol{GDPG = \beta 0 + \beta 1X2 + \beta 3X2}$$

$$\boldsymbol{MEX = \beta 0 + \beta 1X2 + \beta 3X2}$$

$$\boldsymbol{MEIM = \beta 0 + \beta 1X2 + \beta 3X2}$$

Results from running such analyses reflect significant increases, $p<.0001$, in trade volume at the 95% confidence level, e.g. *alpha=.05*, and a significant *t-statistic* of *4.79*. At those levels of significance, there has been a 14.8% average increase in trade as a percent of GDP since each respective country's induction into DR-CAFTA. However, though trade has increased, GDP has not significantly changed at the same confidence level, $p=.4462$ and $t = -0.76$. Additionally, merchandise exports to developing countries in Latin America proved significant with a $p<.0001$ and a *t-statistic* of *4.89,* indicating a 7.03% average increase in merchandise exports to developing countries in Latin America; and, merchandise imports from developing countries in Latin America also proved significant with a $p=.0060$ and a *t-statistic* of *2.76,* indicating a 3.6% average increase in merchandise imports from developing countries in

Latin America. Thus, despite assertions from World Bank economists and scholars, increases in trade volume for DR-CAFTA nations have not led to substantial increases in GDP.

Figure 4

Impact of DR-CAFTA on Member Nations
Fixed Effects Model

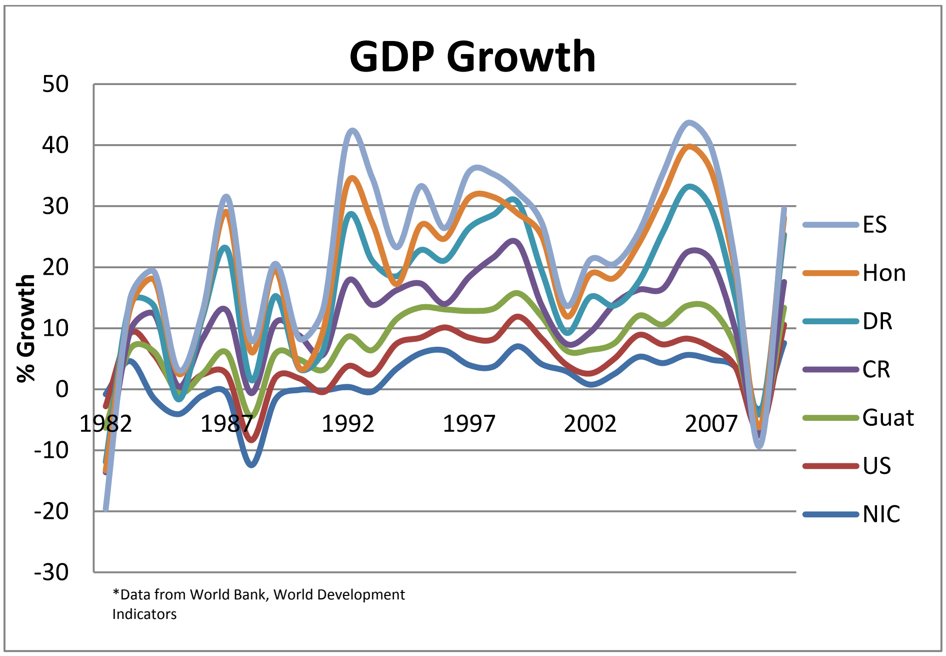
Model	P-value *Enter*	T-Value *Enter*	Parameter Estimate *Enter*
$\boldsymbol{Trade = \beta 0 + \beta 1 * Enter + \beta 3 * Upopg}$	<.0001	4.79	14.80165866
$\boldsymbol{GDPG = \beta 0 + \beta 1 * Enter + \beta 3 * Upopg}$	0.4462	-0.76	-0.643788342
$\boldsymbol{MEX = \beta 0 + \beta 1 * Enter + \beta 3 * Upopg}$	<.0001	4.89	7.037316651
$\boldsymbol{MEIM = \beta 0 + \beta 1 * Enter + \beta 3 * Upopg}$	<.0060	2.76	3.625370817

Variables:
GDPG - % growth of GDP
Enter – dummy variable accounting for year of entry into DR-CAFTA
Upopg – constant variable, % urban population growth
Trade – trade as % of GDP
MEX – Merchandise Exports to Developing Countries in Latin America, %GDP
MIM – Merchandise Imports to Developing Countries in Latin America, %GDP

Although the tested model controlling for year of entry into DR-CAFTA proved to be significant for trade volume and merchandise exports and imports to and from developing countries in Latin America, it proved insignificant for GDP growth. However, other external factors not related to DR-CAFTA may have influenced annual GDP growth during the time period tested. More specifically, 2007 marked the beginning of a global economic crisis.

Governments rushed to bailout banks and other financial institutions and U.S. introduced a stimulus compensatory measure to help improve consumer faith in the market. By looking at global GDP trends during the time period it is evident that trends are similar across the board.

Figure 5



GDP growth in each member country follows the same path. There appear to be increases from 1982 – 1987, general decreases after 1987 until 1992, slight increases from 1992 – 2000, drastic decreases from 2000 – 2002, drastic increases from 2002 – 2007, and unparalleled decreases after 2007. General trends of each country are similar and thus indicative that increases in GDP growth in DR-CAFTA countries after its implementation are subjected to external global economic forces that go well beyond the scope of multilateral trade in the region.

Gains from trade in terms of GDP thus rely on external factors such as global economic conditions, but more importantly on internal infrastructure. Lopez suggests, "…the impact of trade openness on growth depends on country-specific conditions in structural areas such as education, financial development, institutional quality, infrastructure, financial openness, innovation, and regulations" (117). Thus, despite apparent trade openness in relative terms of DR-CAFTA, developing economies in Central America seem to be caught in a catch-22 scenario. Increased trade should lead to substantial gains in terms of annual GDP growth; however, growth cannot happen until the symptoms of developing economies are first dealt with appropriately. Until the necessary infrastructure, education, and training programs are put in place, labor mobility will remain problematic and minimal GDP growth as a result of increased trade will be experienced.

<u>Conclusions</u>

The 2006 and 2009 implementation of DR-CAFTA in Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, the United States has proved dividends for the entire region. Economic stability and integration has been promoted through increased intraregional trade and aggregate trade with world partners. Although DR-CAFTA countries are striving towards such stability, the advancement of the Central American economies into fully developed ones has been hindered by the lack of reinvestment of capital to promote infrastructural reform in the way of educational and training programs to increase labor mobility, the lack of a full repeal of U.S. agricultural subsidies, as well as regional political stability. While evidence indicates substantial increases aggregate trade as a percent of GDP, such gains have not lead to overwhelming increases in GDP itself. Such a lack of substantial gains in GDP can be attributed a number of factors related to the global market, most notably the three recessions experienced from 1982 – 2010. Figure 5 indicates similar trends in GDP growth for all seven countries.

The analyses conducted have shed more light on the aggregate impact of DR-CAFTA in member nations over a six year span. Though it such analyses provide more insight into the successes and failures of DR-CAFTA thus far, it will be interesting to see what the future holds for the region, one that is highly susceptible to global trends.

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