

Income Inequality in Latin America and the Caribbean: Inefficient Labor Markets and Remnants of Racism

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Abstract:

This paper aims to explore the key reasons as to why income inequality in Latin America is so vast. The study will investigate the various manners in which labor markets operate throughout Latin America and attempt to draw a connection between labor market inefficiency and income inequality keeping in mind the regions tumultuous history with racism. Factors considered in this assessment are rate of income levels, unemployment, GDP p/capita, educational attainment, and age of labor force. The factors are accounted for in a regression model to examine the level of influence labor markets and race have on income inequality.

JEL Classification: R21

Keywords: Income Inequality, Racial Inequality, Employment, Labor Markets

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1.0 Introduction

The region of Latin America and the Caribbean is currently the most unequal in the world. Large disparities in income levels and subsequently, access to basic services as well as quality social institutions, undermine the region's ability to grow. Throughout the continent, Latin Americans face unequal income levels, educational opportunities, access to water and electricity and political power. Despite recent, substantial progress in poverty reduction and unemployment levels, countries throughout Latin America and the Caribbean struggle to achieve adequate levels of development.

The World Bank explains the challenges of inequality faced by the region in a recent study stating:

“To break with the long history of inequality in Latin America and the Caribbean, societies need to undertake deep reforms of political, social and economic institutions, improve access by the poor to vital services and assets-especially education-deliver income transfers to poor families and adopt specific policies to help indigenous people and Afro-descendants”

As of 2014, 10% of people in Latin America and the Caribbean hold 71% of the region's wealth. Even industrialized South American countries such as Chile, Argentina and Mexico whom are rich in resources and possess a strong labor force experience high levels of inequality. The biggest country in the region, Brazil, is also the most unequal country. Interestingly enough, Brazil is also the country with the highest concentration of Afro-descendants with 49% of its population identifying itself as black.

Given this information it is important to consider the inefficiencies in the labor market and the racial tensions present throughout the continent. With such a high population of both indigenous and Afro-descendant individuals throughout the continent the issue of race should be explored. In addition, the prevalence of the informal sector is a topic worth mentioning given its ability to severely hamper long-term economic growth.

The objective of this paper is to explore the deep reasons as to why Latin America has historically been, and remains, the most unequal region in the world. The paper takes an anthropological perspective delving into factors of colonialism and race as well. It also takes an analytical approach to the rise of informal labor markets and the importance their presence has on the state of the economy. This paper attempts to contribute to the discussion of massive levels

of inequality throughout Latin America by looking at two separate factors of race and informal markets.

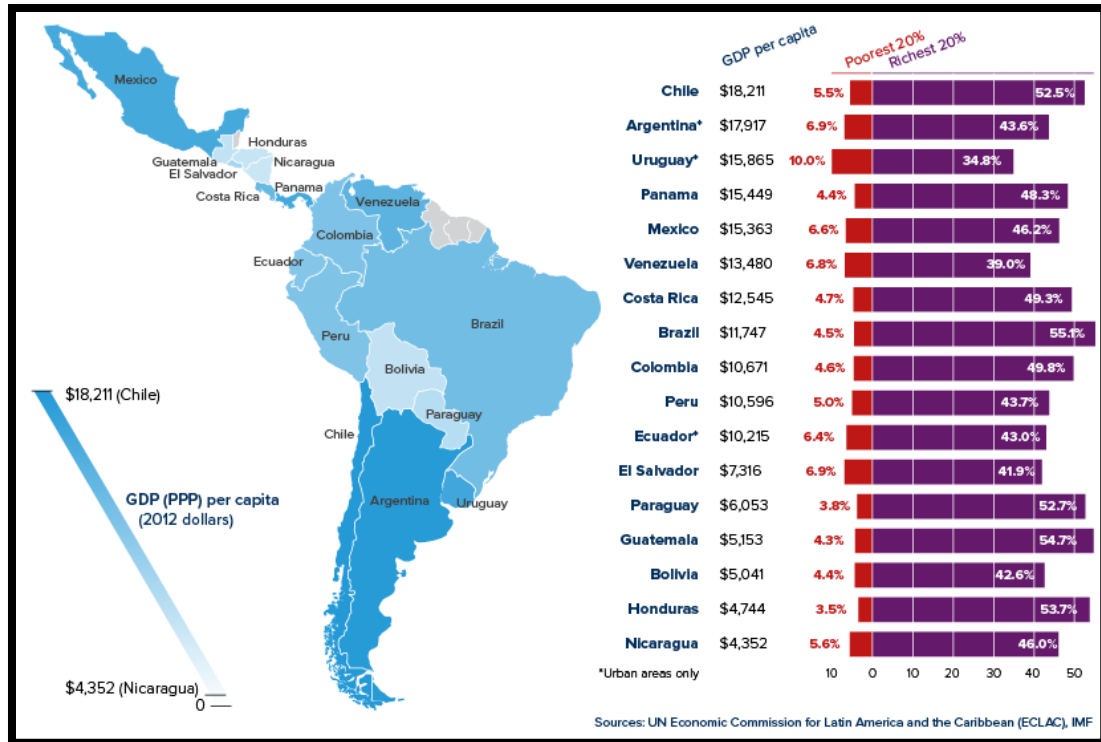
This paper is organized as follows. We will start with a brief overview of key factors discussed consistently throughout the literature. These topics being; income inequality, the strength of the informal labor market and the disparities in educational attainment based on demographics both racial and geographical in nature. Next we will discuss these issues further in the literature review providing connections made between these topics and how it is that they evolve. Following this we will analyze the data and methodology used in this study to assess the importance of these factors in relation to income inequality. Lastly, this paper will end with the empirical results that match the literature review and data findings.

2.0 Income Inequality, Labor Market and Education

As of recently Latin America has experienced significant improvements in the labor market with the unemployment rate declining from 11% in 2002 to just under 7% in 2011. In addition, there has since been a creation of around 35 million jobs in the formal market. The growing labor force has also included the participation of women, having reached 65% by 2012. Over the past decade there has been a general downward trend in wage inequality and a decline in overall inequality. The economy is growing and strengthening, yet as seen in the figure below inequality remains remarkably high. This begs the question of why this is so and what can be done to combat this issue.

Figure 1 below can help us understand how income inequality unfolds in Latin America. In all countries there is severe imbalances in the distribution of income. This is shown by the percentages of each country's richest 20% possession of the country's resources ranging from 34.8% to 55.1%. A higher GDP per capita is not necessarily indicative of lesser inequality which shows the mismanagement and distorted distribution of incomes and resources.

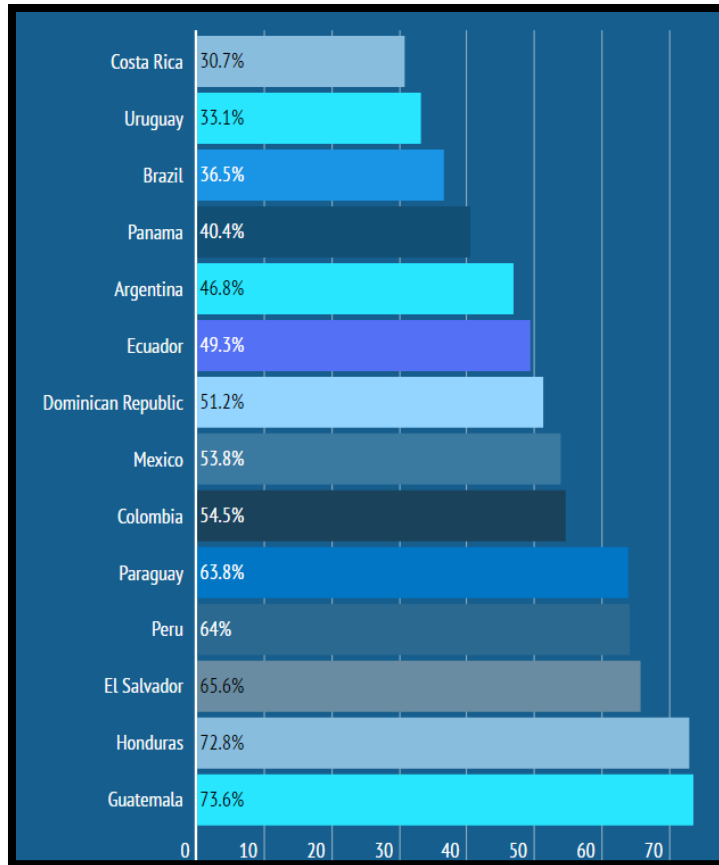
Figure 1: Income Inequality by Country



Source: (<http://anthropologicalobservations.blogspot.com/2014/02/httpimage-storeslidesharecdncoma54b8a20.html>)

Income inequality in Latin America persists in part due to the fact that the informal labor market is thriving. Figure 2 is a graphical representation of the informal economy in Latin America as of 2015. Given few options, informal workers and employers emerge in order to fulfil the needs of their households as well as the demands of the market. In Guatemala, Honduras and El Salvador the informal market constitutes over 65% of the labor market. This suggests a high level of economic inefficiency and poor management of economic resources at the bureaucratic level. Larger countries such as Colombia and Brazil cannot escape this with 54.5% and 36.5% of their economies being informal, respectively.

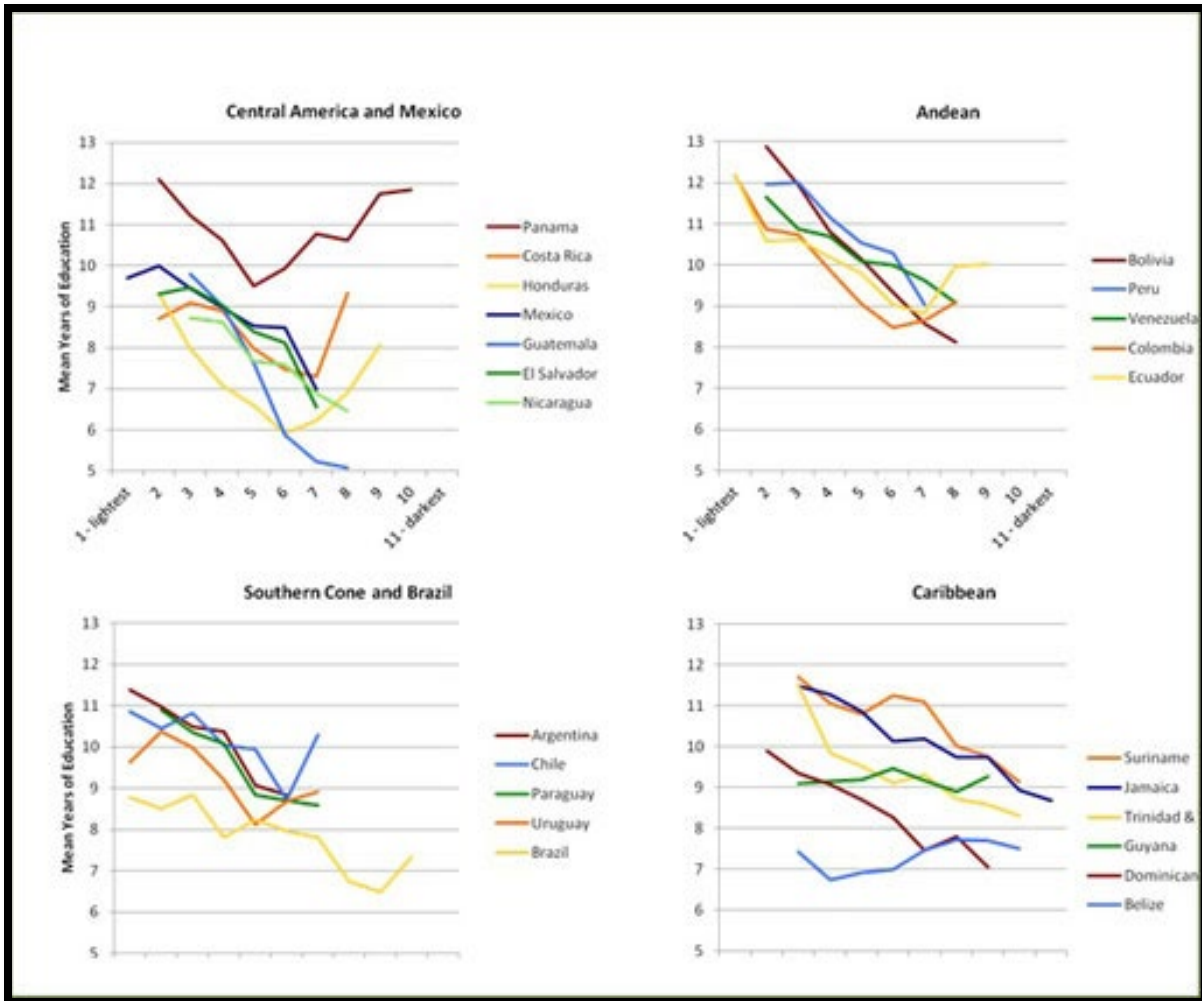
Figure 2: Informal Labor Market by Country



Source: (<http://www.as-coa.org/articles/weekly-chart-latin-americas-informal-economy>)

In figure 3 we see a series of charts displaying disparities in educational attainment among indigenous and black people through the various regions of Latin America. In the Andean region there is a clear downward trend in educational opportunities for the darker population with Colombia and Ecuador showing small improvements. Bolivia and Peru on the other hand, are arguably the two countries in South America with the highest indigenous population and show a steady decline in educational attainment, the darker the individual. The Caribbean, a region with a high concentration of Afro-descendants there has seen a similar patterns as in the Andean region. However, there have been recent improvements.

Figure 3: Regional Disparities in Educational Attainment



Source: (<http://www.americasquarterly.org/the-effects-of-skin-color-in-the-americas>)

3.0 Literature Review

Between 1870 and 1990 inequality in Latin America had been consistently increasing as measured by the GINI coefficient. It was only after the 1990's that inequality began to decline. There has been evidence presented that these trends are largely a result of income inequality and its origins of colonialism (Camps and Engerman, 2016).

Historically in Latin America access to education, land and political participation were rights reserved to the white minority inhabiting the region. Since the vast majority of the population was non-white, inclusive of individuals of indigenous and African, literacy rates were extremely low, ranging between 1/10th and 1/4th. In all Latin American countries education was more

available in urban areas as opposed to rural ones (Frankema et al., 2006; Camps and Engerman 2016).

From 1870 to 1930 there were notable differences in educational attainment within Latin America. The countries of Argentina, Chile and Costa Rica were above the Latin American average while countries such as Brazil, Guatemala and Peru were well below the average. Research suggests that this was so due to social elite refusing to finance public education and rejecting efforts at establishing progressive tax systems (Fattore et al., 2016; Bouillon and Cesar 2000).

Countries like Argentina and Costa Rica shared some features that may have contributed to greater levels of development. These countries were more urbanized, held higher degrees of ethnic homogeneity, received more migration from Europe and had more equal rural populations. The countries that tended to be less developed were less urbanized during this time, had stratified rural societies and high levels of ethnic heterogeneity (Blanco, 2007).

From 1920 to 2000 the six countries of Colombia, Brazil, Mexico, Venezuela, Argentina and Chile all experienced a sharp and continuous decline in illiteracy rates. However, there were instances in which efforts were made to improve this. *El Estado Docente* represented an attempt at spreading education to marginalized populations of blacks and Native Americans, specifically in rural areas (Birdsall, 1995). Additionally, in the 1950's there was a period known as *Desarollismo* when ideology of democracy and human rights began to take precedent in political rhetoric (Ferreira, 2003; Amarante, 2016). During this time there was a surge of liberals taking initiative in programs geared towards forming the human capital necessary for growing industry. Despite their attempts they were met with the harsh resistance of dictatorships which ultimately undermined their goals of development and equity (Amarante, 2012; Garza, 2001).

As of 2010 several improvements have taken place specifically in regards to education. 34.5% of the Latin American population of which are above the age of 15 have attended primary school with 22.3% having completed it. Overall 45.1% of the population had attended secondary school with 25.3% having completed it and 12.6% of the population had attended tertiary education with 7.1% having completed it (Gasparini, 2003; Gaspirini, 2011). There still exists vast disparities in educational attainment between rural and urban areas with 6% of children never having attended school and 23% having dropped out in rural areas. This is a stark contrast when

compared to urban areas where only 1.7% of children had never attended school and only 11% have dropped out (Sahn, 2006). These disparities speak to the inefficiencies present in the current reforms taking place in Latin America. In order to keep up with the global economy Latin American countries must make sincere efforts in allowing educational attainment to their entire populations (Sahn, 2006; Garza, 2001).

4.0 Empirical Methodology

4.1 Data

This study uses data from the years of 1967-2015. This data was obtained from the World Bank through their World Bank Development Indicators. The data is inclusive of all factors mentioned below, however, due to lack of data only 21 observations were taken. The observations are countries in Latin America.

4.2 Model

$$\begin{aligned} Inequality_i = & \alpha_0 + \alpha_1 Income_i + \alpha_2 Income_i^2 + \alpha_3 Age_i + \alpha_4 Schl + \alpha_5 Per_Male \\ & + \alpha_6 Unemp_i + \sum_{j=1}^n \beta_j (Geographical\ Dummies) + \varepsilon_i \end{aligned}$$

This model was taken originally from a study conducted on racial and ethnic differences throughout various regions in the United States. It has been adapted to fit this particular study by including only some factors. The dependent variable becomes the percentage of income shared by the top 10% which is representative of income inequality. The independent variables used are GDP p capita in current U.S dollars; population as a percentage of labor force, primary school enrollment rate, female population rate, and unemployment rate. These variables represent income, average age, level of schooling, percentage of males and unemployment in the above mentioned model, respectively.

5.0 Empirical Results

Summary Stats

	Obs	Mean	Std. Dev	Min	Max
Top10	355	39.62	4.92	23.05	52.5
Population	1715	59.10	5.90	45.27	71.22
Schooling	731	90.61	10.77	35.90	100
Female	1715	50.56	.92	49.10	54.13
Unemployment	817	9.83	5.17	1.3	28.1

This statistics are representative of the numbers that are most important in this study. There are various differences in number of observations because there are separate amounts of data available for each variable. The mean is lowest for unemployment rate meaning that the numbers do not differ very much. It is highest for schooling which is interesting given that both schooling and unemployment are the most important factors in the dataset as shown by the regressions below.

Figure 4: Random Effects GLS Regression

Top10	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
Population	-.1207013	.1246135	-0.97	0.333	-.3649392	.1235366
Schooling	.1762228	.048192	3.66	0.000	.0817682	.2706775
Female	-2.183899	.9874963	-2.21	0.027	-4.119356	-.2484418
Unemployment	.2591743	.0792908	3.27	0.001	.1037672	.4145815
GDP	-.0001983	.0001152	-1.72	0.085	-.000424	.0000274
_cons	138.4932	48.35469	2.86	0.004	43.7197	233.2666

Figure 5: OLS Regression

Top10	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Population	.3262772	.1247836	2.61	0.010	.0802745	.5722799
Schooling	.0804716	.058029	1.39	0.167	-.0339288	.194872
Female	-1.360983	.3868954	-3.52	0.001	-2.123721	-.5982436
Unemployment	-.0455087	.0721232	-0.63	0.529	-.1876948	.0966774
GDP	-.0005936	.0001323	-4.49	0.000	-.0008544	-.0003328
_cons	83.12577	20.90557	3.98	0.000	41.91181	124.3397

The regression shown in figure 4 and figure 5 account for the 21 countries that had reliable and consistent data. The remainder of the countries' data was discarded due to gaps in their data. Of the 21 countries 214 observations were generated. The regression revealed that the most significant variables were unemployment and schooling insinuating the fact that schooling and unemployment have strong relationships to outcome of inequality.

6.0 Conclusion

Given the results from the data and in accordance with the literature it is fair to say that level of education and ability to obtain employment are the two main contributing factors of inequality in Latin America. To further explore this phenomena it would be necessary to employ a model incorporating the impact of racial differences in education systems across the region as well as within the labor industry. However, doing this would imply a more complicated analysis. It will also most likely be useful to explain the differences across regions as represented in the graphic representation above displaying colorism throughout various Latin American countries.

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