

The Impact of Race and Inequality on Human Capital Formation in Latin America During the  
Nineteenth and Twentieth Centuries

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## ABSTRACT.

The Impact of Race and Inequality on Human Capital Formation in Latin America During the Nineteenth and Twentieth Centuries.

In this paper we analyze the reasons behind the delay of the spread of education in Latin America and its relationship with income inequality and race. While the racial composition of the population was behind the low literacy levels obtained during the 19<sup>th</sup> and first part of the 20<sup>th</sup> centuries, racial inequality and its impact on education and educational inequality decreased during the last decades of the 20<sup>th</sup> century. Nonetheless educational levels lagged behind those of the OECD countries even during the late 20<sup>th</sup> century. We also find that the spread of primary and to a lesser extent secondary school during the 20<sup>th</sup> century can explain the sharp decrease of educational inequality during the same time period. Nonetheless this diminution of educational inequality did not have any impact on the diminution of income inequality at least during the 20<sup>th</sup> century. While this paper gives consistent results on race and inequality on human capital formation, the trends and causes of the long run evolution of income inequality till the beginnings of the 21<sup>st</sup> century are still a controversial research topic that we want to further discuss in other forthcoming contributions.

## **Introduction.**

The extent to which Latin America income inequality was one of the most unequal continents of the world during the last 5 centuries has been a matter of debate in recent literature. After the arrival of Spanish colonizers in 1492 this continent suffered from a high epidemic mortality with around 80% of the indigenous population dying (Livi-Bacci 2006). This fact and a demographic regime characterized by low population densities implied that natural resources were abundant at the per capita level. The Malthusian hypothesis based on European overpopulation never operated in this context. In this framework of low demographic pressure and abundance of natural resources the main activities were organized in the form of big mining or agrarian firms. During the late 19<sup>th</sup> century world globalization period the continent specialized in the exports of products such as sugar, cocoa, coffee, cattle, and mining products demanded by European urbanization and the Industrial Revolution. All these products enjoyed economies of scale and therefore the optimal way to produce them was with big firms and plantations. The high levels of property concentration were therefore a characteristic feature of the economy of the continent in the period under consideration..

The recent trends in income inequality in Latin America are generally agreed upon. These was an increase in inequality measured by the Gini coefficient from 1870 to 1990, followed more recently with some decline in inequality after 1990's. An extensive literature has analyzed this topic and its relationship to its colonial origins (Williamson 2010, 2015; Coatsworth, 2008;

Bertola et al (2010); Engerman and Sokoloff, 2012; Acemoglu et al, 2001; Allen et al. , 2015). But in this paper we do not concentrate on this abundant literature on income inequality, but rather in its relationship with other variables such as education and ethnicity and race. We know that the colonial heritage normally implied that literacy was limited in scope to the colonial Spanish elite (Engerman Sokoloff, 2012). But the analysis of the development of the educational system and the evolution of educational inequality and its impact on income inequality needed further research. This paper tries to study these topics as well as trends in inequality according to ethnic group.

### **The Development of the Educational System**

According to Engerman and Sokoloff (2012) during the nineteenth century education was mainly restricted to those in the white minority of colonial origins, the same as the access to other institutions such as land ownership and political participation. In Table 1 we present some preliminary information about the literacy rates in a sample of countries and regions, and compare them with the racial composition of the population.

INSERT TABLE 1 AROUND HERE.

Literacy rates were low in all Latin American countries, between one-tenth and one-quarter. In all countries education was greater in urban than in rural areas. In the nations in table 1 the proportion of non-whites was over seventy percent. This high proportion of non-whites, and the generally very low level of their education, influences the national average and helps to explain the low level of literacy achieved. Thus, even at the end of the nineteenth

century there had to be a major expansion of the educational system to satisfy the educational needs of the largest part of the population.

After the achievement of independence by the Latin American nations in the first decades of the nineteenth century, several countries debated the introduction of reforms of the educational system, and in a few cases, reforms were introduced, in order to guarantee more universal access to primary education. These reforms generally date from the mid-nineteenth century, occurred several years later in Argentina (1884) and Colombia (1886). In the short-run, however, none of these reforms were successful, since the conservative parties leading the reform process wanted mainly to preserve the privileges of the colonial elite and to keep large sectors of the population, mainly the rural and the non-white, marginalized. This initial reform movement aimed at more universal literacy, but was limited in scope and accomplishment during the second half of the nineteenth century (Reimers 2006) (1).

The Catholic church, in contrast with the Protestant church, also played a role in increasing inequality, being generally against the spread of secular education. The Catholic clergy did not support the practice of reading the Bible by laymen and did not regard literacy as a prerequisite for understanding and adhering to Christian values. Literacy was part of the privileges of the clergy and the nobility, and the church perceived education as part of its traditional domain and feared loosening its monopoly control over a privileged medium to spread religious ideology and maintain religious authority (Frankema 2009; Reimers 2006; Landes 1998).

Lindert (2010) demonstrated the relation between the concentration of political power and wealth and low levels of education. According to results by Frankema (2009) (see also Bertola, Ocampo (2013)) Latin American countries had lower levels of education than those of European countries, North America, and Japan, with similar levels of per capita GDP in the years from

1870 to 1930, although the differences within its regions were notable. Argentina, Chile and Costa Rica were above the Latin American average, while Brazil, Guatemala, and Peru were below the average. This anomaly (LACs lower enrolment rates than could be expected on the bases of their GDP per capita levels) has been attributed by Lindert to the resistance of wealthy social classes to pay taxes to finance the education of the poor. The social elites wanted to maintain their privileges, and were also against a system of direct and progressive taxation. Therefore they were very reluctant to finance the costs of mass primary education aimed at the less favored social classes.

There were, however, marked intra-regional differences in the scale and scope of the diffusion of education in LACs. Countries starting the process of diffusion of mass education earliest were those in the colonial periphery, where the impact of the Iberian metropolis was lower than in the central areas of the colonial system. Countries such as Argentina, Uruguay, and Costa Rica shared some features such as being more urbanized, having higher degrees of ethnic homogeneity, and receiving more migration from Europe and its rural population was more equal. Countries where mass education arrived later were those less urbanized, the rural society was more stratified, with high ethnic heterogeneity and a small white elite. Most of LACs were in between the two extremes and began to invest in mass education at the beginning of the twentieth century (Frankema 2009; Bertola, Ocampo 2013).

Figure 1 presents data on the changes in the average years of schooling in the six major economies of Latin America: Argentina, Brazil, Chile, Colombia, Mexico, and Venezuela, in the years from 1880 to 2010. Note that at the start the average years of schooling was only about one. The percentage of the population with zero years of schooling was high, which greatly reduced the mean years of schooling of the total population. After the start of the twentieth

century, all nations began a continuous increase that persisted throughout the century, though even as late 2010, the gap between the highest and lowest countries was still about 4 years.

INSERT FIGURE 1 AROUND HERE.

Figure 2 presents data on the illiteracy rates of the six countries from 1920 to 2000. Illiteracy rates in 1920 were still high, above fifty percent in Colombia, Brazil, Mexico, and Venezuela, and between 30 and 40 percent in the most southern nations, Argentina and Chile, the two countries with the highest number of years of schooling (see Figure 1). These latter two countries had the highest proportion of white population and received the most immigrants from Europe. This helps to explain the lower rates of illiteracy, since unlike the pattern in the United States, in Latin America the immigrant population tended to be more educated and literate than were the native-born. From 1920 to 2000, all six nations experienced a sharp, continuous decline in the extent of illiteracy, all being below twenty percent by 2010, with Brazil being the nation with the greatest percent of illiterates.

INSERT FIGURE 2 AROUND HERE.

During the twentieth century, due to the confluence of several factors, LACs governments began to support the development of mass education: the need to modernize society and to prepare it with the human capital needed to increase labor productivity; the need to develop national identities; and the need to transform the structure of economic opportunities and to

stimulate upward social mobility. This process was controversial because of the different interests of the political parties competing for power, whose discussions of the goals to be attained were based on arguments such as who had the right to education and how, the duration and sponsorship of mandatory primary schooling, and who should have the right to achieve secondary and university education. During the first half of the twentieth century the national systems of public mass education begun during the last part of the nineteenth century were consolidated and there was a growing centralization of educational governance. Conservatives accepted public mandatory primary school with the condition it would not influence social mobility. As we will see the result was the segmentation of the educational system and children from the poor social strata received an education of lower quality with less access to secondary and university school. But the new public system of “Estado Docente” represented an attempt to spread education not only to the elite but to the marginalized populations of blacks, Native-Americans, and mixed non-whites in rural areas. During the years of Import Substitution Industrialization and the period of “Desarrollismo” in the 1950’s a modernizing ideology expanded through all Latin America, with liberal parties taking the lead in providing the human capital needed for nascent industries as well as supplying an education to the entire population as inspired by the principles of democracy and human rights.

The influences of this more liberal education policy was truncated, however, in the 1960’s with the advent of dictatorships. These dictators abolished the more liberal and democratic aspects of education and demobilized many of the more radical groups that began during “Desarrollismo”. They emphasized the development of the necessary skills and knowledge to have workers successfully work in the industrial sector and to further economic growth (Reimers, 2006).

This process of reforms came together with changes in the duration of the mandatory public school from 5 or 6 years at the beginning of the twentieth century to 8 or 9 years at the end. More specifically by the end of the twentieth century in the countries reported in figure 1 the duration of primary school was 9 years in Argentina and Chile, 10 years in Mexico, 8 years in Brazil and Colombia and 7 years in Venezuela. From the results presented in figures 1 and 2 we can conclude that in most of the cases the improvement observed in the average years of schooling and the diminution of illiteracy meant only finishing the primary level of education. According to recent results by Barro and Lee (2010) for the aggregate of LACs by 2010 34.5% of the population aged 15 or more had only attended primary school and 22.3% had completed it, 45.1% had attended secondary school and 25.3% had completed it, and 12.6% had attended tertiary education and 7.1% had completed it. According to the same authors Latin America together with Sub-Saharan Africa were among the continents of the world where the rates of return to an additional year of schooling were the lowest.

Both Frankema (2009) and Reimers (2006) have argued that the process of expansion of the quantity of education was detrimental to its quality. Frankema has stressed that the average number of schooling years does not inform us about the dropouts and the repetition of grades by many children in the rural areas. By the end of the 20<sup>th</sup> century dropouts were higher for the poor families in both the urban and rural settings. In rural areas however there were more children who never attended school (6% in rural areas vs. 1.7% in urban areas) and more dropouts (23% in rural areas vs. 11% in urban). Reimers (2006) informs us about other qualitative variables: high percentages of children in the third- and fourth- grades of a rural primary school report not having a language textbook as opposed to the greater proportion in private schools in urban areas; around 30% of children in all settings did not trust their teachers and constantly fought

with classmates; and about 40% of children in the third- and fourth-grades in rural and urban settings report they did not always understand the explanations given by their teachers.

Therefore the segmentation of the educational system is apparent and a high proportion of children do not fully profit from the process of reform taking place during the twentieth century. Although the basic level of education for most of the population had increased relatively rapidly during the twentieth century, the gap with respect to the OECD countries remained basically unchanged even during the second half of the century. In order to compete economically with the OECD nations, the educational system still needed marked improvements in both quantity and quality of schooling.

### **Education and Inequality**

As pointed out, education in Latin America was quite unequally distributed among the population in the nineteenth century, and while it became more widely diffused in the twentieth century there remained significant differences within the population, by ethnicity, income level, and rural-urban location. In this section we wish to present some measures of trends in educational inequality as well as in income inequality to examine the extent to which inequality in access to education was related to income inequality.

To measure educational inequality we use the educational Ginis available in the latest Clio Infra. Data on income inequality comes from the published works of Leandro Prados de la Escosura (2007) who provides a series of income Ginis since the middle of the nineteenth century. There is information available based on wage rates (Fitzgerald, 2008; Astorga, et al. 2005) and on measures of overall income (Coatsworth 2008; Williamson 2010, 2015; Bértola, et al. 2010; Arroyo-Abad, 2013). Prados de la Escosura offers the longest series, from 1850 to 1990, prepared in a consistent manner, unlike the others which provide evidence for only part of

the period. We have added estimates to the series from 1990 to 2000 with the use of official data from the World Bank. While there may be differences in some cases between the estimates of Prados de la Escosura and other sources, these do not lead to any substantial differences, so for reasons of consistency we choose to rely on the Prados de la Escosura estimates.

Figure 3 demonstrates that the educational Ginis were high, between 60 and 80, at the end of the nineteenth century, but they trended downward in the twentieth century. The broadening of education appears to have played a major role in the decline of the educational Ginis, as did the increase of schooling for women (Reimers, 2006). The high educational Ginis at the end of the nineteenth century can help to explain why income inequality was so high at this time. Recent studies of the U.S. during the twentieth century (Goldin and Katz 2008) indicate that the rising returns to education explain part of the rising income levels, suggesting that the unequal distribution of education in nineteenth century Latin America was another important factor in explaining the persistence of high income inequality.

INSERT FIGURE 3 AROUND HERE.

The widespread declining level of the educational Ginis after 1900 was influenced by the changes in education resulting from the policies of the liberal governments. More equal access to education across race, gender, and ethnicity, no matter how limited, can explain the reduction in wage inequality, particularly in the period 1970 to 2000 (Camps, et al., 2007), and thus the reduction in overall income inequality.

## **Inequality, Education and Race**

While the observed trend in the magnitude of educational inequality in the twentieth century generally has been pronounced, several scholars and educators have stressed the continued differences in school quality (Reimers, 2006). Unequal educational facilities, including inadequate teacher skills provided to the non-white population has led to unequal chances in socioeconomic competition. According to proponents of the importance of differences in educational quality, the education system has been segmented and Native-Americans, blacks, mulattos, and mestizos have been placed in lower quality schools, with lower budgets and fewer resources, thus unable to provide for equality of education. While more prominent in the nineteenth century, the impact of differences in racial structure have led to continued differences in education and income levels. Table 2 presents measures of the extent to which access to education was unequal in the twentieth century. Children from parents in the lowest income deciles (normally non-whites) received only half/ or fewer years of education than children from parents in the highest income decile.

INSERT TABLE 2 AROUND HERE.

From estimates of race diversity in Latin America ( Rosenblat, 1945) it appears that in 1825, before the mass migration from Europe to the Americas, Native Americans represented between 9.1% (Brazil) and 55.7% (Central America) of the total population. The information in regard to blacks is less complete, although Rosenblat (1945) estimates that there were about 387,000 blacks in continental Spanish America, plus 389,000 in Cuba and 260,000 in Guyana.

Brazil's black population was 1,960,000, equal to 16.4 percent the Brazilian population (see also Graham and Merrick, 1979). The population of the black population enslaved in Latin America in 1825 was 75 percent of the total black population of about 3.4 million, meaning that Latin America had a larger proportion of free blacks than the United States. This reflected, in part, the fact that after independence from Spain during the first decades of the nineteenth century slavery was abolished, although in Spanish America in several cases the process was gradual, not immediate, generally by a process *called* "the law of the free womb" (Engerman and Sokoloff 2012). In the country with the largest number of slaves as well as the largest share of slaves in the total population, Brazil, the ending of slavery was finally accomplished in 1888, seventeen years after the passage of the "Law of the Free Womb." Also note that, for the six countries listed by Rosenblat (see table 1) the percentage of whites in the overall population in 1825 was generally less than 20 percent, while the white share in Brazilian population was 7.7 percent.

The picture seen in early nineteenth century changes significantly decades later with the development of mass migration from Europe. During this period about 60 million Europeans migrated to other countries of the world, particularly to North and South America, and to Australia (Hatton and Williamson 1998; Sanchez Alonso 2007) (2). Most of those who migrated to South America came from southern Europe (Portugal, Spain, and Italy), with the preferred destinations of those from Spain being Argentina, Chile, and Uruguay, and, for Portugal, to Brazil. The second half of the nineteenth century saw marked changes in the racial structure of Latin America, as those nations receiving immigrants increased their share of whites in the population, raising the levels of education in these countries. Since the white European

immigrants to Latin America tended to have more education than did the native-born whites at this time, this had served to raise education levels.

The liberal reforms of the twentieth century and the increased share of whites in the population both tended to increase educational levels as well as to reduce the extent of educational inequality. This helps to explain income and educational changes in Latin America over time. Bucciferro (2014) has stressed that in the case of Brazil racial differences were basic to understanding educational and income inequality, but although the situation improved during the last twenty years the gap remains wide. According to Engeman and Sokoloff (2012) and to Bucciferro (2014) racial equality in education has improved only in the recent past. In order to check this second set of hypotheses related to the impact of race on education and inequality we have performed several cross-sectional regressions based on the data sources already quoted in this paper. Data on ethnicity and race for the late twentieth century come from Alesina et al. (2003).

INSERT TABLE 3 AROUND HERE.

INSERT TABLE 4 AROUND HERE

In tables 3 and 4 we see evidence of the segmentation of the educational supply according to race. Only in 1960, however, we obtain statistically significant coefficients. But the sign and scope of the coefficients are very similar for both dates. An increase of 1 per cent in the proportion of whites in overall population has a significant effect in the years of schooling, of 0.0243 in 1960 and 0.01984 in 2000. A 1 percent increase in the proportion of blacks has a negative influence in the years of schooling in both years, while the results for the Indian

population are positive but small. Therefore the regression results confirm that there are still wide differences in school attendance as late as end of the twentieth century. Whites remain in a privileged situation, enjoying more years of school than Native-Americans and blacks, the latter being most marginalized group.

INSERT TABLES 5 AND 6 AROUND HERE.

Regarding the influence of race on educational inequality we find some evidence to support Bucciferro's (2014) hypothesis that between 1960 and 2000 there was a diminution of inequality according to race. The value of all coefficients diminish. The increase of Indian population by 2000 has a negative impact on educational inequality the same as in the case of whites, although in 2000 the size of the coefficient is higher and therefore the impact of the schooling of whites in educational inequality is greater than in the case of Indians. The impact of blacks in 2000 continues to be positive in increasing educational inequality even as the value of the coefficient diminishes. Educational inequalities diminished during the last decades of the twentieth century though blacks continued to be in a marginalized position and racial differences continued to be wide.

To describe the extent of education inequality by income level at the end of the twentieth century Table 2 (see also table 7) compares the average number of years of schooling of those in the lowest decile of the income distribution with those in the highest decile in each country. In most of the countries for which we can obtain the necessary data, for most the period of education for the richest decile was at least double to that of the poorest decile. Among the poorest people, which contains a disproportionate number of Native-Americans and blacks, years of education varied from 2.1 to 7.1 years, while for the richest decile the range was from 6.7 to

14.24 years. Thus, while in the 1990's, most poor people did not succeed in completing primary schooling, a large number of those in the richest decile were able to come close to completing the secondary level. While the educational gaps among ethnic, racial, and income groups decreased in the twentieth century, the persistence of differentials help to maintain the differences in Latin American income inequality that, according to Deiniger and Squire (1998), are, together with several African countries, the most unequal in the world (3).

INSERT TABLE 7 (PART I, PART II, PART III, PART IV AROUND HERE)

## **Conclusion**

There have been major changes in the level of education achieved in Latin America, as well as some narrowing of racial and ethnic differences. Nevertheless, there remain significant differences in the amount and quality of education received by the non-white population relative to the white population. Moreover, despite the narrowing of differences in education, the disparities in income distribution persisted throughout the 20<sup>th</sup> century. Clearly the continuity of political inequality from the settlement period has not been fully overcome, and even reforms in the education systems had not been able to overcome the other institutional factors that maintained inequality. While some changes have been shown to be possible to achieve more equality in levels of education, it will no doubt require other methods to close the present gaps. With the spread of education, a diminution of wage inequality during the last decades of the 20<sup>th</sup>

century has been observed (Camps, 2009). It is possible that these same forces, more specifically the sharp diminution of educational inequality during the 20<sup>th</sup> century and, thus far, in the 21<sup>st</sup> century, may explain the decrease of income inequality during the first decades of the 21<sup>st</sup> century as reported by several authors based on the study of household budgets (ECLAC, 2012).

End notes.

- (1) See also Engerman and Sokoloff (2012): 139. They point out that by 1914 Argentinean literacy rates were 59 percent among foreign born and 40 percent among natives. Rates in Uruguay were very similar
- (2) See also Maluquer de Motes, Nadal, Macías (1991-94). This is a 12 volume set of monographs on Spanish emigration to Latin America.
- (3) Educational attainment differences in Latin American countries from 1960 to 2003 are also presented by Hanushek, Woessman (2012) which provide similar results.

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TABLES AND FIGURES.

**Table 1**  
**Ethnicity, in 1825, and Literacy**

**(Who Can Read and Write), Selected Years**

Country	% Blacks and Native Americans 1825	Literacy Rate %
Mexico	81.9	22.2 (1900)
Central America	82.3	11.3 (1893)
Colombia	78.3	----
Peru and Chile	81.0	13.3 (1854)
Venezuela	74.0	----
Brazil	81.5	15.8 (1872)

Sources: Data on race come from Rosenblat ( 1945) and data on literacy com from Newland ( 1991)

**Table 2**

**Average Years of Schooling According to Income Deciles, 1990s**

Country	(1) Lowest income decile	(2) Highest income decile	(2)/(1) %
<b>Argentina</b>	<b>7.1</b>	<b>14.24</b>	<b>2.0</b>
<b>Bolivia</b>	<b>6.44</b>	<b>12.12</b>	<b>1.88</b>
<b>Brazil</b>	<b>2.41</b>	<b>10.33</b>	<b>4.28</b>
<b>Colombia</b>	<b>4.86</b>	<b>6.68</b>	<b>1.37</b>
<b>Costa Rica</b>	<b>4.51</b>	<b>11.85</b>	<b>2.62</b>
<b>Chile</b>	<b>6.31</b>	<b>13.12</b>	<b>2.07</b>
<b>Ecuador</b>	<b>3.92</b>	<b>11.76</b>	<b>3.0</b>
<b>El Salvador</b>	<b>2.10</b>	<b>11.02</b>	<b>5.3</b>
<b>Honduras</b>	<b>2.73</b>	<b>8.98</b>	<b>3.28</b>
<b>Mexico</b>	<b>3.08</b>	<b>11.24</b>	<b>3.64</b>
<b>Peru</b>	<b>5.85</b>	<b>10.84</b>	<b>1.85</b>
<b>Uruguay</b>	<b>6.3</b>	<b>12.68</b>	<b>2.01</b>
<b>Venezuela</b>	<b>5.85</b>	<b>9.93</b>	<b>1.69</b>

Data Source: Székeley and Montes (2006)

**Table 3**

**The impact of race on years of schooling in 1960**

Indian	<b>0.0119</b>	(0.01131)
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White	<b>0.0243***</b> (0.0067)
Black	<b>-0.01443</b> (0.0101)
Constant	<b>2.21295***</b> (0.39473)
<b>N=19; R<sup>2</sup>=0.6430;</b> (standard error in brackets); *p<.1, **p<.05, ***p<.01	

Data sources: Data on race from Rosenblat (1945) and data on education from Barro, Lee (2010)

**Table 4**

**The impact of race on years of schooling in 2000**

Indian	<b>0.00822</b> (0.01978)
White	<b>0.01984</b> (0.01175)
Black	<b>-0.024748</b> (0.017721)
Constant	<b>5.547209***</b> (0.69018)
<b>N=19; R<sup>2</sup>=0.3396;</b> (standard error in brackets); *p<.1, **p<.05, ***p<.01	

Data sources: data on race from Alesina et al (2003) and data on education from Barro, Lee (2010)

**Table 5**

**The impact of race on educational inequality (educational gini) in 1960**

Indian	<b>0.1410</b> (0.2385)
White	<b>-0.23628</b> (0.08325)
Black	<b>0.36675*</b> (0.12548)
Constant	<b>48.2922***</b> (4.29218)
<b>N=20; R<sup>2</sup>=0.6490;</b> (standard error in brackets); *p<.1, **p<.05, ***p<.01	

Data sources: data on race from Rosenblat (1945) and data on educational gini from Clio Infra.

**Table 6.**

**The impact of race on educational inequality (educational gini) in 2000**

Indian	<b>-0.02670</b> (0.06470)
White	<b>-0.98174**</b> (0,03854)
Black	<b>0.22328*</b> (0.05809)
Constant	<b>28.9049***</b> (2.2289)

**N=20; R<sup>2</sup>=0.6777**; (standard error in brackets); \*p<.1,\*\*p<.05,\*\*\*p<.01

Data Sources: data on race from Alesina (2003) and data on educational gini from Clio Infra.

**Table 7. Part I**

**Racial differences in education, related measures**

**(A)**

		Literacy Rates	
Year	Country	White	Colored
1860	Puerto Rico	19.8	2.1
1861	Cuba	38.5	5.3
1899	Cuba	51	28

*Source: Newland (1991) and Nelson ( 1950)*

**(B)**

		Literacy Rates	
Year	Country	Native White	Colored
1899	Cuba	46.7	28.0
1919	Cuba	62.7	53.1
1943	Cuba	72.6	67.4

*Source: Nelson (1950)*

**Table 7 Part II**

**Adults. Percent by highest level of education, 1998**

	Mexico			Costa Rica			Chile		
	White	Moreno	Mul	White	Moreno	Mul	White	Moreno	Mul
Primary	22	36	53	50	54	54	35	38	50
Secondary	32	38	30	26	22	25	38	38	40
Higher	41	24	11	18	10	7	26	24	9

Source: Reimers ( 2006)

Brazil	Whites ages 25-60: 7 years of schooling
	Black aged 25-60: 4 years of schooling
Guatemala	Indigeneous: 2 years of schooling
	Non-indigeneous: 5 years of schooling
Peru	Indigenous: less than 6 years of schooling
	Non-indigeneous: >9 years of schooling
Bolivia	Indigeneous: 4 years of schooling
	Non-indigeneous: 9 years of schooling
	Indigeneous 91% never in school, others 13%

**Table 7. Part III**  
**Race and Level of Education.**

Brazil		1910	1920	1930
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Literacy Rate, Population aged 6-10	White	55	62	67
	Black	22	28	33
	Mixed	27	34	38
Never attended school	White	50	43	37
	Black	81	76	70
	Mixed	77	71	67
Completed Elementary Education	White	3.6	4.5	5.1
	Black	0.2	0.4	0.5
	Mixed	0.5	0.6	0.9
<i>Source: Musachio, Fitscherald, Viarengo (2014)</i>				

#### **Percent Illiterate (Age 5+older , Males)**

Brazil in 2010	
White	Black
7.4	15.4

#### **Percent. Highest level of Education**

Brazil in 1940			
	Elementary	Middle	Superior
White	71.4	18.7	10.0
Black	94.1	4.5	1.3
Mulatto	86.6	10.0	2.4
Source:	Luna, Klein (2014)		

Source: Luna, Klein (2014)

#### **Literacy Rate in percent**

Brazil in 1940	
White	52
Black	22
Mulatto	30

Source Luna and Klein (2014)

**Table 7. Part IV**  
**Illiteracy Rate in the United States**

Year	White	Black
1870	11.5	79.9
1900	6.2	44.5
1952	1.8	10.2
1979	0.4	1.6

**College Graduates (male)**

Year	Native- Born White	Native- Born Black
1940	6.8	1.5
1980	23.6	9.1
1997	30.1	16.3

Source: *Historical Statistics*

FIGURES.

Figure 1

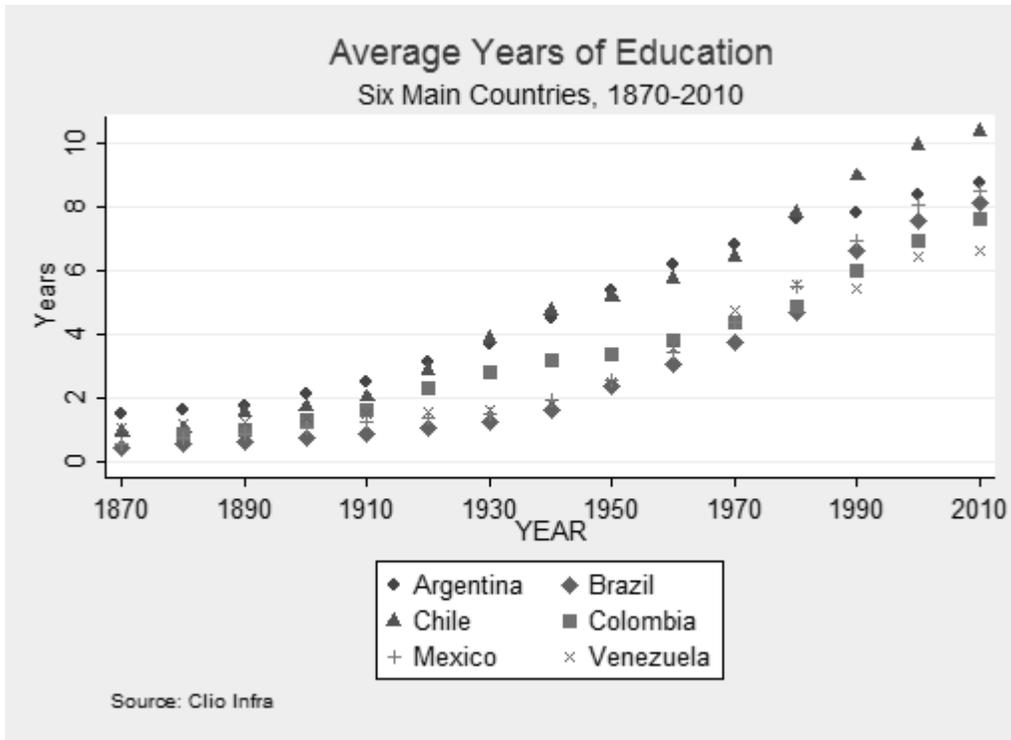


Figure 2

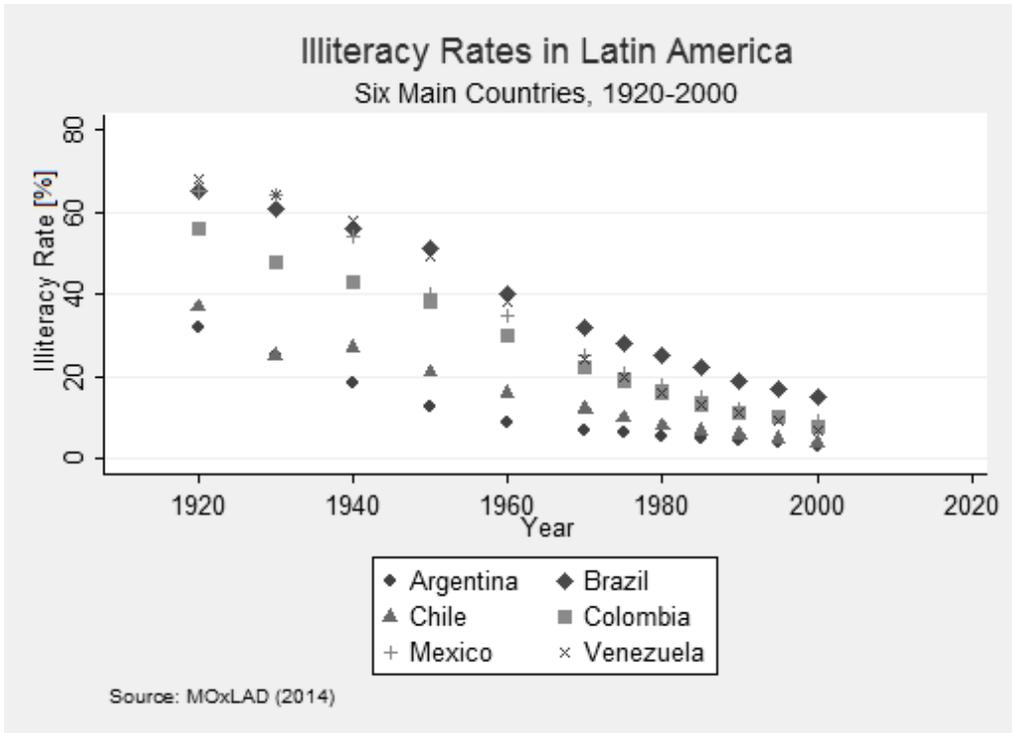
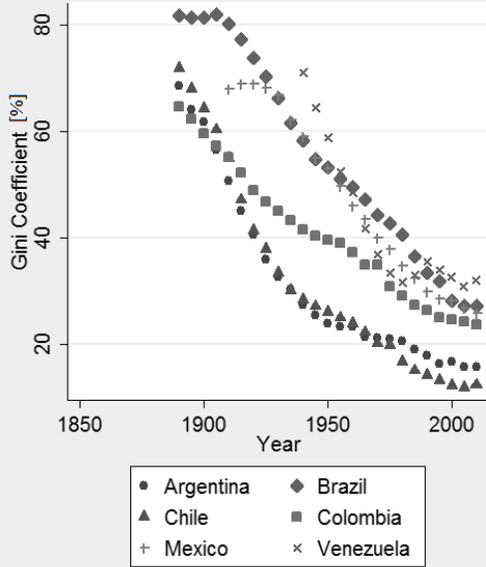


Figure 3.

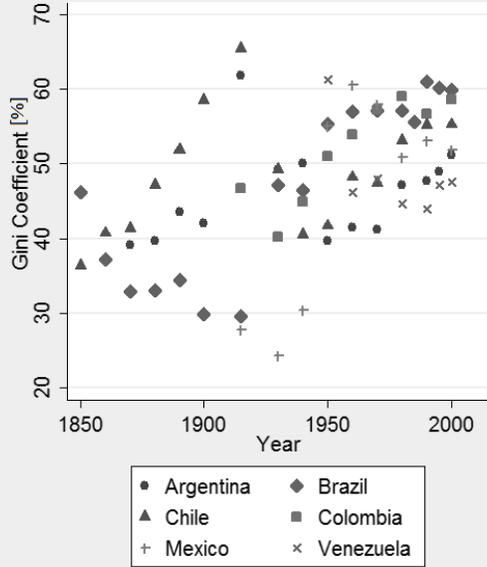
# Inequality in Latin America

**Educational Inequality**  
Six Main Countries, 1890-2010



Source: Clio Infra

**Income Inequality**  
Six Main Countries, 1850-2000



Source: Prados de la Escosura (2007)