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# Conditional Cash Transfers and Their Effect on Poverty, Inequality, and School Enrollment: The Case of Mexico and Latin America

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Claremont McKenna College

**Conditional Cash Transfers and Their Effect on Poverty, Inequality, and  
School Enrollment:  
The Case of Mexico and Latin America**

Submitted to  
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and  
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by  
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for  
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## **Abstract**

Over the past two decades, conditional cash transfer (CCT) has become one of the most widespread approaches to social development in Latin America. Spurred in large part by the evident and immediate success of Mexico's CCT initiative, a multitude of countries began to invest heavily in this strategy hoping to reduce poverty and inequality in the short and long run. This paper examines the relationship between CCT program breadth and poverty, inequality, and secondary school enrollment over a thirteen year span in order to determine whether or not programs with the largest coverage were the most efficient. This question is of grave importance being that as many as eighteen countries are betting on CCT as a means in sustainably breaking poverty cycles. This thesis finds that conditional cash transfer has been exceptionally successful in diminishing extreme poverty in Latin America. Furthermore, although result are inconclusive in terms of moderate poverty, secondary school enrollment, and inequality a trend analysis of fluctuations in poverty and inequality from 1997 to 2010 shows promising results as all development indicators appear to be in decline.

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## **Introduction**

It is the belief of most that all individuals should be afforded a minimal level of well-being and social support. It follows that the both national governments and NGOs have made efforts to help individuals attain access to basic necessities such as water, housing, and education. In a majority of cases, this aid or welfare consists of granting needy individuals handouts, subsidies, and vouchers for them to have enough to live. However, many of these programs are flawed in that aid recipients can become dependent on these stipends. Additionally, although traditional forms of welfare help families reach a somewhat acceptable living standard, handouts often do little to help families rise above poverty permanently. Thus, conditional cash transfer (CCT) programs offered a newfangled approach to the age old problem of poverty and inequality. Instead of distributing endowments to the neediest, CCT allowances are conditional on the receivers' actions. Namely, households are only rewarded if they fulfill a series of government enforced obligations. Although these differ among countries they often include: attending regular health checkups and enforcing school attendance by minors. By partaking in these forward-looking activities, families forcibly invest in escaping poverty permanently.

CCT theory rests on the assumption that building human capital is the only way for individuals to break poverty cycles. Families need to spend a portion of their profits in sustainable investments such as schooling and securities in order to develop their skills and grow their patrimony. However, low-income families are seldom able to retain enough disposable income to do so because the vast majority of their money is tied up in day-to-day expenses. These cash transfers, allow beneficiaries to better manage their

money. For example, cash grants enable households to forego their children's incomes until they complete their schooling. Thereafter, conditional cash transfer aims to help both the current and the next generation by granting participants the tools to escape poverty permanently.

Overall, these efforts have had overwhelmingly positive results and have consequently become extremely popular. In 2011, 18 different Latin American countries were using CCT as a tool in their social policy scheme, covering as many as 135 million beneficiaries.<sup>1</sup> This figure is especially surprising when considering the fact that the use of CCT as a means in poverty reduction is relatively new. Mexico, a pioneer in conditional transfer, only began experimenting with this approach in 1997. Mexico's conditional cash transfer program Progresa grew exponentially in the years to come. Having experienced tangible success year to year, this program has remained in place for the last eighteen years and has become the government's main social development initiative. By the end of 2014, over 6.1 million families were enrolled in the program.<sup>2</sup>

Due to the relative recency and experimental nature of conditional cash transfer a multitude of researchers sought to study the effects of these programs early on. This research focuses heftily on Mexico and Brazil as they were the first to implement CCT programs. Consequently, a wide range of studies were developed directly after Progresa was instated. A majority of these early studies, shed light on the program's success in the

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<sup>1</sup> Stampini, Marco, and Leopoldo Tornarolli. "The growth of conditional cash transfers in Latin America and the Caribbean: did they go too far?". No. 49. IZA Policy Paper, 2012.

<sup>2</sup> "Primer Informe De Labores 2012-2013." *SEDESOL*. Gobierno De Mexico, 30 Dec. 2012. Web. 6 Nov. 2015.

short term. In the case of Mexico, CCT has consistently increased food intake<sup>3</sup> as well as primary and secondary school enrollment<sup>4</sup> year to year.

However, much of the early research focuses on Progresa's immediate effect in targeted communities. Thus, questions about the macroeconomic impact of the program and its long term sustainability arise. Being that a majority of Latin American CCT programs have only been in place since 2005, the case of Mexico is better suited to discuss the longer term effects of these programs. Additionally, Mexico's Progresa is one of the largest conditional cash transfer programs in terms of coverage, further enhancing the viability of Mexico in studying CCT. In this case, extreme poverty has fallen drastically in the last few years but moderate poverty has remained constant within the last decade at around 45%. Furthermore, poverty as measured solely by income continues to rise.<sup>5</sup> Consequently, after almost twenty years, conditional cash transfer programs might not be having their desired sustainable effect despite a consistent growth in budget.

In order to further advance research on the long term impacts of conditional cash transfers, this thesis intends to study the impact that Oportunidades (formerly Progresa) as well as a myriad of different CCT initiatives in 17 Latin American Countries have had on nationwide inequality, secondary school enrollment and poverty rates. Although placing considerable emphasis on the Mexican CCT experience, this thesis aims to discern whether or not conditional cash transfer initiatives aided in providing Latin American countries with a sustainable solution in poverty reduction. In order to do so,

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<sup>3</sup> Hoddinott, John, and Emmanuel Skoufias. "The impact of PROGRESA on food consumption." *Economic development and cultural change* 53.1 (2004): 37-61.

<sup>4</sup> Schultz, T. Paul. "School subsidies for the poor: evaluating the Mexican Progresa poverty program." *Journal of development Economics* 74.1 (2004): 199-250.

<sup>5</sup> Wilson, Christopher, and Gerardo Silva. "Mexico's Latest Poverty Stats." *Wilson Center International Institute for Scholars, Mexico Institute* (2013).

this paper includes nationwide data on the percent total of the population that each of the programs benefited from year to year in order to assess the annual growth and coverage of the program. This data is coupled with a trend analysis of the national Gini coefficient from 1997, the program's inception, and 2010. This will be complemented with data on secondary school enrollment and extreme and moderate poverty.

While a large number of countries have employed conditional cash transfer some have invested in it more heavily than others. While some CCT programs reach around 40% of the nation's citizens, others only cover a mere 5% of the population. Consequently, if CCT programs are efficient in remedying poverty permanently, we would expect to see countries with the largest coverage to greatest drops in inequality and poverty and the heftiest increase in school enrollment. In order to capture the overall success of the program the paper includes a sum total of beneficiaries for each country. Furthermore, this paper includes the net change in Gini index, moderate and extreme poverty, and secondary school education from 1997 to 2010. These values are then regressed against each of the dependent variables to come up with four separate regressions.

This paper concludes that counties that place the largest emphasis on conditional cash transfer were able to reduce extreme poverty by the widest margin. However, results were inconclusive in terms of inequality, moderate poverty, and secondary school enrollment. These results point to the fact that CCT programs have been extremely successful in aiding families that lagged behind the most in terms of development. This conclusion is compatible with the programs design being that it was initially conceived as a means to aid a nation's poorest citizens in remote rural regions.

## **Mexico and Conditional Cash Transfer**

### **A History of Poverty and Inequality in Mexico**

Mexico has long been characterized by the immense disparity in wealth among the upper and working class. This distinction is even more sweeping when comparing the rural poor and the wealthy urban class. Mexico City is one of the largest economies of Latin America and the world. With a GDP of over \$411 billion in 2012, it stands as the eight wealthiest city in the world. Additionally, despite only encompassing a mere 0.1% of the country's surface, the Federal District (D.F.) is the largest contributor to the country's GDP by a wide margin. D.F. alone produces around 23.55% of the nation's gross domestic product annually.<sup>6</sup> Contrastingly, due to the limited non-urbanized space, D.F. contributes the least towards Mexico's agriculture. This contrast is characteristic of Mexico proper. While the nation's largest cities are highly westernized hubs of foreign investment, the rural communities are significantly less sophisticated. Out of the 198 million acres of Mexican land, a stunning 145 million are dedicated to agriculture. Even more striking, agriculture only comprises 4% of the national GDP.<sup>7</sup> Thus, Mexicans living in rural areas are often marginalized. For decades, this lump of the population has suffered the worst living conditions. Additionally, the nation's indigenous population has long been one of the most marginalized communities.

The disparity between urban and rural has pervaded the country for years. Poverty and the marginalization of the rural community have defined modern Mexican history.

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<sup>6</sup> "The 10 Traits of Globally Fluent Metro Areas" The Brookings Institute and JP Morgan Chase. Brookings, 2014. Web. 6 Nov. 2015.

<sup>7</sup> De Janvry, Alain, and Elisabeth Sadoulet. "Rural poverty in Latin America: Determinants and exit paths." *Food Policy* 25.4 (2000): 389-409.

While the last hundred years saw the propulsion of Mexico into the western world. The nation's poor, especially those inhabiting secluded rural areas were excluded from this growth and modernization. By the mid-1990s an estimated 24 percent of all households, or in other words around 30 percent of the population lived in extreme poverty. Rural areas housed a large number of the country's poor. Consequently, approximately half of Mexico's rural families lived in poverty. Conversely, only 14% of urban households were poor under the national standard.<sup>8</sup>

### **Previous Efforts in Poverty Reduction**

Before 1997, Mexico's poverty reduction programs focused on improving food consumption, health status and education of the poor. These programs were generally run by a myriad of interconnected bureaucratic agencies. Although large sums of money had been invested in poverty alleviation, a large portion of the allotted budget was lost to both administrative costs and corruption. Moreover, bureaucratic agencies did a notoriously poor job in communicating with each other. Consequently, agencies often duplicated each other's efforts and were inconsistent in identifying needy regions because they used different methodologies in making these determinations. Unfortunately, the government failed to document the progress of many of these efforts and thus their relative success remains unclear. However, it is certain that these organizations were often mismanaged and extremely inefficient.<sup>9</sup>

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<sup>8</sup> Boltvinik, Julio. "Welfare, inequality, and poverty in Mexico, 1970-2000." *Confronting development. Assessing Mexico's economic and social policy challenges* (2003): 385-446.

<sup>9</sup> Levy, Santiago. *Progress against poverty: sustaining Mexico's Progresa-Oportunidades program*. Brookings Institution Press, 2007.

Social welfare programs also lacked consistency. It was common practice for newly elected officials to eliminate their predecessor's welfare programs. It was easy for them to do so since an overwhelming majority of initiatives failed to provide citizens with the ambitious results they promised. And thus, candidates would eliminate these alleged failures and once again set unattainable goals for the novel approaches they proposed. This endless cycle perpetuated the failure of such programs. Government plans were not allowed enough time to develop properly and their focus on short-term goals failed to prioritize the long-term interests of the beneficiaries. Furthermore, Mexican Presidents are limited to a six-year term and thus the at large success of their initiative is somewhat less important. This lack of commitment coupled with the evident administrative shortcomings of welfare initiatives led to the creation of a myriad of inefficient and redundant agencies.

By the mid-1990s, Mexico's federal government ran fifteen different food subsidy programs: eleven targeted urban and rural populations while four were generalized.<sup>10</sup> These programs were administered by ten different government regulated ministries. As is characteristic of the Mexican bureaucracy before the 1990s, the results of these programs remain largely untested. Nevertheless, it is clear that they were poorly strategized. This is exemplified by the fact that 75% of the gross budget was allotted to urban poverty were less than 40% of the poor resided. Additionally, there was a striking disparity between the sum allotted to generalized and targeted programs. Most of the money was absorbed by generalized bread and tortilla subsidies in urban areas<sup>11</sup> where

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<sup>10</sup> *Ibid*

<sup>11</sup> *Ibid*

the help was arguably less needed. Consequently, these programs were extremely skewed to favor the urban poor rather than the needier rural communities.

The disparity in aid distribution was not necessarily deliberate. A majority of the country's poor resided in remote rural areas. A large number of these communities were located in mountainous regions and lacked roads. Additionally, they did not have the storage availability and a strong administration to regulate a mass shipment of food resources. Furthermore, the rural population was more disperse than the clustered urban residents and thus they were significantly costlier to reach. By 1995, over 2.5 million individuals lived in 150,000 secluded localities of less than 100 people. Additionally, 7.8 million people resided in 33,000 zones of between 100 and 500 inhabitants.<sup>12</sup> These factors combined made it difficult for government led programs to provide these communities with aid. The situation was further complicated by the fact that the urban poor often excreted more political power and were more assertive in demanding their stipends. These difficulties made it so that the rural poor received the least aid by a wide margin.

In terms of health, the government had also failed to provide the rural and urban poor with comparable assistance up until the mid-1990s. Despite a series of governmental efforts, a large lump of the rural population lacked access to preventive health services and had insufficient information about basic health care. Subsequently, this population was more vulnerable to early morbidity, malnutrition, and a host of easily preventable

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<sup>12</sup> *Ibid*

illnesses. In 1995, the mortality rate for rural poor was roughly 165% higher than that of underprivileged urban populations.<sup>13</sup>

Finally, as was characteristic of Mexico at the time, there was also a wide disparity in educational achievements amongst social strata. By the early nineties, an overwhelming majority of the population attended primary school, in 1994, a staggering 97.5% of the population was enrolled in primary school and approximately half went on to enroll in secondary school.<sup>14</sup> However, the educational quality of public schools in marginalized areas was significantly lower than that of urban schools. These schools were run by untrained teachers who regularly failed to teach students the required curriculum. In the most extreme cases, predominantly indigenous populations failed to learn vernacular Spanish and thus remained confined to poor regions that spoke the pertinent indigenous dialect.

### **Tequila Crisis**

In 1994 President Salinas de Gortari's administration ratified NAFTA setting the country up for a mass inflow of capital from the private sector. However, the treaty's passage was greeted with chaos and disorder undermining the image of national stability that the government was trying to convey. Early in 1994, the Zapatista Army of National Liberation publically declared war against the Mexican state in response to the passage of the trade agreement. The Zapatistas believed that NAFTA would widen the gap between the wealthy and poor, especially in rural regions like Chiapas where the revolutionary army was based. The movement received widespread media attention both locally and

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<sup>13</sup> *Ibid*

<sup>14</sup> World Bank Group, ed. *World development indicators 2012*. World Bank Publications, 2012.

internationally thus causing investors to place a risk premium on Mexican assets.

Furthermore, Mexico's volatility was heightened in late March when beloved presidential candidate, Luis Donaldo Colosio was assassinated while campaigning in Tijuana. This resulted in widespread political and social instability as the elections neared.

In order to counter the detrimental effects of the newfound unsteadiness, the Mexican Central Bank issued dollar denominated public debt in order to buy pesos. However, the Banco de Mexico was unable to continue in this trend for long and thus newly inaugurated President Ernesto Zedillo was forced to devalue the peso in late December. The devaluation appeared to the public as a confirmation that Mexico was in financial distress and thus capital flowed out of Mexico at a rapid pace. Investors demanded higher risk premiums over their investments and thus the central bank was being coerced into increasing interest rates. This placed downward pressure on the peso which would eventually lead the Mexican Stock Exchange to plummet a few weeks later. The elevated cost of capital hindered the speed of recovery and thus the country faced one of the longest recessions in its recent history.

The effects of the 1994 Mexican peso crisis took a toll on Mexicans for many years to come. The country's GDP had fallen by 6.2 % in 1995,<sup>15</sup> the largest reduction in economic activity in five decades. The elevated interest rates posed a huge obstacle to growth and recovery. In addition to a stagnant economy, Mexico faced hyperinflation and thus a meteoric fall in real wages of 30-35%. Prices went up by 35% in 1995.

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<sup>15</sup> Pereznieta, Paola. *The Case of Mexico's 1995 Peso Crisis and Argentina's 2002 Convertibility Crisis*. No. 1008. 2010.

Subsequently, the rural poor took a big hit. Patrimonial poverty reached a staggering 69% while food poverty increased over 15% since the previous year.<sup>16</sup>

It quickly became apparent to the newly appointed Zedillo administration that the poor would have to be provided with ample resources in order to navigate the crisis.

Although many officials lobbied for the strengthening of existing programs, members of the Finance Ministry pushed for a new approach in poverty reduction.<sup>17</sup> The overwhelming economic difficulties coupled with the malleability of a newly established administration presented the perfect environment for experimenting with a new approach. Therefore, a reluctant cabinet set out to design a program that would deal with the short-term ramifications of the economic crisis as well as propel recipients towards permanent stability. Additionally, the government was tasked with implementing this new approach despite having a historically low budget being that the government had cut government spending drastically in order to minimize the long-term effects of the economic recession. In an attempt to reconcile this myriad of complex goals the government looked to novel approaches abroad. In 1996, the Mexican Government sent a delegation to Brazil to visit several municipal “Bolsa Familia” conditional cash transfer programs. This would eventually lead to Mexico to tentatively launching a CCT program in 1997.<sup>18</sup>

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<sup>16</sup> *Ibid*

<sup>17</sup> Levy, Santiago. *Progress against poverty: sustaining Mexico's Progresas-Oportunidades program*. Brookings Institution Press, 2007.

<sup>18</sup> Lindert, Kathy, et al. "The nuts and bolts of Brazil's Bolsa Família Program: implementing conditional cash transfers in a decentralized context." (2007).

## Literature Review

### CCT Model

The model for conditional cash transfer is simple: encourage families to develop the skills necessary to build a healthy patrimony by reinforcing human capital building practices through monetary compensation. That is, give families cash stipends if they agree to invest in what the government believes to be sustainable behaviors (education, health services, and nutrition).

The model for CCT rests on the assumption that local governments are to blame for poverty. Namely, individuals fall into poverty because the government fails to grant them adequate resources in their quest for prosperity. Thereafter, it is assumed that these individuals would live above the poverty line had society granted them access to education, healthcare, etc. This perception is prevalent in a majority of Latin American countries. In the case of Mexico, an estimated 65.8 percent of people believe that citizens are poor because “society is unjust”. Conversely, only around 24 percent blame poverty on the poor. Accordingly, 56.9% of Mexicans admittedly stated that “the poor have very little chance to escape from poverty.”<sup>19</sup> These beliefs lie in stark contrast with those of the United States where a staggering 61.2 percent of interviewees believed the poor to be in their respective situations because “they are lazy”. Subsequently, only 29.5 % of Americans thought that “the poor have very little chance to escape poverty.”<sup>20</sup>

Conditional cash transfer programs sought to provide individuals with the proper tools to escape poverty. Many programs faced two major problems: improper targeting

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<sup>19</sup> Lindert, Kathy, Emmanuel Skoufias, and Joseph Shapiro. "Redistributing income to the poor and the rich: Public transfers in Latin America and the Caribbean." *Social Safety Nets Primer Series* (2006).

<sup>20</sup> *Ibid*

and recipient dependency. Governments worldwide often faced great difficulty in reaching their nation's poorest and additionally often failed to lift benefited individuals out of long-term poverty. Thus CCT programs were designed to both reduce current poverty and inequality by providing families with a minimum income as well as break the inter-generational transmission of poverty by conditioning these transfers on participant's compliance with a series of human capital objectives. These included school attendance, vaccines, and pre-natal visits.<sup>21</sup>

The CCT model was initially conceived as an attempt to fulfill society's perceived debt to the poor.<sup>22</sup> A government should provide a minimum income to the poor that would suffice for them to live above the poverty line. However, in order to prevent dependence on these stipends CCT had to go beyond merely addressing the immediate needs of the poor. And thus, beneficiaries would only be granted their respective stipend if they succeeded in complying with certain human capital building requirements. The premise stood that linking the receipt of welfare payments to investment in future outcomes would ensure that the money spent today could contribute to long-term poverty eradication. CCT essentially made it costly for parents to forego their child's education since they would be giving up stable governmental compensation in doing so.

### **Progres-Oportunidades Approach**

In the case of Mexico the CCT approach addressed many of the criticisms of previous welfare strategies the government had experimented with. By aiding underprivileged families in developing human capital, CCT would eliminate the problem

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<sup>21</sup> Lindert, Kathy, et al. "The nuts and bolts of Brazil's Bolsa Família Program: implementing conditional cash transfers in a decentralized context." (2007).

<sup>22</sup> *Ibid*

of long term dependency on handouts. Additionally, this strategy would mean foregoing the high costs of delivering food subsidies to the rural poor who often inhabit remote municipalities. Having recently faced heavy budget cuts after the 1994 peso crisis, Zedillo' cabinet members endorsed CCT as a perfect fit. Progresa was designed to be both sustainable and relatively inexpensive. However, as intuitive CCT might seem the theory was in its infancy in the mid-1990s. Thus, the Mexican government faced the daunting challenge of designing a program around a novel and untested theory. Consequently, the administration shied away from making drastic moves.

The initial model for Progresa was only implemented in a select few rural states. While a substantial number of cabinet members favored CCT others viewed this new-age solution with skepticism. Thus, the pilot face was launched in rural Campeche and was not given any significant media attention. In 1996, 31,000 extremely poor rural households received CCT grants and were carefully evaluated by the *Instituto Nacional Aut3nomo de Mexico*.<sup>23</sup> The study concluded the program to be a success. It also pointed to the fact that its implementation rendered the other local welfare agencies futile. Thus, it was determined that the program should be run by a single entity that would be given considerable legal power.<sup>24</sup>

Consequently, Progresa came to be centrally run. Since its early stages and throughout, the administrative unit in charge is a federal agency that gathers all the relevant data, determines eligibility, issues payments to households, contracts for external

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<sup>23</sup> Levy, Santiago. *Progress against poverty: sustaining Mexico's Progresa-Oportunidades program*. Brookings Institution Press, 2007.

<sup>24</sup> United Nations Development Program. "Mexico: Scaling Up Progresa/Oportunidades-Conditional Cash Transfer Programme" UNDP, 2011.

evaluations, and coordinates with other federal ministries and agencies. Although relevant government ministries are responsible for providing beneficiaries with proper public education and health services, the actual transferences are handled by the Progresa administration.<sup>25</sup>

In addition to eliminating surplus government agencies, Progresa was made more efficient by means of targeting. The program was expanded to cover 357 municipalities within twelve different states.<sup>26</sup> In order to select the communities that would be benefitted, the administration constructed a multidimensional index of marginality. Based on a series of aggregate local indicators, the neediest regions were selected.<sup>27</sup> Program leaders subsequently developed another targeting method to distinguish the neediest individuals within these communities in order to cover the 300,000 most deprived households. In order to do so, Progresa officials would visit every home within the targeted region and conduct a survey to assess how desperate each situation was. The census, officially denominated the ENCASEH collected information on a range of socio-economic characteristics including number of residents, access to medical services, years of education. The survey essentially measured household specific poverty using a multidimensional approach that combined income with a other relevant factors such as dwelling characteristics, dependency ratios, ownership of durable goods, etc. The usage of such a comprehensive survey was meant to make a holistic determination of poverty whilst making it difficult for families to manipulate their results. Numerical weights were

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<sup>25</sup> Levy, Santiago. *Progress against poverty: sustaining Mexico's Progresa-Oportunidades program*. Brookings Institution Press, 2007.

<sup>26</sup> Ibid

<sup>27</sup> Behrman, Jere, and Susan Parker. "The impact of the PROGRESA/Oportunidades conditional cash transfer program on health and related outcomes for the aging in Mexico." (2011).

assigned to each characteristic to calculate a household score. This result was then compared to the “threshold score” that represented the acceptable minimal. If the household scored lower than this threshold they were eligible to become enrolled in Progresas.<sup>28</sup>

Although this method of targeting was successful in the early stages of Progresas, it was modified to accommodate differing characteristics of urban regions. In 2002, President Vicente Fox expanded the program to include urban dwellings.<sup>29</sup> Soon after, it became clear that a marginally smaller number of households were eligible as beneficiaries under the rural threshold. Furthermore, the large number of applicants made it difficult for administrators to evaluate each household separately. Thus, a method of self-selection was developed in order to accommodate all households and expedite the process. Once participating communities were identified, a large scale media campaign was conducted therein to promote the program and its benefits. In order to reach most community members, the program was advertised in a plethora of mediums including television, radio, posters in churches, loudspeaker announcements, etc.<sup>30</sup> Community members were encouraged to fill out a survey on a series of individual socio-economic factors. Based on their score on this survey they were deemed either eligible or unfit to proceed to the next phase. Those that were determined needy enough were evaluated by Progresas officials at home who would verify the information provided in the survey. These updated results are then processed by the administrative office were induction

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<sup>28</sup> Coady, David, and Susan Parker. *Targeting social transfers to the poor in Mexico*. No. 9-60. International Monetary Fund, 2009.

<sup>29</sup> Vicente Fox also went on to rename the program Oportunidades in 2002

<sup>30</sup> Levy, Santiago. *Progress against poverty: sustaining Mexico's Progresas-Oportunidades program*. Brookings Institution Press, 2007.

decisions were made.<sup>31</sup> Although both methods of selection remain in place, the latter has become the most widespread due to its heightened efficiency and reduced cost. However, administrative selection is arguable better at reaching the rural poor living under the lagging rural poor that the program aimed to target in the first place.

Once beneficiaries have been selected, they are obligated to register family members in the local health clinic and the school to which they are assigned. Family members agree keep up with their academic and medical obligations in the months to follow. Requirements depend on each individual's age, gender, and educational attainment level. Local health and school officials are then mandated to periodically record a household's attendance at schools and clinics and report back to the administration every two months. Progresa-Oportunidades households receive \$250 unconditioned pesos (\$15 dollars) per adult a month. If they wish to grow this amount, households must oblige in consistent school attendance and medical consultations.<sup>32</sup>

In terms of health, Progresa/Oportunidades provides a mix of cash and in-kind benefits. All participants receive a monthly health stipend regardless of their performance. In addition, pregnant or nursing women who care for infants or malnourished children receive a physical nutritional supplement. However, these benefits are conditioned on families attending health clinics on a regular basis. If they comply, households are poised to receive an added food support transfer of \$189 pesos (\$11.50).

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<sup>31</sup> Coady, David, and Susan Parker. *Targeting social transfers to the poor in Mexico*. No. 9-60. International Monetary Fund, 2009.

<sup>32</sup> Levy, Santiago. *Progress against poverty: sustaining Mexico's Progresa-Oportunidades program*. Brookings Institution Press, 2007.

Additionally, the nutritional supplement is distributed exclusively at relevant health clinics.<sup>33</sup>

The more substantive transfer is the scholarship given to children and young adults enrolled in grades 3 to 12. The value of the scholarship increases as children progress to higher grades. Additionally, grants are greater for girls than boys starting at the secondary level. Starting with an amount of \$120 pesos (\$7.30) for children in primary school, it goes up to \$760 pesos (\$46 dollars) for females in twelfth grade.<sup>34</sup>

As a further goal, the Zedillo administration sought consistency. The long-term outlook of this program necessitated an extended commitment to this initiative. However, history pointed to the fact that very few social programs survived the change in governmental administrations. Thereafter, the program had to prove to be manifestly successful for it to attain permanence and thus the program was intensely scrutinized by government officials. This practice led to the continuation and subsequent expansion of CCT in Mexico long after Zedillo left office. Although the succeeding President Vicente Fox renamed the program Oportunidades in 2002, the program survived intact.<sup>35</sup>

### **Progres-Oportunidades Results**

In the realm of welfare initiatives, Progres-Oportunidades was pioneering. The programs imposition of explicit conditions coupled with new targeting methods were unprecedented. Thereafter, little evidence existed to corroborate the plausibility of conditional cash transfer. As a result, the Mexican government monitored the program

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<sup>33</sup> *Ibid*

<sup>34</sup> Soares, Sergei, et al. "Conditional cash transfers in Brazil, Chile and Mexico: impacts upon inequality." *Estudios económicos* 1 (2009): 207-224.

<sup>35</sup> Levy, Santiago. *Progress against poverty: sustaining Mexico's Progres-Oportunidades program*. Brookings Institution Press, 2007.

closely and collected a wide array of data in order to shed light on the efficiency of the program. Consequently, a multitude of scholars and government officials ventured to analyze the relative success of Progresa. Most relevant parties consider the program an utter success in the short run.

Table #1: Food Consumption in Rural Progresa Households

<b>Metric</b>	<b>Consumption</b>	<b>Calorie Intake</b>	<b>Fruits Consumption</b>	<b>Vegetable Consumption</b>
<b>Household Increase (%)</b>	15%	7.1%	16%	30%

In granting families cash transfers, Progresa administrators sought to increase a household's disposable income in the hopes that a portion of the transfers would be invested in food consumption. As shown in Table #1, in the case of rural families, overall consumption increased by 15 percent on average. It is estimated that over three quarters of this increase went to food.<sup>36</sup> Additionally, the increase in food consumption was present early on. A mere two years after the programs launch, households receiving Progresa benefits consumed 7.1% more calories than did comparable families in control non-benefited localities. In addition, the programs emphasis on healthy eating also had a positive impact on food choice. Participation in Progresa appeared to have an impact on the acquisition of calories from fruits, vegetables, and animal products. This pointed to the fact that families were intentionally forgoing unhealthy bread based products such as tortillas.<sup>37</sup> It is estimated that families consumed 16% more fruits and vegetables and

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<sup>36</sup> Hoddinott, John, Emmanuel Skoufias, and Ryan Washburn. "The impact of PROGRESA on consumption: A final report." *International Food Policy Research Institute, Washington, DC* (2000).

<sup>37</sup> Hoddinott, John, and Emmanuel Skoufias. "The impact of PROGRESA on food consumption." *Economic development and cultural change* 53.1 (2004): 37-61.

30% more animal products (especially poultry) after the implementation of the program. Consequently, the program was successful in increasing both food intakes as well as promoting a healthier diet through its health seminars.<sup>38</sup>

Furthermore, there is overwhelming evidence to show the fact that Progresa and Oportunidades were successful in boosting the use of preventive health services by participants. Preventive care visits grew fivefold during the programs first five years. In turn, nutrition related visits increased by 45%.<sup>39</sup> This drastic increase was especially visible in rural areas, where resident's health was particularly dire. In rural areas alone, demand for such services rose from 30% to 50% within the programs first two years.<sup>40</sup> Results were particularly substantial for households with young children. Participant consults to monitor nutritional status increased by 30% in infants up to two years age and by 25% for children from three to five.<sup>41</sup> This shift towards illness prevention led to decreased incidences of emergency hospitalization. For the same set of rural households, there was a 58% drop in hospital visits in both infants and the over-fifty age group.<sup>42</sup>

Consequently, the morbidity rate for children born to Progresa households was around 25% lower in the first six months of life than in comparable non-benefited rural families. Additionally, the program saw a 39% reduction in illness in children aged zero to three a mere two years after the programs implementation.<sup>43</sup> The improvement in

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<sup>38</sup> Ibid

<sup>39</sup> Fernald, Lia CH, Paul J. Gertler, and Lynnette M. Neufeld. "Role of cash in conditional cash transfer programmes for child health, growth, and development: an analysis of Mexico's Oportunidades." *The Lancet* 371.9615 (2008): 828-837.

<sup>40</sup> Ibid

<sup>41</sup> Huerta, María del Carmen, and Daniel Hernández. "Algunos aspectos de salud reproductiva de la población beneficiaria de Progresa." *Washington DC: International Food Policy Research Institute (IFPRI)* (2000).

<sup>42</sup> Fernald, Lia CH, Paul J. Gertler, and Lynnette M. Neufeld. "Role of cash in conditional cash transfer programmes for child health, growth, and development: an analysis of Mexico's Oportunidades." *The Lancet* 371.9615 (2008): 828-837.

<sup>43</sup> Levy, Santiago. *Progress against poverty: sustaining Mexico's Progresa-Oportunidades program*. Brookings Institution Press, 2007.

health was particularly evident in pregnant mothers. Maternal mortality dropped by 11% while infant mortality went down by 2% as well. At the same time, the program was successful in increasing the use of safe contraceptive methods in rural households. The greatest increase occurred in young women aged twenty to twenty-four.<sup>44</sup>

The Progres-Oportunidades program also sought to increase the attainment of education in disadvantaged communities. By conditioning monetary support on the incidence of school attendance, administrators strived to aid young beneficiaries in becoming more marketable than their parents and hopefully escaping poverty permanently. Fortunately, the program was successful in both increasing school enrollment and reducing dropout rates for those students. Although primary school enrollment was remarkably high before 1997 the program had positive effects on failure and dropout rates.<sup>45</sup> The increase in successful school enrollment was particularly strong in the case of families with parents who had only completed a mere three years of schooling. Pointing to the possibility that the educational increase was the most poignant when there were greater lags.<sup>46</sup>

Table #2: School Advancement and Job Participation in Beneficiaries and Non-Beneficiaries

<b>Metric</b>	<b>Regular School Advancement (boys)</b>	<b>Regular School Advancement (girls)</b>	<b>Premature Job Market Participation</b>
<b>Progres-Oportunidades Beneficiaries</b>	64%	39%	10%
<b>Non-Beneficiaries</b>	38%	30%	45%

<sup>44</sup> Huerta, María del Carmen, and Daniel Hernández. "Algunos aspectos de salud reproductiva de la población beneficiaria de Progres-Oportunidades." *Washington DC: International Food Policy Research Institute (IFPRI)* (2000).

<sup>45</sup> Levy, Santiago. *Progress against poverty: sustaining Mexico's Progres-Oportunidades program*. Brookings Institution Press, 2007.

<sup>46</sup> *Ibid*

Furthermore, researchers found that Progresa-Oportunidades children were not only more frequently enrolled in school but that they outperformed relevant counterparties on average. In rural areas, children who had been incorporated into the program for at least five years advanced more rapidly through school.<sup>47</sup> As shown in Table #2, the proportion of boys that advanced through school regularly was 64% for those in the program compared to 38% for those who were not. Similarly, 39% of beneficiary girls were more successful in completing at least five years of school in a six year period compared to 30% for other relevant parties. Consequently, the program saw a decrease in the participation of young boys and girls in the informal labor market. Studies found that boys who were 10 to 14 years of age were up to 35% less likely to partake in the labor market.<sup>48</sup>

Table #3: Change in Poverty Headcount in Rural and Urban Beneficiaries

<b>Metric</b>	<b>Change in Poverty Headcount</b>	<b>Change in Moderate Poverty</b>	<b>Change in Extreme Poverty</b>
<b>Rural Beneficiaries</b>	-9.7	-18.7	-28.7
<b>Urban Beneficiaries</b>	-2.6	-4.9	-1.7

In terms of income, Progresa was particularly successful in lifting the extremely poor out of severe poverty. As portrayed in Table #3, the headcount poverty gap, and severity indexes fell by 9.7, 18.7, and 28.7 percent respectively in 2004 (seven years after the programs implementation). This drop was more moderate in urban areas where these

<sup>47</sup> Behrman, Jere R., Susan W. Parker, and Petra E. Todd. *Long-term impacts of the Oportunidades conditional cash transfer program on rural youth in Mexico*. No. 122. Discussion papers//Ibero America Institute for Economic Research, 2005.

<sup>48</sup> *Ibid*

indices fell by 2.6, 4.9, and 1.7 percent respectively.<sup>49</sup> Thus, the program had the biggest impact on the extremely poor in rural regions. This is unsurprising as Progresa was initially designed to aid the nation's poorest in the country's more remote regions. These results also point to the fact that the program had the most overwhelmingly positive results in the poorest households being that they had the most room for economic growth.

In terms of the medium run, benefited families experienced better health. Children in rural communities became more resistant to disease as a result of better caloric intake and consistent preventive medical consultations. The incidence of disease decreased by 12% in children up to two years old and 11% for children aged 3 to 6.<sup>50</sup> Furthermore, children in benefited households tended to be taller than comparable counterparts. Researchers found that benefited children grew 1 cm more every year than relevant non-beneficiaries. On the basis of these indicators, it became clear that severe malnutrition had dropped on average in these households.<sup>51</sup> Malnourishment among rural children dropped by 17% in the case of infants aged zero to three.<sup>52</sup> Proper nutrition is widely perceived to have a substantial persistent impact on a child's physical and mental development and on their health status as adults. It follows, that healthy adults are better able to retain and perform in a wider range of jobs. Thus, these results hint to Progresa

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<sup>49</sup> Cortes, Fernando, Patricio Solís, and Israel Banegas. "Oportunidades y pobreza en México: 2002-2004." *El Colegio de México, Mexico* (2006).

<sup>50</sup> Fernald, Lia CH, Paul J. Gertler, and Lynnette M. Neufeld. "Role of cash in conditional cash transfer programmes for child health, growth, and development: an analysis of Mexico's Oportunidades." *The Lancet* 371.9615 (2008): 828-837.

<sup>51</sup> *Ibid*

<sup>52</sup> *Ibid*

having fairly substantial effects on lifetime productivities and earning in children brought up in benefited households.<sup>53</sup>

Progresa sought to have an impact on household's long-term living standards. Program developers hoped that beneficiaries would allot a portion of their disposable income on interest yielding investments. Researchers found that a large number of beneficiaries did in fact devote a portion of their resources in productive activities. For each peso families received, they invested around 14 cents. This investment improved family's income producing capabilities as they had estimated rates of return of 15.34%. Thereafter, after nine years in the program beneficiary households were able to increase consumption by 47.6% evidencing the apparent sustainability of cash transfers.<sup>54</sup> Additionally, program participants were 33% likelier to participate in microenterprise being that the cash transfers often eliminated their liquidity shortages.<sup>55</sup> Strikingly, it also became apparent that women were more prone to take part in these industries. However, evidence also pointed to the fact that these potentially sustainable investments were more prevalent in urban rather than rural communities.<sup>56</sup>

### **Expansion of CCT in Latin America and Some Examples**

Mexico and Brazil were the first Latin American countries to experiment with government sponsored conditional cash transfer. However, by the mid-2000s these programs had come to dominate the social protection sector in Latin America and the

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<sup>53</sup> Behrman, Jere, and John Hoddinott. *An Evaluation of the Impact of Progresa on Preschool Child Height*. International Food Policy Research Institute. Food Consumption and Nutrition Division. No. 104. Discussion Paper, 2001.

<sup>54</sup> Gertler, Paul, Sebastian Martinez, and Marta Rubio-Codina. "Investing cash transfers to raise long term living standards." *World Bank Policy Research Working Paper* 3994 (2007).

<sup>55</sup> *Ibid*

<sup>56</sup> *Ibid*

Caribbean. By 2006 virtually all Latin American countries had implemented some form of conditional cash transfer.

The reason for the rapid expansion and popularity of these programs is twofold. Firstly, the apparent success of both Progresa-Oportunidades in Mexico and *Bolsa Familia* in Brazil promised similar results in other Latin American Countries (LAC). Much like pre-CCT Mexico, social protection in Latin America predominantly focused on work related social insurance which included health coverage and pensions.<sup>57</sup> Although these programs were somewhat successful in helping low-income workers become less vulnerable to economic shocks, they also failed to reach significant portions of their respective nations poor. The fact that the rural poor lived in remote communities coupled with the high prevalence of informal employment led to a large number of people being excluded from government initiatives. Secondly, faced with the evident success of CCT initiatives, the Inter-American Development Bank (IDB) and the World Bank became increasingly willing to sponsor human-capital investment loans. Consequently, a large array of countries ceased the possibility of implementing a visibly fruitful and partially sponsored project.<sup>58</sup>

Brazil's *Bolsa Escola* and Mexico's Progresa were quickly followed by Honduras' *Programa de Asignación Familiar* (PRAF) in 1998. By the late 1970s, Honduras had failed to develop a strong central government. For much of the 20<sup>th</sup> century, Honduras' economy had been heavily reliant of U.S. investment, especially in

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<sup>57</sup> Stampini, Marco, and Leopoldo Tornarolli. *The growth of conditional cash transfers in Latin America and the Caribbean: did they go too far?*. No. 49. IZA Policy Paper, 2012.

<sup>58</sup> Adato, Michelle, and John Hoddinott. "Conditional cash transfer programs: A "magic bullet" for reducing poverty?." (2007): 139-154.

the ample banana sector. Consequently, the United States had supplied the military government in place at the time in order to keep Honduras free of communism. However, social protection and living conditions for the poor were deplorable. USAID extended help to Honduras throughout the 80s and 90s; however these programs were highly criticized for their cost inefficiency, poor targeting, and reliance on foreign food supply. Conditions worsened when the U.S. found a more strategic ally in Nicaragua and lost interest in Honduras as a strategic partner. A large portion of U.S. resources were withdrawn and the country's poor were left in a desperate situation.<sup>59</sup> Half of Honduran households were impoverished with 30% living in extreme poverty.<sup>60</sup>

In the early 1990s, the World Bank partnered with the IDB to sponsor Honduras' conditional cash transfer program: PRAF. Consequently, both organizations held significant discretion in determining the aim and administration of the program. PRAF originally sought to target families that fell below critically low levels of consumption and provide them with increased levels of nutrition, education, and health. In order to do so, PRAF granted women vouchers for food stamps when they fulfilled co-responsibilities in health and education. Some program components were conditioned while others were not. However, the co-responsibilities were both few and seldom enforced. Consequently, the program initially functioned as an unconditioned cash transfer program. This first program was largely unsuccessful despite heavy budgetary

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<sup>59</sup> Moore, Charity. "The political economy of social protection in Honduras and Nicaragua." *Conditional cash transfers in Latin America* (2010): 101-126.

<sup>60</sup> *Ibid*

increases through the 1990s. Thereafter, the program was transitioned into a conditional cash transfer initiative in 1998.<sup>61</sup>

This second phase of the program was significantly more successful. Researchers estimate that the program was successful in increasing school enrollment rates by 1-2% yearly. Additionally, dropout rate was reduced by 2-3 percentage points.<sup>62</sup> In terms of nutrition, benefited families steadily increased calorie consumption year to year.<sup>63</sup> Additionally, the effect of this program was the most visible in the poorest households. However, project managers continue to struggle with the implementation of CCT policies consequently yielding less than ideal results. The lack of coordination amongst national and international fund providers combined with a feeble central government made the program much less efficient than Mexico's Progresa.<sup>64</sup> Nevertheless, the program remains in place to date.

Subsequently, the first half of the 2000s saw the introduction of a second wave of CCT programs throughout Latin America and the Caribbean. Costa Rica added *Supermonos* in 2000, discontinued it in 2002 and finally replaced the original program with *Avancemos* in 2006. Additionally, Nicaragua incorporated CCT into its social welfare scheme from 2000 to 2006. Furthermore, Colombia and Chile instated *Familias en Acción* and *Chile Solidario* respectively in 2001. Jamaica added the *Program of*

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<sup>61</sup> *Ibid*

<sup>62</sup> Glewwe, Paul, and Pedro Olinto. "Evaluating the Impact of Conditional Cash Transfers on Schooling: An Experimental Analysis of Honduras' PRAF Program." *Unpublished manuscript, University of Minnesota* (2004).

<sup>63</sup> *Ibid*

<sup>64</sup> *Ibid*

*Advancement through Health and Education* (PATH) in 2002. And finally, Ecuador introduced the *Bono de Desarrollo Humano* initiative in 2003.<sup>65</sup>

Despite its geographic proximity with Honduras, Nicaragua had a distinctly dissimilar experience with CCT. Nicaragua's modern history has been strongly shaped by its Sandinista National Liberation Front. Nicaragua's political unrest throughout the 70s culminated in the resignation of President Somoza and the seizure of government by the socialist Sandinistas in 1979. These insurgents sought to empower Nicaragua's poor who, as it stood, lived in deplorable conditions. Consequently, the new government, set out to redistribute wealth and privatize industry, bringing the economy to a halt. This era was characterized by a civil war, a declining GDP and exorbitant inflation rates. Although these redistributive policies were successful in increasing school enrollment rates and extending healthcare to some of the nation's poor by 1990 Nicaragua's GDP was as low as it had been in the 1920s.<sup>66</sup> Consequently, the Sandinistas were voted out of office that same year.

By 1993, 50% of the Nicaraguans were poor, with 19% living in extreme poverty.<sup>67</sup> Nicaragua set out to create a viable and sustainable means of social assistance that would drive the country into the twenty-first century. The government partnered with the World Bank and looked to CCT as a potential way out. Largely modeled after

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<sup>65</sup> Stampini, Marco, and Leopoldo Tornarolli. *The growth of conditional cash transfers in Latin America and the Caribbean: did they go too far?*. No. 49. IZA Policy Paper, 2012.

<sup>66</sup> Moore, Charity. "The political economy of social protection in Honduras and Nicaragua." *Conditional cash transfers in Latin America* (2010): 101-126.

<sup>67</sup> *Ibid*

Mexico's Progresa, Nicaragua's *Red de Protección Social* (RPS) was funded through an IDB loan in early 2000.<sup>68</sup>

RPS, like many other CCT initiatives sought to build human capital. The program was designed and administrated by a highly trained staff of scholars experienced in conditional cash transfer. RDS expertly targeted the poorest regions and implemented rigorous methods of data collection to track the programs development during its early stages. Subsequently, the program was spectacularly successful and became internationally renowned for its positive effects on malnourishment.<sup>69</sup> The program was thus renewed for a second phase due to its early success. However, the program was absorbed by the larger welfare organ FISE and suffered drastic budget cuts. Many of the programs functions were consolidated within similar programs financed by international institutions. Consequently, RDS administrators lost much of the independence they had garnered during the early stages. This led to a lack of fraternity between RPS and other government employees which hindered the programs initial productivity. Despite its evident potential this CCT initiative was discontinued in 2006 after failing to reach its goals from year to year. This decision was not met with opposition being that the Nicaraguan populace had remained skeptical as to the viability of CCT as a means in ending poverty.<sup>70</sup>

The third wave of CCT Programs came in 2005 and 2006. It included *Solidaridad* in the Dominican Republic, *Familias Por la Inclusión Social* in Argentina, *Comunidades*

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<sup>68</sup> Moore, Charity. "The political economy of social protection in Honduras and Nicaragua." *Conditional cash transfers in Latin America* (2010): 101-126.

<sup>69</sup> *Ibid*

<sup>70</sup> *Ibid*

*Solidarias Rurales* in El Salvador, *Red de Oportunidades* in Panama, *Juntos* in Peru and, *Plan de Atención Nacional a la Emergencia Social* in Uruguay, among others.<sup>71</sup>

Amongst these countries, Argentina's CCT experience differed from those mentioned previously. Argentina's recent economic history has been defined by a series of harsh and prolonged economic recessions. Following three decades of prosperity, Argentina faced a lengthy period of stagnation from 1975-1990. Although the manufacturing industry had grown unobstructed through the 70s, this progress was followed by a decade of continuous decline. And thus, Argentina went from housing some of the wealthiest per capita citizens in Latin America to having per capita incomes below many Latin American countries.<sup>72</sup> Conditions only worsened as Argentina entered a four year depression in 1998. In previous years, Argentina had relied on private investment from both foreign and national markets in order to foster growth. However, the Mexican peso crisis of 1996 coupled with the Asian and Russian currency crisis of 1997 and 1998, discouraged foreign investment in developing economies.<sup>73</sup> Menem's government imposed heftier taxation in order to reduce debt margins and stabilize the economy. This move proved to be detrimental as it slowed down an already crippled market. The Argentinian people revolted in a multitude of large cities leading to a series of political shifts, further chaos, and the end of the Argentinian peso to the dollar.<sup>74</sup>

As a result of the crisis, the country experienced a sudden increase in poverty and unemployment. The government reacted by creating a series of CCT programs to better

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<sup>71</sup> Stampini, Marco, and Leopoldo Tornarolli. *The growth of conditional cash transfers in Latin America and the Caribbean: did they go too far?*. No. 49. IZA Policy Paper, 2012.

<sup>72</sup> Kehoe, Timothy J. "What can we learn from the 1998-2002 depression in Argentina?." *Great depressions of the twentieth century* (2007).

<sup>73</sup> *Ibid*

<sup>74</sup> *Ibid*

equip the poor to deal with economic shocks in the short and medium run. This initiative housed three different CCT programs to target different problems: the Unemployed Heads of Household Plan, the Families Plan for Social Inclusion, and the Training and Employment Insurance. However, they were consolidated under the Universal Child Allowance (UCA) in 2009. This program became the largest social protection initiative in Argentina, granting aid to over 2 million underprivileged households.<sup>75</sup> In the case of this program, monthly payments are granted to either male or female heads of household for each child under eighteen who resides in the family unit. The cash transfers were staggered, (granted in smaller quantities at different point of the month) and were conditioned on human capital building activities similar to those of Progresá.<sup>76</sup>

UCA has been evidenced to be success. Research suggests that the program had a positive impact on primary and secondary school enrollment and attendance. The share of beneficiary heads with at least some secondary education grew from 32% to 46% from 2005-2010.<sup>77</sup> There was also an observed reduction in dropout rates.<sup>78</sup> Furthermore, the program saw a substantial increase in the percentage of household heads engaged in formal wage employment.<sup>79</sup>

Mexico, Honduras, Nicaragua, and Argentina differ in their implementation of conditional cash transfer. However, they share a series of similarities that shed some light

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<sup>75</sup> Stampini, Marco, and Leopoldo Tornarolli. *The growth of conditional cash transfers in Latin America and the Caribbean: did they go too far?*. No. 49. IZA Policy Paper, 2012.

<sup>76</sup> Rabinovich, Lila, and Stephanie Diepeveen. "The Design of Conditional Cash Transfers: Experiences from Argentina's Universal Child Allowance." *CESR-Schaeffer Working Paper 2014-006* (2014).

<sup>77</sup> Stampini, Marco, and Leopoldo Tornarolli. *The growth of conditional cash transfers in Latin America and the Caribbean: did they go too far?*. No. 49. IZA Policy Paper, 2012.

<sup>78</sup> Conditional cash transfer in argentin Rabinovich, Lila, and Stephanie Diepeveen. "The Design of Conditional Cash Transfers: Experiences from Argentina's Universal Child Allowance." *CESR-Schaeffer Working Paper 2014-006* (2014).a?

<sup>79</sup>Stampini, Marco, and Leopoldo Tornarolli. *The growth of conditional cash transfers in Latin America and the Caribbean: did they go too far?*. No. 49. IZA Policy Paper, 2012.

on the CCT experience in Latin America. Time and time again, CCT programs were shown to be instantly successful in improving the living standards of each nation's poorest. The programs relative victories and shortcomings were more carefully scrutinized than previous welfare efforts and thus administrators were better able to present the general public tangible results. And thus, many concluded CCT to be a simple and efficient panacea to poverty and inequality. Thereafter, many countries in the region implemented similar strategies in order to address age old problems in particularly desperate times. Consequently, it is particularly important to analyze the long-term effects of CCT initiatives being that they have become widely implemented across Latin America.

### **CCT Criticism**

Conditional cash transfer programs have been evidenced to be efficient methods in poverty reduction if properly administrated. However, they might not be the panacea that they promise to be. Although ample evidence exists to corroborate the efficiency of CCT programs in the short term it is not clear that these initiatives are a tangible cure for poverty in the long-run. That is, programs such as Oportunidades might not be achieving the growth in human capital that differentiated the programs from conventional welfare. Unfortunately, it is hard to make an accurate determination either way.

Ingrained in CCT philosophy is the aim to break intergenerational poverty cycles by building human capital. However, program administrators rely on governmental budgeting and are thus inclined to focus on demonstrable short term goals. Generating these results is straightforward. Beneficiaries will most likely be better off after enrolling in the program because individual households painlessly increase their income and

consumption from month to month. However, linking changes in the national incidence of poverty with expenditures on CCT programs is difficult. The children of CCT beneficiaries will likely be better educated and healthier than their parents. Nevertheless, their ability to break free from poverty is influenced by a myriad of both economic and social factors outside of the CCT realm. A lack of formal employment opportunities or an economic recession can dramatically hinder the efforts of such programs.

In terms of developing human capital, CCT programs focus exclusively on the younger school age generation. Within households, only minors are compensated for attending school and building towards their future. This leaves those that are of age incentivized to follow suit. Although this methodology is the most plausible it prevents household parents from sustainably increasing their income generating capabilities. Thereafter, these households may not be able to keep up with their expenses after the cash transfers are withdrawn once the children have left home. Furthermore, when the benefited generation does leave they might not be greeted with lucrative job opportunities. CCT programs often target remote rural communities and thus it would be difficult for individuals to find profitable jobs within their respective communities. However, there is no guarantee that they will encounter opportunities in the formal labor market elsewhere. It has then been suggested that CCT programs should place a portion of their resources in developing infrastructure and industry within the benefited communities in order to facilitate this critical transition. However, this would prove significantly costly and the results of this operation would not be evidenced as cost efficient in the short-run.

## **Thesis Aim**

This thesis aims to determine whether or not the largest CCT initiatives were more successful than others in reducing poverty rates, increasing secondary school enrollment, and reducing population inequality over a thirteen year period. Namely, were countries that invested in covering a larger portion of the population more productive than those who housed comparably smaller scale conditional cash transfer initiatives?

## **Data Description**

The data set includes figures for eighteen different Latin American and Caribbean countries from 1997 to 2010. These countries were selected on the basis that they all had a CCT program in place for at least three years during this time span. In order to assess the magnitude of each country's conditional cash transfer initiative the data includes the percentage of the total population covered by the program each year. Furthermore, the data set contains the Gini coefficient, secondary school enrollment rates, and poverty rates for each of these countries year to year. These figures are meant to reflect the change in national poverty, schooling, and inequality from the beginning to end of the period.

## **Number of Beneficiaries/Population**

This measure was formulated in order to better grasp the relative size of CCT programs within each of the eighteen countries. While it is clear that some countries invested a large portion of their social development budget on CCT others merely experimented with small pilot programs. As is intuitive, larger countries tended to benefit more people. However, this was not necessarily reflective of each government's commitment to CCT as population size varies greatly within Latin America. In order to

deal with this bias, the metric labeled “BP” consists of the total number of program beneficiaries divided by the corresponding year’s total population in order to derive the portion of the population that was benefited by the program year to year. This measure eliminates population size bias and is more accurate in describing program size.

The number of beneficiaries was derived from administrative and household survey data for each country. The Socio-Economic Database for Latin America and the Caribbean (SEDLAC) partnered with World Bank<sup>80</sup> in order to analyze each country’s database. The number of beneficiaries was in turn derived from 300 of these surveys in 18 different LAC. It is important to note that household surveys were illustrative in deriving the number of program beneficiaries in recent years since they included a module to report participation or non-participation. However, it was necessary to rely on each individual’s government data for the earlier years before the module was introduced. Furthermore, household surveys are not representative of the entire population and thus estimation is necessary. This means that the total number of beneficiaries will not match the numbers presented in the study. However, it is possible to make an educated guess since CCT programs mainly target the extremely poor in rural areas.

The values for the total population year to year were collected from the World Bank. This figure represents the sum total of all residents of a country regardless of legal status or citizenship (with the exception of refugees). Subsequently, Table #4 represents the percent total of beneficiaries in each country from year to year. The (-) denotes CCT programs not being instated in that particular year.

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<sup>80</sup> SEDLAC and World Bank Group, ed. *Poverty Rates in Latin America*. SEDLAC, 2012.

Table #4: Percent Population Coverage by National CCT Initiatives

Country	1997	1999	2001	2003	2005	2007	2009
Argentina	-	-	-	-	3%	6%	28%
Brazil	9%	10%	12%	21%	24%	24%	26%
Chile	-	-	-	3%	5%	6%	8%
Guatemala	-	-	-	-	-	-	8%
Honduras	-	10%	10%	6%	11%	11%	11%
Mexico	2%	11%	15%	20%	22%	22%	23%
Nicaragua	-	-	1%	3%	3%	-	-
Panama	-	-	-	-	1%	8%	12%
Paraguay	-	-	-	-	-	1%	8%
Peru	-	-	-	-	1%	7%	8%
Uruguay	-	-	-	-	9%	10%	22%

The results shown in Table #4 are illustrative of CCT in Latin America. Although a large majority of countries have implemented some form of conditional cash transfer programs vary tremendously in age and breadth. While pioneers like Mexico and Brazil have hosted CCT programs for 18 years,<sup>81</sup> latecomers such as Guatemala have only experimented with this approach for a little over five years. Furthermore, most countries have expanded their program consistently from year to year. While Mexico's Oportunidades only tended to 2% of the population in 1997, it came to enroll over 22% of all residents by the end of 2010. Similarly, Brazil's *Bolsa Escola* only benefited 9% of the Brazilian population at its dawn but ended up registering 26% of the population in 2010. However, a small group of countries have either reduced or eliminated CCT programs within this same timeframe. For example, Nicaragua experimented with a relatively small CCT initiative starting in 2001, however after a mere six years, the country did away with the program entirely. Thereafter, it is evident that some countries

<sup>81</sup> Including the years (2011-2015)

relied more heavily on CCT in their respective development schemes. While 57% of Bolivia's population participated in the *Bono Juancito Pinto* program in 2010, Costa Rica's *Avanceamos* only reached 4% of the population. If CCT programs are efficient, one could expect countries with larger programs to achieve the largest falls in poverty and inequality as well as a steady rise in secondary school enrollment.

### **Gini Coefficient**

The Gini coefficient is the most commonly used measure of national inequality. This index is meant to represent the fairness of the income distribution amongst a nation's residents. A Gini coefficient of zero represents perfect equality as it implies every person has the exact same income. Conversely, a Gini of 1 represents a perfectly unequal society wherein a single individual would possess the entirety of the nation's income. A particular country's Gini falls between 0 and 1 depending on how equal the society is in terms of income. In order to make this determination, a curve is derived where the cumulative percentages of total income received are plotted against the cumulative number of recipients. The Gini index measures the area between this line and a hypothetical line of perfect equality.

The dataset includes Gini coefficients for the eighteen countries from year to year retrieved from the World Bank.<sup>82</sup> Although a good measure of inequality, these figures were somewhat problematic. While a large number of countries have Gini coefficients available for most years, others only had three or four data point available within the 13 year span. However, these gaps in data were mostly offset by the fact that this thesis focuses on the total change in inequality from the first to the last year of the study. Thus,

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<sup>82</sup> World Bank Group, ed. *World development indicators 2012*. World Bank Publications, 2012.

a data point early on and an observation within the last few years sufficed. A plot of some of Latin America's Gini over time is represented in Figure #1.

Figure #1: Latin American Gini Coefficients 1997-2010

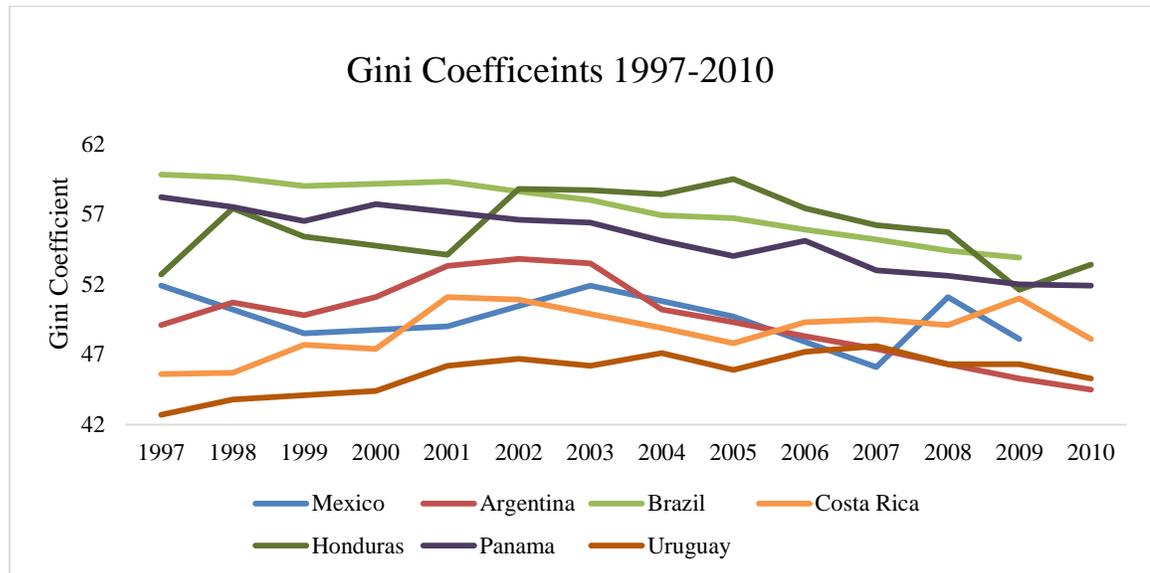


Figure #1 shows that inequality levels vary amongst Latin American countries throughout the late 90s and early 2000s. In 1997, Brazil and Honduras suffered from staggering levels of inequality as high as .60 and .59 respectively. However, Uruguay exhibits consistently lower indices as low as .42. These disparities can be partly attributed to the differences in a country's share of rural population. This diagram also illustrates the relatively high volatility of Gini coefficients in the region. Many countries were affected with economic recessions and governmental conflict during the late 1990s. This is the case of Argentina wherein the political and economic instability of the early 2000s led to a drastic spike in inequality. From 2000 to 2001 a large portion of the nation became unemployed whilst facing significant increase in real prices leading to this temporary rise in inequality. Regardless of the individual landscape of each country it is also evident that a majority of Latin American Gini's exhibit a downward trend from the beginning to the

end of the measured period. Mexico's inequality coefficient went down from 51.9 in 1997 to 48.1 by 2010, a 3.8 drop. Similarly, Panama had a remarkably high Gini of 58.2 in 1997 but managed to reduce this coefficient to 51.9 by the end of the period. In fact, albeit a few examples such as Costa Rica most Latin American countries have seen a decline in inequality in the early 21<sup>st</sup> century.

### **Secondary School Enrollment**

Moreover, the dataset includes two different measures of secondary school enrollment. Firstly, the gross enrolment ratio considers total enrollment in secondary education, regardless of age as a percentage of the population of official secondary education age. This ratio can exceed 100% due to the fact that it includes students who are either over or under aged because of their early or late entrance into secondary school. Similarly, net secondary school enrolment is the ratio of children of official school age who are enrolled in school to the population of the corresponding official school age. That is, only children who have managed to stay on track are considered in this metric. This statistic can only reach 100%. Subsequently, the percent number of school attendees tends to be larger when considering the gross amount of enrollees due to the fact that a larger number of people can be considered. However, the net rate is illustrative in revealing how well populations are doing in avoiding dropouts and failing.

Both enrollment measures were retrieved from the World Bank dataset for each of the eighteenth countries from 1997 to 2010<sup>83</sup>. Although net school enrollment is an arguably better measure in successful youth schooling more data points tended to be available for gross enrollment. Thereafter, both were included. However, the effect of the

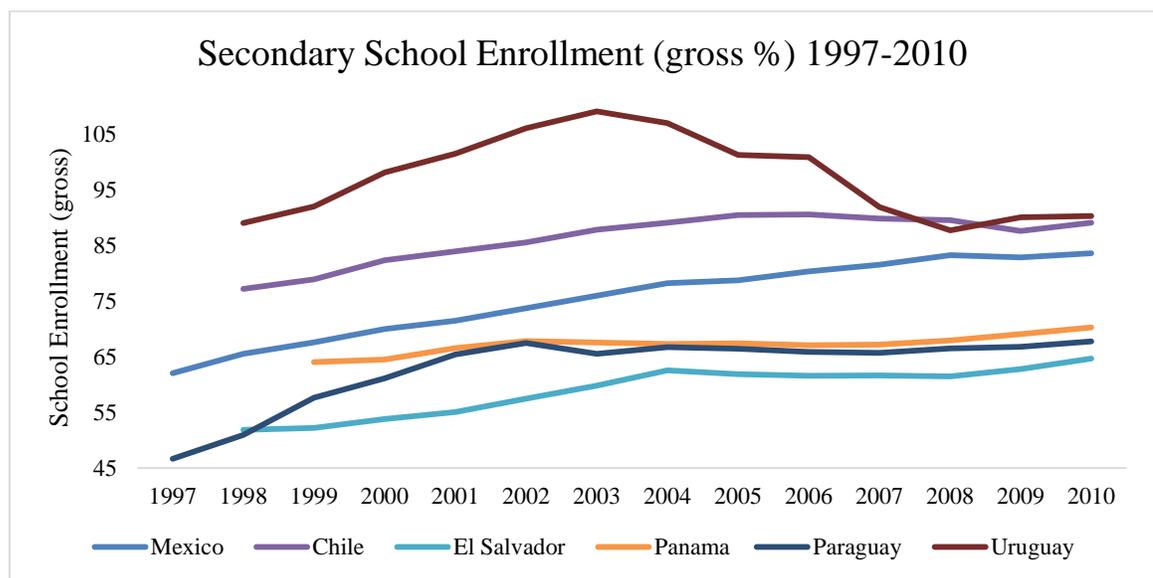
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<sup>83</sup> World Bank Group, ed. *World development indicators 2012*. World Bank Publications, 2012.

missing values was largely offset by the fact that this project only necessitated a final and initial value within the timeframe in order to distinguish at large variation.

As represented in Figure #2, there is ample variation amongst Latin American countries when it comes to school enrollment. Nations like Uruguay have consistently enrolled a very large number of people in secondary school. In this case, enrollment rates were as high as 89% in 1997. Contrastingly, some countries lagged behind significantly in terms of education at the turn of the century. Paraguay and Mexico had significantly lower enrollment ratios of 46% and 63% respectively. Thereafter, the subsequent ten years saw a drastic increase in these ratios for both countries. Mexico managed to reach an 84% enrollment rate in 2010, a 21 percent increase. Similarly, Paraguay saw a 20% increase within this timeframe. Contrastingly, Uruguay only saw a percent increase at the end of the period. This is indicative that the countries with the most significant lags exhibited the greatest change. However, despite individual nuances, secondary school enrollment is in expansion overall as portrayed in Figure #2.

Figure #2: Latin American Gross Secondary School Enrollment Rates 1997-2010



## **Extreme and Moderate Poverty**

In order to determine changes in the percent population living in poverty for every country from year to year, the dataset includes two different indexes: extreme poverty and moderate poverty. The former describes the percent of the population who lack the sufficient income to satisfy their most basic needs such as water, food, and basic housing. The latter represents the percent of the populations who is considered poor but are in less danger than the extreme poor. That is, people who accumulate enough income to afford their most basic needs but have no disposable income beyond that. In most instances, this statistic is calculated by establishing two different international poverty lines for extreme and moderate poverty. If an individual subsists with under \$1.25 dollars a day he is extremely poor. Similarly, if a person's income is between \$1.25 to \$2 dollars a day they are moderately poor. However, this measure is somewhat problematic being that real prices differ dramatically amongst countries.

Instead, the relevant data for all eighteen countries was retrieved from SEDLAC<sup>84</sup>. Unlike most nations, Latin American countries have generated their own extreme poverty lines based on the local cost of a basic food bundle. If an individual is unable to afford this basket with their allotted income, they are extremely poor. Similarly, if individuals are able to afford the current real price of the food bundle with no disposable income to spare they are moderately poor. This data proved problematic in that some country's failed to record poverty statistics rigorously from year to year. Thereafter, there are several missing data points. Nevertheless, this is offset by the fact

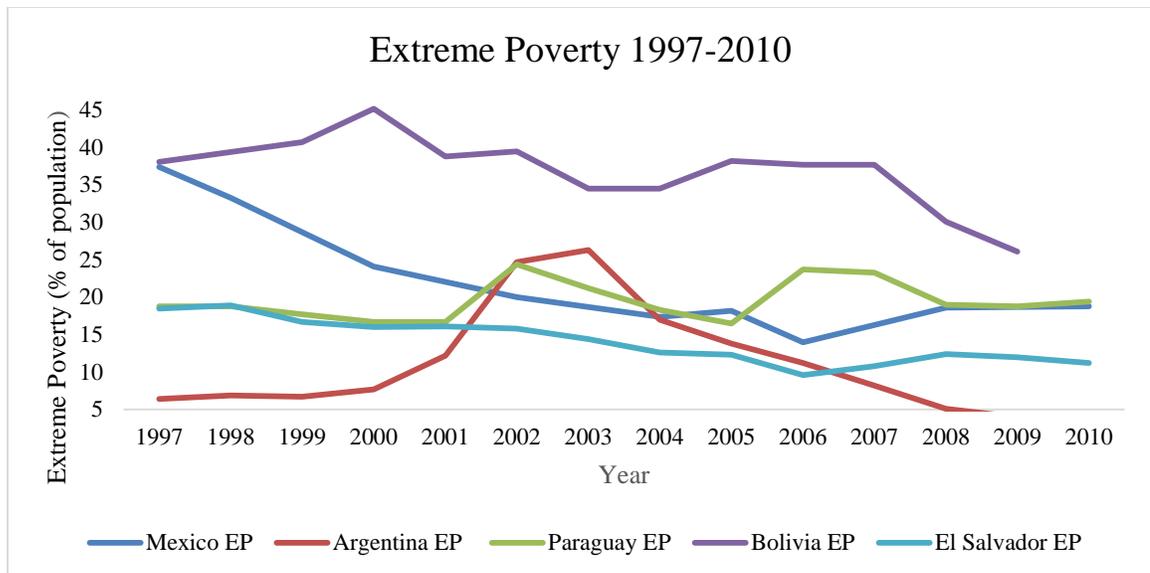
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<sup>84</sup> SEDLAC and World Bank Group, ed. *Poverty Rates in Latin America*. SEDLAC, 2012.

that the main regression only considered an initial and final value in order to grasp the net change from 1997 to 2010 thus making this setback unproblematic.

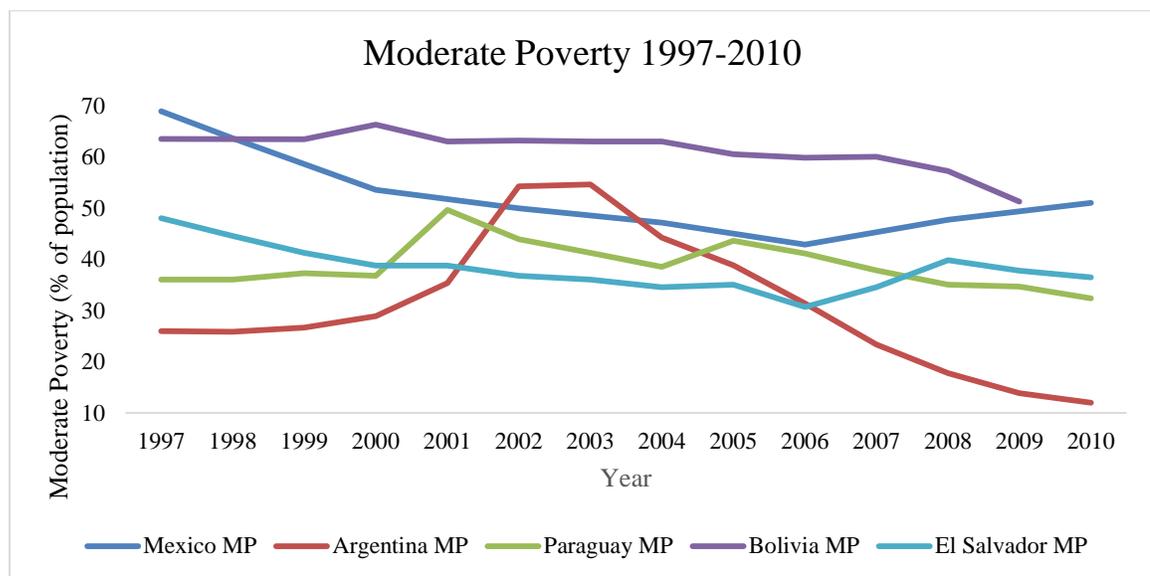
As illustrated in Figure #3, extreme poverty was in decline during the early 2000s. Although individual nations went through brief peaks and troughs within the timeframe in question, extreme poverty rates were generally lower in 2010 than 1997. In the case of Argentina, a severe economic depression led to a drastic 17% increase in extreme poverty between 2000 and 2002. However, 8 years later Argentina's extreme poor had been reduced to 3.1%. This value was 3.3% lower than the initial 6.4% figure in 1997. Furthermore, the total change in poverty from beginning to end is more drastic in the case of the country's that were worst off in 1997. For example, as an aftermath of the tequila crisis of 1994, Mexico saw a staggering 37% of Mexicans living under extreme poverty in 1997. However, by the end of 2010, this figure had gone down to 19%, a dramatic eighteen point decrease.

Figure #3: Extreme Poverty Rates in Latin America 1997-2010



Similarly, as exhibited in Figure #4, moderate poverty rates exhibit a downward trend in most Latin American countries. However, the decrease was more drastic for some countries than others. In 1997, 36% of the Paraguayan population lived under the poverty threshold. Thirteen years later this figure was relatively similar at 32%. Contrastingly, Mexico suffered a drastic decrease in moderate poverty during this same timeframe. While an astounding 69% of Mexicans lived in poverty in 1997, this figure was 18% lower in 2010 at 51%. However, this sharp decrease was not uniform. Mexico saw the lowest poverty rate in 2006 at 42.9% at the end of Vicente Fox’s presidency. However, this figure had escalated by an ample 7% four years later as the country faced the U.S. financial crisis of 2007-2008.<sup>85</sup>

Figure #4: Moderate Poverty Rates in Latin America 1997-2010



Furthermore, as depicted in Figure #4 Paraguay’s percent population living in poverty increased by over 13% within the first five years of the relevant time span,

<sup>85</sup> Levy, Santiago. *Progress against poverty: sustaining Mexico's Progresa-Oportunidades program*. Brookings Institution Press, 2007.

beginning at 36% in 1997 and reaching 49.7% by the end of 2001. This can be partly attributed to the assassination of Vice President Luis Maria Agana in early 1999 and the political crisis that ensued that led the then President Raul Cubas to resign later that year. However, by the end of 2010, the nation saw the lowest moderate poverty rate of the decade at 32.4%, a drop of over 12% from five years earlier. This situation is not particular to Uruguay, many LAC suffered from at least one economic or political crises throughout the 1990s. Subsequently, their populations generally suffered from increasing poverty rates. However, shocks' withstanding, it appears that poverty rates were in decline in the medium-run.

## **Empirical Approach**

While a large number of countries have employed conditional cash transfer some have invested in it more heavily than others. While some CCT programs reach 40% of the nation's citizens, others only cover a mere 5% of the population. Consequently, if CCT programs are efficient in remedying poverty permanently, one would expect to see that on average countries with the largest coverage achieve the greatest drops in inequality and poverty as well as the heftiest increases in school enrollment. This thesis aims to determine whether or not this was the case. It is unrealistic to expect this trend and the subsequent results to be straightforward. There are a multitude of country specific factors such as economic recessions and political instability that come into play when making these determinations. However, the large array of countries included in the study should mitigate some of this variability.

In order to capture the overall breadth of each program a variable, labeled "BP" was generated that represents a sum total of beneficiaries for each country. That is, a sum of the percent population that received aid from year to year. For example, if Guatemala began employing CCT in 2008 and covered 9, 8, and 10 percent of the population in the three years to come, their sum total would be 27%. This figure was then divided by 13 (representing the 13 years between 1997 and 2010) to generate a yearly average. Furthermore, the regression includes the net change in Gini index (gini), net secondary school enrollment (ssn), gross secondary school enrollment (ssg), extreme poverty (ep), and moderate poverty (mp) from 1997 to 2010. These variables comprise the change between the first observation in 1997 and the last observation in 2010 in order to grasp the overall variation during the relevant timespan. This figure is also divided by thirteen

(representing the number of years) in order to come up with a yearly average change in inequality, poverty, and school enrollment.

Subsequently, five different ordinary least square (OLS) regressions were run in order to grasp the effect that CCT program size had on the change in poverty, school enrollment, and poverty. Each regression aims to determine the effect of program size on each social development indicator. Subsequently the regressions stand as follows:

$$(1) \text{ gini}_i = \alpha_0 + \beta_1(BP)_i + \varepsilon_i$$

$$(2) \text{ ssn}_i = \alpha_0 + \beta_1(BP)_i + \varepsilon_i$$

$$(3) \text{ ssg}_i = \alpha_0 + \beta_1(BP)_i + \varepsilon_i$$

$$(4) \text{ ep}_i = \alpha_0 + \beta_1(BP)_i + \varepsilon_i$$

$$(5) \text{ mp}_i = \alpha_0 + \beta_1(BP)_i + \varepsilon_i$$

Each regression is meant to determine the impact that “BP” or program coverage had on these indicators. Namely, the equation determines how much of the change in inequality, school enrollment, and poverty can be attributed to CCT programs.

## Analysis of Results

Figure #5: Regression Results

VARIABLES	(1) gini	(2) ssn	(3) ssg	(4) ep	(5) mp
bp	-1.161 (1.341)	-2.737 (2.570)	-1.494 (3.318)	-2.774** (1.238)	-2.690 (2.053)
Constant	-0.0689 (0.146)	1.138*** (0.279)	1.593*** (0.360)	-0.130 (0.134)	-0.314 (0.223)
Observations	18	18	18	18	18
R-squared	0.045	0.066	0.013	0.239	0.097

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Figure #5 summarizes the results for all five regressions. In the case of inequality, results are inconclusive. Namely, it is unclear whether or not countries that implemented the largest scale CCT initiatives underwent the most sizable decline in inequality. However, despite the lack of significance, the regression suggests there is a negative relationship between program breadth and inequality. For every annual unit increase in percent beneficiaries, Latin American countries could expect their Gini coefficient to decline by 1.16 percent each year.

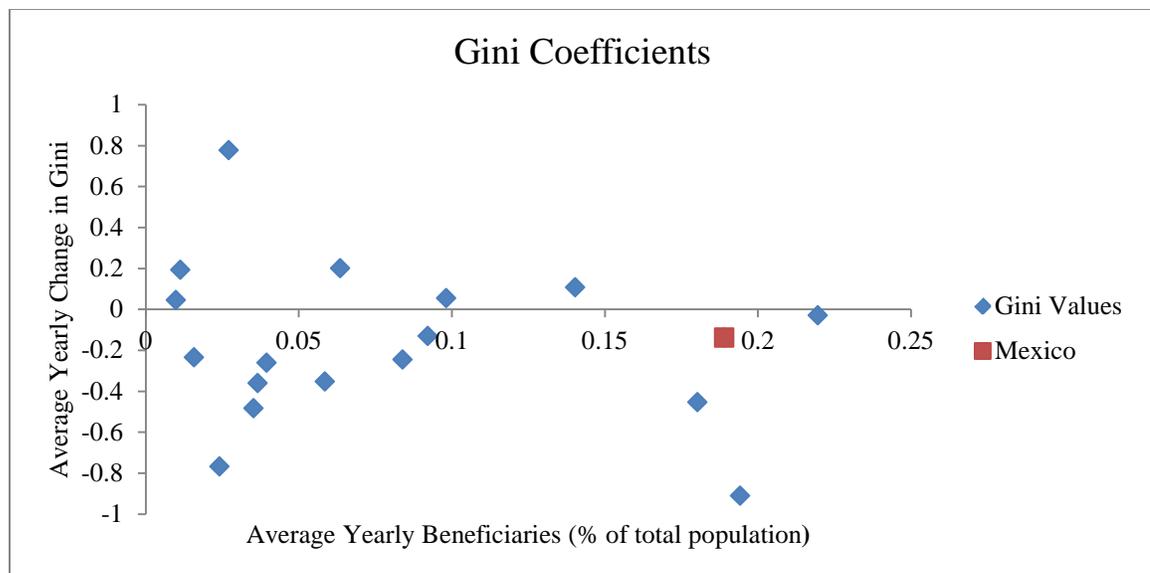
Despite the lack of significant results,<sup>86</sup> it would be premature to conclude that conditional cash transfer initiatives fail to impact inequality. This regression only accounts for eighteen different observations as each one represents a single comprehensive value per country. It would be difficult to see significant results with such few data points. Additionally, although CCT initiatives are designed to eliminate poverty

<sup>86</sup> For the purpose of this thesis, a “p-value” of 10% or lower is statistically significant. Namely, there is a 5% chance that the given relationship is caused by pure random chance.

permanently it is reasonable to expect a delay in the realization of these goals. However, the length of this study only spans 13 years. Therefore, it is possible that these shortcomings in data coupled with the recency of CCT programs account for the lack of conclusive results. However, as shown in Figure #6, most counties exhibited average annual drops in inequality, however slight.

In the case of Mexico, the decrease of inequality was negligible despite being one of the countries with the largest CCT programs. As shown in Figure #6, Mexico's inequality was only reduced by an average 0.13% despite benefiting around 19% of the population. Although this result is discouraging it is important to consider the fact that Mexico, underwent severe and prolonged economic distress at different point from 1997 to 2010. It is somewhat promising to have seen a reduction in inequality, however slight, despite these structural changes in the Mexican economy. However, little can be concluded by analyzing this data alone.

Figure #6: Regression (1) Scatter



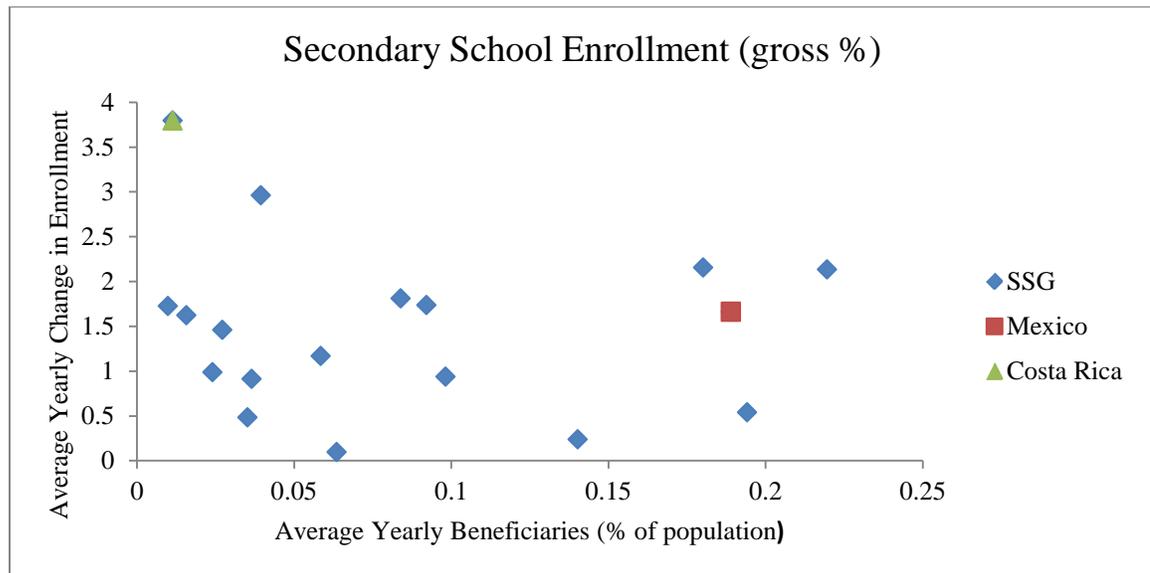
In the case of school enrollment,<sup>87</sup> results fail to be significant at the 90% level. Again, given the relevant data for 1997 and 2010, it is impossible to determine whether or not the countries that invested more heavily in conditional cash transfer managed to increase secondary school enrollment more on average from year to year. In this case, the regression results point to a negative relationship between gross secondary school enrollment and program breadth.

However, it would be irresponsible to interpret this as meaning that CCT negatively impacts school enrollment. Instead, it is important to consider the fact that, as portrayed in Figure #7, most Latin American countries saw an increase in secondary school enrollment in the last two decades. However, some of the most economically stable and successful countries such as Chile underwent drastic leaps in modernization through the early 2000s whilst others fell behind. Therefore, despite having one of the smallest CCT programs, Chile's school enrollment rates skyrocketed. However, it is evident that all countries saw annual increases in schooling as evidenced in the figure below despite being able to make such drastic jumps. However, it is impossible to reliably attribute this growth to conditional cash transfer programs. It might be the case that Latin American countries at large have focused more heavily in increasing school enrollment rates as a means of westernizing the population in recent years. Subsequently, despite seeing a rise in secondary school enrollment rates, this change cannot be reliably attributed to conditional cash transfer as there may be a series of other government initiatives tasked with doing this.

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<sup>87</sup> I only analyze gross enrollment because trends and results are quite similar as are the variables and the added analysis appeared superfluous

Figure #7: Regression (3) Scatter

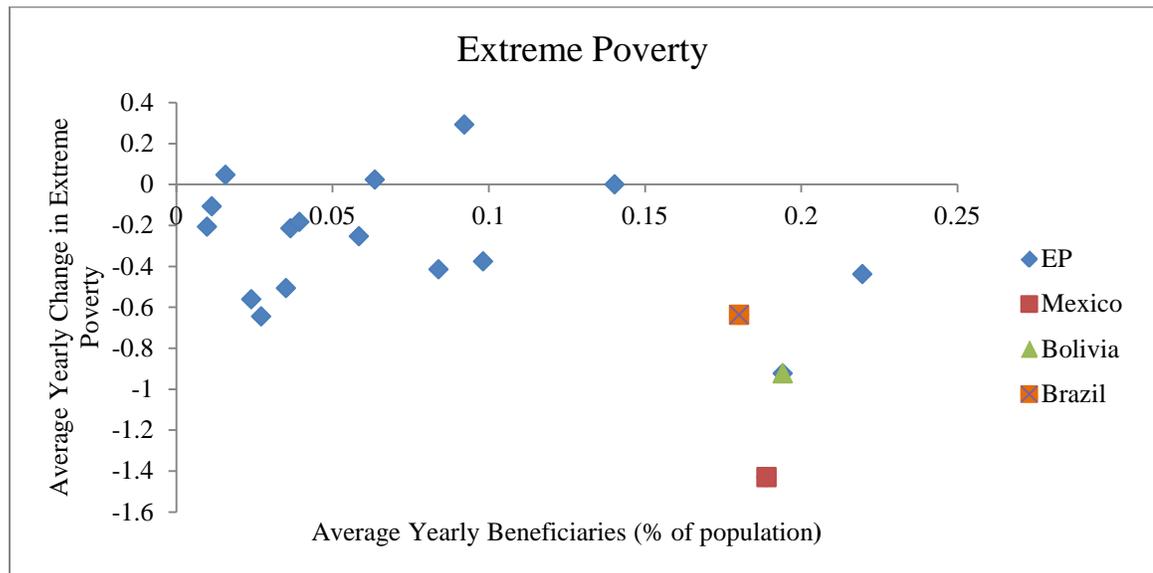


As seen in Figure #7, Mexico saw one of the largest rises in school enrollment when compared to other Latin American countries. Covering an average 19% of the population, Mexico's enrollment rates went up by around 1.66% each year. Although results for Latin America as a whole are inconclusive, this results hint at the possibility of Progresa, one of the lengthiest and most extensive programs, having a positive impact on school enrollment. In fact, save a few outliers such as Costa Rica, where school enrollment rose by a staggering average of 3.8% annually despite having a small CCT program, some of the countries with the largest CCT program breadth saw the largest increases in enrollment. This finding is not surprising due to the fact that individual countries might have enacted a multitude of other development initiatives to complement CCT. However, this does not render CCT necessarily inefficient as results are still inconclusive.

In terms of extreme poverty, the regression rendered significant results at the 95% level. In this case, a percentage point increase in annual beneficiaries is expected to result

in a 2.77% decrease in extreme poverty from year to year. When considering the context of CCT programs, this result is not surprising. Conditional cash transfers, by design, prioritize aiding the nation's poorest in the most remote rural regions. In fact, one of the main advantages of these initiatives is the relative ease with which administrators can reach the most marginalized members of the general population. Thereafter, the fact that Latin American CCT programs were most evidently successful in reducing severe poverty in comparison to nationwide inequality and school enrollment rates.

Figure #8: Regression (4) Scatter



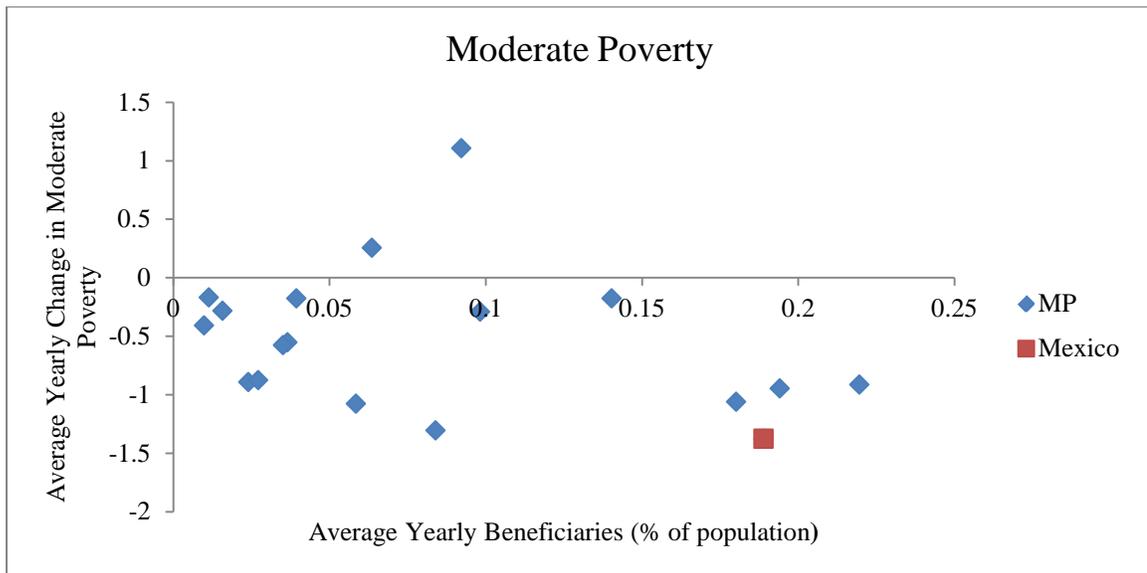
The results point to the fact that countries that implemented the largest conditional cash transfer programs in terms of population coverage generally saw a more drastic decrease in extreme poverty. In turn, CCT was responsible for 23.9% of the change in extreme poverty as indicated by the R-squared value. This finding is further evidenced in Figure #8. The diagram exhibits a downward trend as program coverage increases. Additionally, a majority of Latin American countries saw at least slight average yearly drops in extreme poverty. However, the three countries with the largest programs:

Mexico, Bolivia, and Brazil saw some of the largest reductions in extreme poverty rates. This result implies that a Latin American country's investment in CCT programs is directly related to success in combating extreme poverty.

In the case of Mexico, the country saw the largest drop in extreme poverty at a yearly average of 1.43% as shown in Figure #8. Mexico, a pioneer in conditional cash transfer, has invested more heavily than most other Latin American countries in these programs. Additionally, the Mexican CCT initiative is one of the oldest along with Brazil. This finding indicates that countries might be able to drastically decrease the percent of the population living under dire circumstances of poverty by investing in CCT programs over the long run. It is important to note that Mexico was able to consistently reduce extreme poverty despite being heavily impacted by the financial crisis of 2007.

In terms of moderate poverty, the regression results were once again inconclusive with no statistical significance at the 10% level. Although moderate poverty has generally decreased in Latin America, this change cannot be reliably attributed to CCT programs. However, the model's slope hints at a negative relationship between conditional cash transfer and moderate poverty. The slope indicates that by increasing average beneficiaries by one percent a country could expect to see a 2.69% fall in moderate poverty. However, there is yet to be sufficient evidence to either corroborate or disprove this assumption being CCT programs are fairly young. It is difficult to analyze the long-term effects of such initiatives. However, the fact that countries have tended to see a drop in percent working poor as shown in Figure #9, is encouraging.

Figure #9: Regression (5) Scatter



As portrayed in Figure #9, Mexico underwent the largest average annual decrease in moderate poverty. Similar to extreme poverty this finding is encouraging being that Progresa-Oportunidades is one of the oldest and most expensive CCT initiatives. However, because results are inconclusive, this reduction cannot be justifiably attributed to this program. Nevertheless, it is important to note that Mexico was consistently successful in reducing poverty rates despite undergoing a series of political and economic crises. Conditional cash transfers might be making the country's poor more resilient to nationwide financial distress. However, I cannot prove this within the constraints of my data.

## **Conclusion**

Conditional cash transfer programs have only been present in the social welfare schemes of nations for the past eighteen years. However, they have become vital in defeating Latin American poverty and inequality. Motivated by the apparent success of Mexico's Progresa-Oportunidades and Brazil's Bolsa Escola in the late 1990s, a multitude of Latin American countries adopted CCT initiatives.

In a majority of cases, CCT programs have proved to be a rapid and efficient panacea to a plethora of social development issues such as high poverty rates and low school enrollment rates. Additionally, due in large part to rigorous data collection by administrators, the triumphs of these programs become apparent early on. By targeting the poorest individuals in remote areas CCT initiatives easily accomplish large milestones when it comes to their beneficiaries. The extremely poor, by definition, lack access to the most basic good such as water and food and consequently by granting them a minute stipend their condition can be significantly improved. Consequently, these programs have been asserted as being more successful than the traditional welfare model. Additionally, a large number of Latin American countries adopted these schemes when the nation's poor faced particularly dire conditions due to economic recessions or political instability.

However, the medium and long run success of these programs is yet to be seen. Although conditional cash transfer programs are designed to fulfill the hefty goal of breaking with poverty cycles, the recency of a majority of initiatives coupled with complications in conducting longitudinal studies make the studying of these effects challenging. Consequently, it is unclear whether or not CCT programs are merely a better

yet flawed alternative to past initiatives or if they are in fact a sustainable panacea to the age old problems of poverty and inequality. Nevertheless, a large number of Latin American countries have allotted a large portion of their resources in partaking in conditional cash transfer.

Thereafter, this paper attempts to address some of these questions. In order to shed light on the impact of conditional cash transfer in both the short and medium run, this thesis focuses on Mexico's experience. A pioneer in conditional cash transfer, Mexico's CCT experience is deeply intertwined with the history of conditional cash transfer itself. Furthermore, as one of the oldest and largest CCT programs in Latin America, Progresa-Oportunidades is a relevant example in the motivation, administration, and impact of such initiatives over an extended time period. Furthermore, the case of Mexico is especially relevant when considering that many Latin American countries modeled their pertinent program on Mexico's innovative Progresa program.

Moreover, this thesis aims to analyze whether or not CCT programs that cover the largest chunks of the population have been more successful in reducing poverty and inequality and increasing school enrollment rates within a thirteen year span. If conditional cash transfer programs are more efficient than their conventional welfare counterparts then the largest programs would have seen the most dramatic change in terms of these metrics. Although regression results were inconclusive in terms of moderate poverty, secondary school enrollment, and inequality there is overwhelming evidence that conditional cash transfers have been incredibly successful in combating extreme poverty. That is, the countries with the largest percent population coverage have been the most successful in helping families out of the most severe forms of poverty.

These results are not surprising when considering the structure and design of CCT programs. These initiatives explicitly target and prioritize each nation's poorest individuals. Subsequently, programs are extremely successful in lifting these individuals out of their situations. Although this is an impressive milestone when contemplating the fact that a large number of previous welfare initiatives failed to reach this marginalized population a lot remains unclear in terms of the at large success or failure of CCT initiatives. Nevertheless, it would be irresponsible to conclude conditional cash transfer programs inefficient in reducing inequality and poverty and increasing school enrollment. A majority of CCT initiatives are fairly young thus conclusive results remain pending.

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