

**Economic History of Developing Regions** 

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rehd20

# Economic inequality in Latin America and Africa, 1650 to 1950: Can a comparison of historical trajectories help to understand underdevelopment?

## Stefania Galli, Dimitrios Theodoridis & Klas Rönnbäck

**To cite this article:** Stefania Galli, Dimitrios Theodoridis & Klas Rönnbäck (2022): Economic inequality in Latin America and Africa, 1650 to 1950: Can a comparison of historical trajectories help to understand underdevelopment?, Economic History of Developing Regions, DOI: <u>10.1080/20780389.2021.2024073</u>

To link to this article: https://doi.org/10.1080/20780389.2021.2024073

© 2022 The Author(s). Co-published by Unisa Press and Informa UK Limited, trading as Taylor & Francis Group

A	_	1
	г	
П	Т	
	Г	

6

Published online: 04 Feb 2022.

_	
С	
L	071
~	

Submit your article to this journal 🕝

Article views: 360

L
 _

View related articles



View Crossmark data 🗹



#### REVIEW

OPEN ACCESS Check for updates

UNISA University of south africa

Routledge Taylor & Francis Group

# Economic inequality in Latin America and Africa, 1650 to 1950: Can a comparison of historical trajectories help to understand underdevelopment?

### Stefania Galli <sup>1</sup><sup>a,b</sup>, Dimitrios Theodoridis<sup>b</sup> and Klas Rönnbäck<sup>b</sup>

<sup>a</sup>Department of Economic History, London School of Economics and Political Science, London, UK; <sup>b</sup>Unit of Economic History, University of Gothenburg, Gothenburg, Sweden

#### ABSTRACT

The present article provides a comparative review of historical economic inequality in the two most unequal regions of the world, namely Latin America and Africa. This contribution examines novel studies that provide quantitative estimates of income and/or wealth inequality in the two continents in terms of sources, methods, results and interpretations, focusing on the period 1650 to 1950. The article shows that although scholars in the two regions have often employed similar methodologies, their results are far from conforming to a uniform pattern. The present review highlights how scholars of Latin America and Africa tend to remain geographically isolated, failing to capture the learning opportunities stemming from the work of their continental counterparts in terms of both sources and methods.

#### **KEYWORDS**

Inequality; resource distribution; Latin America; Africa; history

#### **1. Introduction**

Studies of inequality have seen a resurgence in recent decades, not least following a growing interest in the consequences of inequality on economic development. In this context, history has been deemed vital to the understanding of the present, a belief that has fuelled a new wave of studies on historical inequality. Previous studies on the subject were few and far between (see e.g. Gudmundson 1983; Bigsten 1986; Berry 1990), yet historical inequality is currently experiencing a much-needed revival (Federico 2021). Notwithstanding the prevalence of historical studies of inequality focusing on Europe and North America, the new wave of research has increasingly brought other regions into the spotlight – particularly in the last two decades – among them Latin America and Africa.

It is not by chance that Latin America and Africa have received ever-increasing attention in terms of research on inequality. It is well-established that these two regions are the most unequal in today's world both from an economic and a social perspective (The World Bank 2016).

CONTACT Stefania Galli 🐼 S.Galli@Ise.ac.uk 🗈 Department of Economic History, London School of Economics and Political Science, London, UK

<sup>© 2022</sup> The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/ licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

2 👄 S. GALLI ET AL.

There are several theories on the determinants of inequality, ranging from neoclassical theories of human capital formation and the marginal productivity of labour, to structural theories of unequal access to power and resources (Guidetti and Rehbein 2018). In the case of Latin American and Africa, most of the theories that have been put forth suggest that high contemporary levels of inequality may have a long history (see e.g. Bourguignon and Morrisson 2002; Lopez and Perry 2008). Several authors have argued for the negative and long-lasting impacts of certain institutions, e.g. slavery and colonial rule (De Ferranti et al. 2004; Engerman and Sokoloff 2005; Huber et al. 2006; Angeles 2007; Frankema 2009; Nunn 2009; Acemoglu and Robinson 2010; Bértola et al. 2010; Fourie and von Fintel 2011; Soares, Assunção, and Goulart 2012). Other scholars have instead placed more emphasis on commercialization as a determinant of resource distribution rather than colonialism or slavery per se (Coatsworth 2005, 2008; Williamson 2010; Gelman 2011).

Aside from the commonalities concerning inequality levels and their explanations, it is nonetheless true that Latin America and Africa are highly heterogeneous internally in terms of experiences and factor endowments (Austin 2008; Bértola, Gelman, and Santilli 2015). Marc Badia-Miró and co-authors point to the co-existence of territories in Latin America with levels of economic development on a par with Europe (e.g. parts of Argentina and Chile), while other territories are closer in development to many African countries (e.g. areas of Peru and Bolivia) (Badia-Miró et al. 2020). At the same time, there are differences between the two continents, including the timing of colonization and their demographics. Colonialism began and ended earlier in most of Latin America than in most of Africa. The demographics of Latin America were largely affected by a combination of coercive and voluntary migration into Latin America, as one of the destinations for the Atlantic slave trade, as well as considerable migration from Europe at later stages. In contrast, demographic trends in Africa were the result of coerced migration in the form of the slave trade but hardly any voluntary migration.

We believe that the similarities between the two continents make for a fruitful direct comparison in historical inequality research. At the same time, however, their heterogeneity imposes some limitations on such a comparative approach. We will discuss some of these issues later in this study.

#### 2. The present study

The widespread use of new archival material from both regions, in combination with the use of new and adapted estimation methods, has brought to light new empirical evidence on long-term inequality trends. These are presented in a large number of studies, primarily published within the past couple of decades. Despite the increased interest in historical inequality, this literature is yet to be systematically reviewed, leaving the question of what can be learnt from this recent strand of literature still unanswered. In the present contribution we review the current state of the research on long-term historical economic inequality in Latin America and Africa, from the 1650s to 1950, with the intention of answering the following research question: what can we learn about the long-term historical development of socio-economic inequality by employing a comparative perspective on Latin American and African societies? Our study shows that, despite the use of similar methods and types of sources, scholars have seldom taken advantage of opportunities

for cross-fertilization stemming from geography. We find that the heterogeneity of the estimates makes it difficult to extrapolate patterns of long-term inequality between and within continents. We conclude that the reliance on individual case studies focusing on either of the two regions makes it difficult to solve the issue of comparability between estimates. More intentional comparative research in the future may thus contribute significantly to shedding light on common determinants of inequality in the two continents.

#### 2.1. Delimitations

In the present article we focus on historical studies concerned with economic inequalities in wealth and/or income in Latin America (including the Caribbean) and Africa. We focus on studies that have contributed to the scholarly debate through quantitative, empirical estimates of aggregate wealth and income inequality. The latter is calculated in various ways, such as income in the formal sector or income that includes estimates for both formal and informal labour. Studies that focus on the distribution of a few specific wealth assets, i.e. land or slaves, will only be discussed in passing. The reason is that studies that focus solely on particular assets do not provide a comprehensive picture of economic inequality in a society. Furthermore, our contribution will be delimited to examining research that has provided estimates on inequality before 1950. The mid-twentieth century marks a turning point in the availability of official statistics, which has resulted in a plethora of studies on economic inequality in the two regions that stretch from this period until the present day. Such studies have been discussed in some previous literature reviews of the field, which motivates our temporal delimitation (see e.g. Cornia and Kiiski 2001; Anand and Segal 2008; Cornia 2014).

Due to length constraints, we will focus on studies that have examined inequality between individuals/households or between classes in a society. Studies of wage or income gaps (skilled/unskilled, female/male, urban/rural or between regions) or other aspects of inequality (e.g. human capital, anthropometrics) fall outside the scope of the present review. Although such studies help to shed light on specific aspects of socioeconomic inequality, they are based on very different methodologies than those discussed in the present contribution and would merit reviews of their own.

With the aim of reviewing the most relevant publications, we began by including several studies known to the authors. We later expanded our sample by undertaking a search of Google Scholar, using keywords such as wealth inequality, income inequality, long-term wealth/income inequality, historical inequality, inequality in Latin America/Africa, longterm wealth/income distribution, historical wealth/income distribution, and wealth/ income distribution in Latin America/Africa (in both English and Spanish). Further publications were then identified by using a snowballing technique from the studies found in the first round of identification. In order to avoid a bias towards a certain type of study, e.g. highly cited published work, we did not rule out studies that were unpublished working papers at the time of the writing of this review. In total, we identified in excess of 100 publications that at first glance seemed to fit the criteria of the present review. All these studies were separately examined by at least two of the three authors of this contribution, so as to minimize bias in the collection and reporting of information. At this stage some of the studies were deemed not to meet the criteria for inclusion in this review. In this way we arrived at a sample of 65 studies that met our criteria of providing novel quantitative empirical evidence of historical economic inequality in Latin America or Africa.

#### 4 😉 S. GALLI ET AL.

#### 3. Measuring historical economic inequality

In Tables 1 and 2 we present key aspects of the studies examined in the present review, sorted by type of inequality (wealth or income), continent, and time period.

Overall, the tables show that Latin America has received substantially more attention than Africa, with 51 and 14 studies respectively. Historically, Africa suffers from a lack of

Study	Geographical unit	Time period	Sources/data	Inequality measure
Fourie and von Fintel (2010)	Cape Colony (SA)	1663–1757	Tax records	G
Koby (2014)	Barbados	1680	Census for assets, multiple second. sources	TI
Bergad (1999) <sup>d</sup>	Minas Gerais (BRA)	1720–1888	Probates	G
Moraes et al. (2021)	Montevideo (URY)	1772–1773	Probates	G
Burnard (2001)	Jamaica	1774–1775	Probates	TI
Vicario (2017)	Southern Provinces (URY)	1751–1850	Tax registers, census	G
Galli and Rönnbäck (2021) <sup>b</sup>	Sierra Leone colony (SL)	1792–1831	Census, official ordinances	G, IS
Gelman and Santilli (2018) <sup>c</sup>	Rural Buenos Aires (ARG)	1789, 1839	Census, multiple second. sources	G
Marcondes (2005) <sup>d</sup>	Vale do Paraiba, province of São Paulo (BRA)	1801–1872	Census, slave registers	G
Frank (2005)	Southeastern Brazil	1815–1860	Probates	G, TI
Johnson and Frank (2006)	Buenos Aires (ARG) and Rio de Janeiro (BRA)	1820–1855	Probates, multiple second. sources	G, TI
Johnson (1995)	Buenos Aires (ARG)	1820/1850	Probates	G
Llorca-Jaña et al. (2018b)	Chiloé (CHI)	1830–1855	Agricultural Census	G
Galli and Rönnbäck (2020)	Sierra Leone Colony (SL)	1831	Census for assets, multiple second. sources	G, IS
Gelman and Santilli (2011b)	Buenos Aires and Córdoba (ARG)	1838–1839	Census for assets, tax records	G, TI
Gelman and Santilli (2003)	Rural Buenos Aires (ARG)	1839	Census, tax records	G
Gelman and Santilli (2010b) <sup>b</sup>	Province of Buenos Aires (ARG)	1839–1855	Census, tax records	G
Gelman and Santilli (2011a) <sup>b</sup>	Buenos Aires	1839/1867	Census, Tax records	G, IS
Gudmundson (1983)	Central Valley (CR)	1843/46	Census	G, TI
Mata (2011)	Salta (ARG)	1850s	Tax records	G, IS
Bergad (1999) <sup>b</sup>	Minas Gerais (BRA)	1854/59	Agricultural Census	G
Parolo and Fandos (2011)	Tucumán (ARG)	1860–1869	Census, tax records	G
Martirén (2012) <sup>b</sup>	Santa Fe (ARG)	1860–1870	Census, tax records	G
Frid (2011)	Province of Santa Fe (ARG)	1860–1870	Census, tax records	G, TI
Fandos and Parolo (2011) <sup>b</sup>	Tucumán and Jujuy (ARG)	1860–1870	Tax records	G, TI
Djenderedjian and Martirén (2012) <sup>c</sup>	Paraná, Entre Rios, Esperanza, Santa Fe (ARG)	1862/1864	Census, tax records, probates	G
Bragoni (2011a, 2011b)	Rural Mendoza, Paraná (ARG)	1866	Census for assets, tax records, probate records	G, TI
Álvarez (2011)	Tucumán (ARG)	1869–1884	Census, probates	G
Silveira (1985)	Brazil	1870-1980	Probates	G
Fandos (2013) <sup>b</sup>	Quabrada and Puna (ARG)	1872–1909	Cadastral surveys	G
Djenderedjian and Schmit (2008) <sup>b</sup>	Entre Rios (ARG)	1874–1892	Cadastral surveys, sales & tax records	G
Acemoglu et al. (2007) <sup>b</sup>	Cundinamarca (COL)	1879, 1890	Cadastral surveys	G
Summerhill (2010) <sup>b</sup>	Province of Sao Paolo (BRA)	1905, 1995	Agricultural Census	G

Table 1. Original empirical research on wealth inequality in Latin America and Africa.

Notes: Inequality measures are denoted as follows: G = Gini coefficient; IS = Income shares; TI = Top income shares. <sup>a</sup>Estimates both wealth and income inequality, <sup>b</sup>estimates the distribution of land wealth assets <sup>c</sup>estimates the distribution of land wealth assets.

Study	Geographical unit	Time-period	Sources/data	Method	Social classes	Inequality measure
Fourie and von Fintel (2011)	Cape Colony, ZA	1700–1757	Tax records, wage data, output data	Household survey <sup>a</sup>		G
Aboagye and Bolt (2021)	Ghana	1891–1960	Census, formal income, output data	Social Tables	17	G
Alvaredo and Atkinson (2010)	South Africa	1903–2005	Tax records	Tabulated tax data		TI
Bigsten (1986)	Kenya	1914–1976	see Bigsten (1985)	Social Tables	13	G
Atkinson (2015a)	Zimbabwe, Malawi, Zambia	ca.1917–1980s	Tax records	Tabulated tax data		TI
Alvaredo, Cogneau, and Piketty (2021)	Algeria, Tunisia, Cameroon	1920–1960	Tax records	Tabulated tax data		TI
Bolt and Hillbom (2016)	Botswana	1921–1974	Formal income, output data	Social Tables	8	G
Atkinson (2014)	The Gambia, Ghana, Nigeria, Sierra Leone, Kenya, Tanzania, Uganda, Zanzibar, Malawi, Zambia, Zimbabwe, Botswana, Lesotho, Swaziland	ca.1930s–1970s	Tax records	Tabulated tax data		TI
Atkinson (2015b)	Tanzania, Kenya, Uganda, Zanzibar	ca.1936–1970	Tax records	Tabulated tax data		TI
Tadei and Alfani (2019)	Senegal, Ivory Coast	1939–1954	Census, formal income, output data	Social Tables	25/40 <sup>d</sup>	G, IS
Atkinson (2015c)	Ghana, Nigeria, Sierra Leone, The Gambia	ca.1943–1959	Tax records	Tabulated tax data		TI
de Haas (2021)	Uganda	1925–1965	Multiple primary sources	Social Tables	11	G, IS
Burnard, Panza, and Williamson (2019)	Jamaica	1774–1775	Census, multiple second. sources	Social Tables	23	G, TI
Milanovic, Lindert, and Williamson (2007)	Nueva España (MEX)	1790	Historical publication	Social Tables	3	G
Bleynat, Challú, and Segal (2021)	Mexico	1800–2015	Second. wage rates, industrial survey, salaries <sup>c</sup>	Williamson ratio		WR <sup>e</sup>
Felix (1982)	Mexico	1910s	Census, secondary sources			G
Castañeda Garza and Bengtsson (2020)	Mexico	1895–1910/ 1930–1940	Multiple primary and secondary sources	Social Tables	19/101	G
Arroyo Abad (2013)	Argentina, Mexico, Uruguay, and Venezuela	1830s-1900s	Census, formal income, multiple second. sources	Williamson ratio		WR
Arroyo Abad and Junquera (2017) <sup>b</sup>	Brazil, Chile, Colombia, Mexico, and Venezuela	1830-2010		Social Tables	4	G

#### Table 2. Original empirical research on income inequality in Latin America and Africa.

(Continued)

ECONOMIC HISTORY OF DEVELOPING REGIONS

۲

ы

Table 2. Continued.
---------------------

Study	Geographical unit	Time-period	Sources/data	Method	Social classes	Inequality measure
			Census, multiple second. sources			
Bértola, Gelman, and Santilli (2015)	Rural Buenos Aires	1839–1867	Census, Tax records, output data	Social Tables	5	G, TI
Llorca-Jaña, Navarrete-Montalvo, and Araya-Valenzuela (2018a) <sup>h</sup>	Chiloé (Chile)	1830–1855	Agricultural Census	Household survey		G
Llorca-Jaña et al. (2018b)	Chile	1830s-1850s	Agricultural Census, tax records	Household survey		G, IS
Prados de la Escosura (2007)	Argentina, Chile, Colombia, Uruguay, Brazil, Mexico, Cuba	1850–1960	Multiple second. sources for GDP and wage	Williamson ratio		WR
Rodríguez Weber (2014)	Chile	1860–1970	Census, Income data, Industrial Census	Social Tables <sup>f</sup>	49/116 <sup>9</sup>	G
Bértola et al. (2010)	Brazil	1870, 1920	Multiple second. sources	Social Tables		G, TI
Bértola (2005)	Uruguay	1870–1986	Multiple second. sources	Social Tables	4	WR, G
Berry (1990)	Peru	1876	Tax data from second. source	Social Tables	9	TÍ
FitzGerald (2008)	Argentina, Brazil, Chile, Colombia, Mexico	1900–2000	Census, multiple second. sources	Social Tables	4	G
Ardente, Díaz, and Rossi (2004)	Uruguay	1908–1966	Census, formal income, multiple second. sources	Social Tables	8	G
Londoño (1991)	Colombia	1938-1988	see Londoño (1995)	Social Tables		G
Rodriguez Weber (2017a)	Colombia	1938-1988	Multiple second. Sources	Social Tables	6	G
Astorga Junquera (2017)	Argentina, Brazil, Chile, Colombia, Mexico, Venezuela	1900–1950	Multiple primary and secondary sources	Social Tables	4	G, IS
Alvaredo (2010)	Argentina	1932–2004	Tax data	Tabulated tax data		TI

Notes: Inequality measures are denoted as follows: G = Gini coefficient; WR = Williamson ratio; IS = Income shares; TI = Top income shares. <sup>a</sup> Social Tables-design (average wage per class) for labourers on farms, <sup>b</sup> including income from land and labour, <sup>c</sup> secondary wage rates used for the years before 1930, <sup>d</sup> 25 for lvory Coast and 45 for Senegal, <sup>e</sup> Inverse Williamson ratio, <sup>f</sup> 'dynamic social tables' <sup>g</sup> the number of social classes varies across the benchmark years. Some further studies, denoted with <sup>h</sup> estimates both wealth and income inequality.

esearch prior to the twentieth century, a result of the scarcity of written sources for the period preceding the European colonization in the nineteenth century. The type of economic inequality studied in the literature is nearly equally divided between income and wealth. There are, however, relatively few studies that provide estimates on aggregate wealth inequality, as many of the studies concerned with wealth inequality only produce estimates for specific assets: slaves, land, or livestock. These provide a picture of inequality that is inherently limited and will therefore only be discussed briefly in this review.

#### 3.1. Wealth inequality

Virtually all studies concerned with wealth inequality are based on various types of household-level data. Although the sources that enable such studies may vary, the most common sources we identify are tax records, census data and probate inventories. Census data have often been employed in research, from both Africa and Latin America (e.g. Gudmundson 1983; Gelman and Santilli 2010a; Bragoni 2011b; Gelman and Santilli 2011a; Koby 2014; Galli and Rönnbäck 2020).

While many might assume that a census only contains demographic information, some historical censuses also report valuable information on various assets owned by the individuals or households surveyed. One key strength of census-based estimates is that they tend to cover the entire population. This is, however, not always the case, as some censuses show a geographical bias (Galli and Rönnbäck 2020). Another type of source is tax records reporting data at the household level (Gelman and Santilli 2003; Fourie and von Fintel 2010; Parolo and Fandos 2011). A common challenge for both censuses and tax records is that they tend to include only certain types of assets, with taxable wealth depending on the type of taxation imposed.

Many of the assets included in studies that rely on either census or tax data seem to have a rural bias, as assets more commonly held by urban dwellers – e.g. financial assets or capital invested in factories, workshops, or merchant inventories – are seldom included in the primary sources. While some studies have therefore limited their scope to solely studying the distribution of wealth in rural areas (Gelman and Santilli 2003; Bragoni 2011b; Koby 2014; Galli and Rönnbäck 2020), others have attempted to adjust their estimates to compensate for this shortcoming (Fourie and von Fintel 2010). It is often also necessary to supplement data from censuses or tax records with data on the value of the assets they record. Where there is a lack of data on the value of these assets, wealth inequality can be estimated based on a Principal Component Analysis<sup>1</sup> (Fourie and von Fintel 2010).

An important methodological challenge for wealth inequality research based on census or tax data is how to deal with households that appear to have no wealth. This is a problem for many of the studies reviewed here (among others Gudmundson 1983; Parolo and Fandos 2009; Gelman and Santilli 2010a; Bragoni 2011b). Although it is very possible that a number of households in a society may not have any wealth – and especially no wealth of the type recorded in the sources – in some cases it can be difficult to tell from the source whether a household really had zero wealth, or if the

<sup>&</sup>lt;sup>1</sup>The PCA method is intended to create a predicted asset index to overcome the lack of prices for assets. It is usually employed to develop a price-weighted index with the aim of calculating a conventional measure of inequality.

records for some reason are incomplete (see e.g. Gudmundson 1983). Omitting the propertyless can, however, substantially bias the levels of inequality estimated for the whole society downwards. Due to their nature, certain sources, most importantly tax records, also tend to completely omit households that do not own any of the taxed assets, or that own wealth below a certain threshold. In order to draw any inference about the distribution of wealth in society at large, not just among property holders, information may have to be cross-checked against the size of the entire population, to establish how large a share of the population presumably held no assets (e.g. Parolo and Fandos 2011). Once the number of propertyless households is known, scholars have dealt in various ways with this share of the population, from assuming that the propertyless simply had zero wealth (Johnson and Frank 2006; Gelman and Santilli 2010a), to assuming that their wealth was below the threshold for tax liability (Gudmundson 1983).

A third common source for the study of historical wealth inequality is probate inventories. This research design has long been employed in studies concerned with wealth distribution in Europe or North America (see e.g. Main 1977; Jones 1980). While probate records have also been employed in the study of Latin America, so far only one ongoing project makes use of this type of source for Africa (Fourie and Green 2018). The main strength of probate inventories is that all assets held by the household under probate are included in the inventory. Nevertheless, previous research has shown that this is not always the case. On one hand, financial credits and debits are not always accounted for in the records, and on the other hand, some assets may have been removed prior to the probate being compiled. The main challenge of studies based on probate inventories, however, is how accurate a representation they provide. In most societies, wealthier households were more likely to be subject to probate than poor or propertyless households. Furthermore, in most slave societies, some reviewed here, slaves were legally banned from owning property and would therefore not be subject to probate. As probate inventories are established once a head of household has deceased, there is also an inherent age bias, as wealth tends to be accumulated over a lifetime. All the studies we reviewed that rely on probate inventories as a primary source employ comparatively small samples of households, at best a few hundred per point of observation (Burnard 2001; Frank 2005; Johnson and Frank 2006; Álvarez 2011; Moraes et al. 2021). This renders their degree of representativeness of inequality among the overall population uncertain at best.

A number of studies concerned with inequality focus on the distribution of specific types of assets, such as land or slaves. While some such studies are based on either of the types of source discussed above, and therefore face similar challenges to those already mentioned (Bergad 1999; Gelman and Santilli 2010a; Martirén 2012; Djenderedjian and Martirén 2012; Vicario 2017; Gelman and Santilli 2018; Galli and Rönnbäck 2021), several are based on other, asset-specific sources – cadastral surveys or particular farm/plantation censuses in the case of land inequality (Bergad 1999; Acemoglu et al. 2007; Djenderedjian and Schmit 2008; Summerhill 2010; Fandos 2013), or slave registers of various types in the case of slave ownership (Marcondes 2005). Although records such as these might be valuable *per se*, they only tend to include those members of a population who own such assets, therefore making it very difficult to draw inferences about the levels of inequality that include the propertyless. A final issue that is worth noting is how to deal with slaves, as slavery remained legal and constituted a major form of capital investment well into the nineteenth century in several countries on both continents. That ownership of slaves was one important aspect of the wealth distribution in slave societies is obvious, and slaves are consequently also studied in several of the studies reviewed here for their contribution to wealth (see e.g. Bergad 1999; Marcondes 2005; Johnson and Frank 2006; Fourie and von Fintel 2010; Koby 2014; Moraes et al. 2021). Some of the studies have, however, also attempted to include slaves as members of the population, albeit propertyless, when estimating wealth inequality levels for the society at large (Johnson and Frank 2006; Fourie and von Fintel 2010).

#### **3.2.** Income inequality

Scholars studying income inequality have employed methodologies based on social tables, tabulated tax data or the Williamson ratio, with social tables being the most widely used methodology (Table 2).

The idea of estimating inequality based on social tables is elegant in its simplicity, and has a long history (see Milanovic, Lindert, and Williamson 2011 for an overview of many such studies). Such studies most commonly start out from census data reporting information on the occupational structure of the society in guestion. The research design is thus highly dependent upon the existence and reliability of this type of data. Based on the data, the population is divided into classes of income earners, and to each member of a class is assigned a particular income. Although this procedure may seem straightforward, major challenges arise when estimating the income of individuals involved in agriculture, or that of slaves, both of which constituted a large share of the population in the period under examination in our areas of interest. A further methodological element worth noting concerns the number of classes a population is divided into, which affects the level of detail of a study. As evident in Table 2, some studies are very crude, based on a handful of classes, while some are substantially more detailed (e.g. Rodríguez Weber 2014; Burnard, Panza, and Williamson 2019; Tadei and Alfani 2019). A simple count of the number of classes may nevertheless hide the fact that a single class, i.e. small-scale farmers as in several of the African studies, dominates the sample numerically (e.g. Aboagye and Bolt 2021). Furthermore, most of the studies reviewed here rely on a basic social table design, which captures inequality between classes but not within, although some authors (e.g. Bigsten 1986) have attempted to make some assumptions concerning within-class inequality. It is noteworthy that within-class inequality can be high, as suggested by Fourie and von Fintel in their study of the Cape Colony (Fourie and von Fintel 2011). Studies that do not adjust for within-class inequality can therefore substantially underestimate the real levels of inequality in a society.

Other authors, among them Anthony Atkinson, Facundo Alvaredo, and their coauthors, estimate income inequality based on tabulated tax data (Alvaredo 2010; Alvaredo and Atkinson 2010; Atkinson 2014, 2015a, 2015b, 2015c; Souza 2016; Alvaredo, Cogneau, and Piketty 2021). This methodology is not devoid of issues, as reliance on tax registers obscures the issue of tax evasion. A perhaps more important problem is the minimum level of income required to pay taxes. In some of the countries studied by Atkinson and co-authors, this threshold level is indeed very high, so that the vast majority of the population goes unrecorded. In order to arrive at a meaningful estimate of income inequality, these types of studies require additional data on national income, i.e. from historical national accounts. Furthermore, this research design only permits study of the top income shares, rather than the whole distribution, as there is only reliable information for this share of the population.

A couple of recent Latin American studies have, finally, also attempted to estimate what has come to be known as the 'Williamson ratio', the ratio of median wages to average GDP per worker. This method, devised as an alternative to the wage/rental ratio that has figured in some previous research, is intended to overcome the paucity of data concerning land rents and therefore to examine income inequality levels in a larger pool of societies. Nevertheless, this methodology does not come without challenges. The main challenge lies in the assumptions that authors are required to make concerning which wage rate is most appropriate to use, leading to issues of comparability and reliability. Furthermore, the degree of representativeness of studies that rely on this method remains unclear, as wages tend to be available for the formal sector of the economy, which may account for only a small fraction of the labour force in agrarian societies, which applies to most of the studies reviewed here.

The availability of sources and the time-consuming nature of data compilation has limited the chronological scope of studies on inequality. Some studies merely report data for a single year, making it impossible to uncover chronological trends (e.g. Gud-mundson 1983; Berry 1990; Burnard 2001; Gelman and Santilli 2003, 2010a; Bragoni 2011b; Koby 2014; Burnard, Panza, and Williamson 2019; Galli and Rönnbäck 2020; Moraes et al. 2021), while the vast majority of the studies in our review rely on estimates calculated over a few benchmark years. However, there are a few studies that have been able to create annual data series based on primary sources (e.g. Alvaredo 2010; Alvaredo and Atkinson 2010; Atkinson 2014), and others have attempted to fill the gap between benchmark years via interpolation (e.g Bértola 2005; Rodríguez Weber 2017a). Whether interpolated annual series really contribute any new knowledge beyond that revealed by an analysis of the benchmark years remains, however, an open question.

#### 4. Empirical estimates of inequality

The studies reviewed in this article rely on a variety of inequality measures, from Gini coefficients to top income shares, to the Williamson ratio and more. The inequality measure of choice is an important element in studies of inequality as it influences the level of comparability across time and space.

#### 4.1. Gini coefficient

The Gini coefficient is the measure more often employed by scholars due to its long and widespread use in research.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup>The Gini-coefficient is not devoid of critique. The most compelling highlights the emphasis this measure places on the middle of the distribution at the expense of the tails, implying an underlying desirable distribution (for more on this topic see Atkinson 1970). Unfortunately, the available inequality studies for northern Africa do not provide Gini index estimates, limiting our comparative discussion about levels and patterns of inequality to Sub-Saharan Africa only.

Figure 1 reports the available wealth inequality estimates provided in the form of Gini coefficients for countries in Latin America and Africa by decade. Only estimates pertaining to total wealth and to the whole population in each society studied appear in the figure.

The studies in our review span the period from the 1660s to the 1900s, with a concentration of estimates in the first half of the nineteenth century. The figure shows a predominance of studies on Latin America, although on closer scrutiny many of these estimates refer to regions in Brazil and Argentina, while only two studies refer to Africa, examining the Cape Colony and the Sierra Leone Colony. The range of the estimates spans from an exceptionally low Gini coefficient of 0.51 for the Sierra Leone Colony to an exceptionally high value of 0.95 for the province of Córdoba in Argentina. More notable, however, is the large difference in wealth inequality estimates among studies that focus on the same regions. Due to the use of studies that employ different methodologies or sources, those focusing on Rio de Janeiro and Buenos Aires in the mid-nineteenth century have concluded significantly different levels of inequality: a difference in the range of 0.15– 0.2 Gini points (see Figure 1).

In Figure 2 we turn our attention to Gini estimates of income inequality. All estimates extracted from studies included in this review span from the 1700s to our cut-off point in 1950.<sup>3</sup> Estimates of income and wealth inequality therefore overlap for much of the period under study, with the exception of the years prior to 1700.

The range of income inequality estimates shows a wider range than for wealth inequality, with a low of 0.19 suggested for Mexico in the 1940s and 0.2 for Chile in the 1910s, and a high of 0.79, estimated for the Cape Colony in the 1700s (Fourie and von Fintel 2011; Astorga Junquera 2017). The only studies dating from the eighteenth century, from the Cape Colony, colonial Jamaica and colonial Nueva España, suggest that income inequality in these three colonies was extremely high (Fourie and von Fintel 2011; Milanovic, Lindert, and Williamson 2011, 201; Burnard, Panza, and Williamson 2019). Unsurprisingly, inequality was the highest (in the range 0.74–0.79) in the two slave colonies, the Cape Colony and Jamaica (Fourie and von Fintel 2011; Burnard, Panza, and Williamson 2019). The estimated Gini coefficient of income inequality from Nueva España is somewhat lower (0.64), but the authors argue that it nonetheless exceeded the inequality possibility frontier of that particular colony (Milanovic, Lindert, and Williamson 2011).

The majority of the estimates of Gini coefficients in our sample date from the late nineteenth century and the pattern they reveal is rather heterogenous. Figure 2 high-lights how current estimates of historical income inequality are 'fragmentary and not fully comparable', to borrow Branko Milanovic's words (Milanovic 2016, 4). Despite the large range of Gini estimates no clear trend can be discerned for Latin America and Africa as a whole. Differences in research design and varying geographical units of analysis make direct comparisons between studies problematic. Figure 3 shows, however, that even among studies concerned with a single territory and employing similar research methods, estimates may vary enormously in both levels and trends over time. Especially notable is the case of Brazil, where FitzGerald (2008), Bértola et al. (2010) and Astorga Junquera (2017) find a common trend in income inequality but a striking difference in the levels of Gini estimates (a difference of at least a factor of three) during the same

<sup>&</sup>lt;sup>3</sup>Some of the studies included in this review extend further in time than our cut-off point (Bigsten 1986; Bolt and Hillbom 2016; Tadei and Alfani 2019; Aboagye and Bolt 2021; Astorga Junquera 2017; Souza 2016; de Haas 2021).

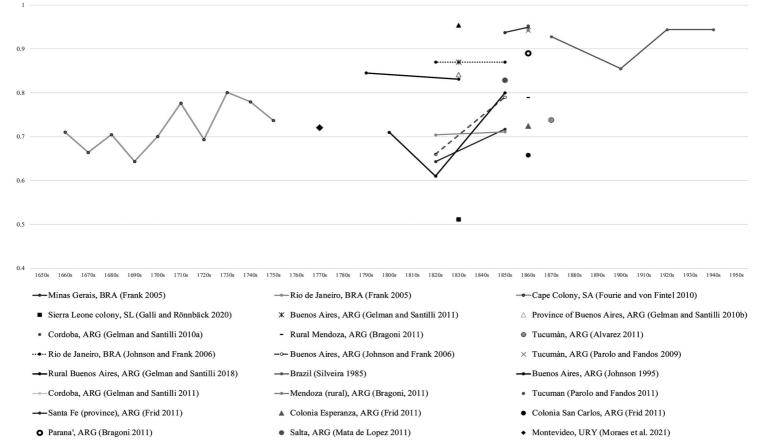


Figure 1. Wealth inequality in Latin America and Sub-Saharan Africa, 1650–1900. Sources: See Table 1.

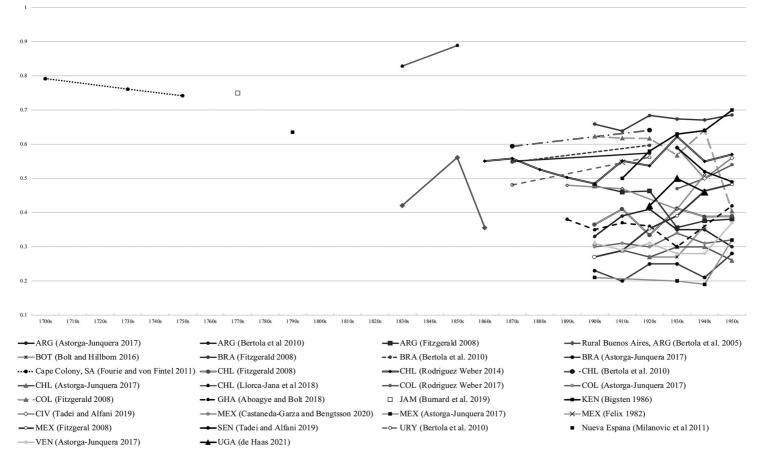


Figure 2. Income inequality in Latin America and Sub-Saharan Africa, 1700–1950. Sources: See Table 2.



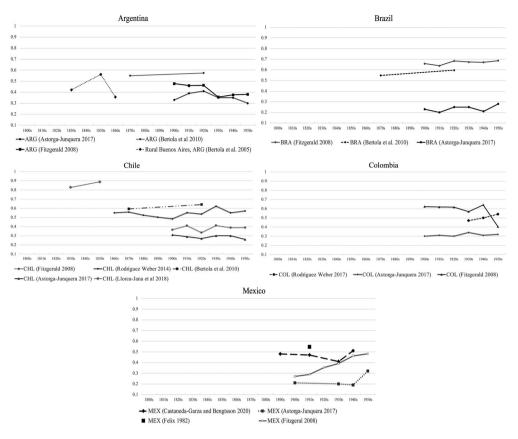


Figure 3. Income inequality in selected countries in Latin America, 1800–1950. Sources: See Table 2.

years. The estimates by Astorga Junguera suggest that Brazil at this time would have been among the most equal societies in human history, whereas the estimates by Fitzgerland and Bértola et al. would place Brazil among the most unequal societies. The great disparity between estimates can also be seen for the other countries reported in Figure 3.

Despite the highly contradictory results in previous research, we will try to distinguish some commonalities. Starting with the studies from Latin America, it seems possible to distinguish a few different patterns.

- (1) One pattern is an increase in inequality throughout the period for which data is available. This seems to be the case in Brazil (FitzGerald 2008; Bértola et al. 2010; Astorga Junquera 2017) and in Mexico (FitzGerald 2008; Astorga Junquera 2017; Castañeda Garza and Bengtsson 2020). The increase is very dramatic in the case of Mexico, in the range of 0.15–0.2 Gini points, whereas the estimates for Brazil increase more modestly, arguably due to a higher level of inequality from the outset.
- (2) A second pattern tends to hint at an increase in inequality during the nineteenth century, followed by a decrease in the twentieth century. This would seem to have been the case in Uruguay (Bértola 2005; Bértola et al. 2010) and in Argentina (FitzGerald 2008; Bértola et al. 2010).

14

(3) A potential third pattern would be the mirror image of the previous one: decreasing inequality during the nineteenth century and increasing inequality during the twentieth century. This may have been the case for Chile; however, estimates for Chile vary substantially in terms of both levels and trends depending on the study one focuses on (FitzGerald 2008; Bértola et al. 2010; Rodríguez Weber 2014; Astorga Junguera 2017; Llorca-Jaña et al. 2018a). The estimates of FitzGerald (2008) and Astorga Junquera (2017) suggest that income inequality in Chile from the 1900s to 1950 was rather low, hovering around 0.4 and 0.3 respectively, and stagnant, with only some minor variations. Rodríguez Weber (2014) estimates cover a longer time span and suggest a higher level of income inequality, albeit decreasing in the nineteenth century and increasing afterwards. Estimates from Llorca-Jaña et al. (2018a) and Bértola et al. (2010) are even higher and trending upwards, with inequality in early nineteenth century Chile being among the highest recorded in our sample. Rodríguez Weber's work would seem the most reliable as it builds on an extensive construction of a social table with over 50 classes. Competing estimates have also been calculated for Colombia (see Figure 3), where we find that the existing estimates hint at three different trends in inequality: a stationary, a growing, and a declining trend (FitzGerald 2008; Astorga Junguera 2017; Rodríguez Weber 2017a). Fitzgerald's and Astorga Junguera's data cover a slightly longer period, and exhibit no trend until the 1940s, when Fitzgerald's estimates converge towards Astorga Junguera's lower Gini estimates. Rodríguez Weber's data, although covering a shorter period, suggests increasing income inequality between the 1930s and 1950. The work by Rodríguez Weber is here largely based on previous estimates by Londoño (1991),<sup>4</sup> which seem to be more reliable than Fitzgerald's proxy estimates, upon which Astorga Junguera (2017) also relies heavily.

Turning then to the six African countries for which Gini coefficients are available, they exhibit one of three patterns (see Figure 4).

- (1) The Botswana and Kenya estimates (Bigsten 1986; Bolt and Hillbom 2016) suggest increasing income inequality during the twentieth century. In Botswana, the estimated Gini coefficient increased from the 1920s, and in Kenya from the 1910s.
- (2) The estimates from the Ivory Coast and Senegal (Tadei and Alfani 2019), in contrast, both suggest that income inequality in these countries decreased, at least from the 1930s onwards, the period for which they provide estimates.
- (3) The Gini coefficient for Ghana and Uganda, on the other hand, appears to fluctuate without a clear and apparent trend for most of the time under examination, in the range of 0.3–0.4 and 0.4–0.5 respectively, with the exception of 1950s Ghana, when inequality records an increase to 0.46 (Aboagye and Bolt 2021; de Haas 2021).

<sup>&</sup>lt;sup>4</sup>J. Londoño's (1995) original work *Distribución del ingreso y desarrollo económico. Colombia en el siglo XX* has been unavailable to us. To our knowledge it provides benchmark Gini estimates based on social tables for the years 1938, 1951, 1964, 1971, 1978, and 1988.





Figure 4. Income inequality in Sub-Saharan Africa, 1700–1950. Sources: See Table 2.

0.9

0.8

0.7

0.6

0.5

0.4

0.3

#### 4.2. Top incomes

The discussion above has been concerned with studies estimating inequality in the form of Gini coefficients. Do studies that employ other metrics tell a similar story? Studies on Africa, like the works by Facundo Alvaredo and others (see Table 2) have made important contributions with long series of estimates of top income shares based on tabulated tax data for a large number of African countries in the twentieth century. These studies show a generalized and pronounced decrease in top income shares during the late colonial period and after independence across most African countries studied (Alvaredo and Atkinson 2010; Atkinson 2014; Tadei and Alfani 2019; Alvaredo, Cogneau, and Piketty 2021). In the case of Nigeria and Ghana, however, top income shares between the African countries.

The Latin American studies vary in their time span, with some providing estimates for a single benchmark year (Koby 2014; Burnard, Panza, and Williamson 2019), others comparing a benchmark year from the period under review here with modern data (Berry 1990,<sup>5</sup> and yet others providing a cumulative picture over inequality in the continent (Cornia 2021). A few works, however, contribute to the debate with long-time series for three of the largest economies in South America in the twentieth century: Chile, Brazil, and Argentina (Alvaredo 2010; Souza 2016; Rodríguez Weber 2017b). In the cases of both Brazil and Argentina, the authors find that inequality as measured by top income shares grew rather dramatically following the Great Depression only to decline subsequently. In both countries, the share of income held by the top 1% reached a peak in 1942/1943, hovering at 31% in Brazil and 25% in Argentina, followed by a decline after which the top income shares stabilized at around 25 and 19% respectively (Alvaredo 2010; Souza 2016). Unlike the case of Argentina and Brazil, inequality fluctuated widely in the case of Chile, following a trendless pattern ranging from approximately 25 to 35% of total income between 1913 and 1940 (Rodríguez Weber 2017b). Like Brazil and Argentina, however, Chile also experienced a decline in inequality after the 1940s and the top income share fluctuated at approximately 15 to 20% from the 1950s onwards.

#### 4.3. Williamson ratio

Studies that have built Williamson ratio estimates have so far exclusively focused on Latin America, likely due to the scarcity of reliable GDP estimates for Africa. Despite this geographical concentration, their results on inequality are not uniform. The research by Leticia Arroyo Abad (2013) studies Argentina, Uruguay, Venezuela, and Mexico in the nineteenth century, and finds distinct patterns of development in inequality for each country. For Argentina and Uruguay, the results suggest that inequality increased throughout the nineteenth century. In the case of Mexico, Abad's study suggests that inequality has been decreasing since the 1870s. The more recent study of Mexico by

<sup>&</sup>lt;sup>5</sup>Berry's study compares the top income shares in Peru in the late nineteenth century with those in the 1960s, arguing that they remained at equally high levels (approximately 40% of total income). Such a compression of history does, however, run the risk of obscuring important changes over time, as the more meticulously assembled time series from other countries would suggest.

18 👄 S. GALLI ET AL.

Bleynat, Challú, and Segal (2021), on the other hand, also employs the Williamson ratio, but suggests that income inequality actually increased throughout the period. These different results for nineteenth century Mexico are mainly due to methodological differences in the estimation of the Williamson ratios. Abad's study only accounts for land capital rents while Bleynat et al. account for returns on all factors of production. The study by Prados de la Escosura (2007), finally, has also contributed Williamson ratio estimates for Argentina, Chile, Colombia, Uruguay, Brazil, Mexico and Cuba since the 1850s. His results suggest that inequality increased until around the First World War in all these countries, except for Brazil. Following the First World War, Prados de la Escosura's estimates show decreasing inequality in several of the countries (Argentina, Chile, Cuba and Uruguay), whereas it increased drastically in the remaining countries (Brazil, Colombia and Mexico).

#### 4.4. Wealth and income inequality compared

There are only two regions – the Cape Colony and rural Buenos Aires – for which there are estimates of both wealth and income inequality from the same period. In the case of rural Buenos Aires, the estimates of income inequality (Bértola 2005) are considerably lower than the estimates of wealth inequality in this region (Gelman and Santilli 2011b, 2018). The respective estimates from the Cape Colony (Fourie and von Fintel 2010; 2011) do not, however, necessarily show that levels of wealth inequality were higher than levels of income inequality. This might potentially be due to biases in the samples of data used in the two respective studies. Taking all studies together, the estimated levels of income inequality in general seem to fall within a lower range than the levels of wealth inequality; the vast majority of estimates of income inequality show a Gini coefficient below the level of 0.6, in contrast to the studies of wealth inequality where the vast majority are to be found in the range above 0.7.

#### 5. Concluding remarks

Socio-economic inequality in Latin America and Africa today is among the highest in the world. To what extent do these regions share common patterns in terms of historical levels of inequality? In this paper we offer a novel survey of the recent research on inequality in a historical perspective in the two regions.

Our review of the research in the field of historical economic inequality shows that scholars of Africa and Latin America so far have mainly operated in isolation from each other, as there are few references between the respective bodies of literature. We believe that much could be learnt from cross-fertilization. There are a number of studies from both continents that employ similar research designs, most importantly social tables, but also estimates based on specific types of primary data. In such cases, the details on how these methods have been employed and how scholars have attempted to deal with common challenges can undoubtedly lay the ground for improved studies in the future. Some types of research design are, however, solely employed by scholars studying one of the continents, but not as yet by scholars of the other. Estimating the Williamson ratio in a country over time has, for example, been employed by some Latin American scholars, but not yet in African economic history. This is an area where Africanists could potentially take inspiration from their Latin American colleagues. The same goes for the types of sources employed for the studies. Only one study of wealth inequality in Africa has, so far, attempted to use probate inventories as a source.

As for the results arrived at in the research reviewed in this paper, we find very little support for the argument that Latin American and African countries shared a uniform experience in terms of inequality levels and trends, neither between nor within each continent. Furthermore, these estimates span a range from very low to very high inequality levels, suggesting that the picture is far more complex than often argued in the historiography. The results of this survey thus caution against monocausal explanatory models of inequality levels in the two regions.

If the aim is to develop a more coherent, unitary, and comprehensive theory of inequality, a less fragmentary history is a prerequisite. Our study emphasizes the need for more thorough comparative work between scholars of different territories and periods. Only by creating a collaborative effort could we possibly come close to understanding how inequality grows and develops in developing countries, something that has so far escaped isolated efforts.

#### Acknowledgments

We wish to thank Ellen Hillbom; Christian Ducoing; participants at the workshops 'Africa and Latin America: A shared Economic History?' at Lund University and 'Political Change, Social Mobility and Wealth Distribution In Historical Perspective' at Bocconi University; Alfonso Herranz-Loncan, and three anonymous reviewers for their valuable comments on previous drafts of this paper.

#### **Disclosure statement**

No potential conflict of interest was reported by the authors.

#### Funding

This work was supported by Jan Wallanders och Tom Hedelius Stiftelse samt Tore Browaldhs Stiftelse [grant number P18-0020]; Swedish Research Council [grant number 2018-01840].

#### ORCID

Stefania Galli 💿 http://orcid.org/0000-0002-5273-0617

#### References

- Aboagye, Prince Young, and Jutta Bolt. 2021. "Long-Term Trends in Income Inequality: Winners and Losers of Economic Change in Ghana, 1891–1960." *Explorations in Economic History* 82. https://doi.org/10.1016/j.eeh.2021.101405.
- Acemoglu, Daron, Maria Angelica Bautista, Pablo Querubin, and James Robinson. 2007. "Economic and Political Inequality in Development: The Case of Cundinamarca, Colombia". w13208. *National Bureau of Economic Research*. https://doi.org/10.3386/w13208.
- Acemoglu, Daron, and James Robinson. 2010. "Why is Africa Poor?" *Economic History of Developing Regions* 25: 21–50. https://doi.org/10.1080/20780389.2010.505010.

.0 👄 S. GALLI ET AL.

- Alvaredo, Facundo. 2010. "The Rich in Argentina Over the Twentieth Century." In *Top Incomes: A Global Perspective*, edited by A. B. Atkinson, and Thomas Piketty, 253–298. Oxford: Oxford University Press.
- Alvaredo, Facundo, and Anthony B. Atkinson. 2010. "Colonial Rule, Apartheid and Natural Resources: Top Incomes in South Africa 1903-2005." OxCarre Working Papers. Oxford Centre for the Analysis of Resource Rich Economies, 046, University of Oxford. https://ideas.repec.org/p/oxf/oxcrwp/046. html.
- Alvaredo, Facundo, Denis Cogneau, and Thomas Piketty. 2021. "Income Inequality Under Colonial Rule. Evidence from French Algeria, Cameroon, Tunisia, and Vietnam and Comparisons with British Colonies 1920–1960." *Journal of Development Economics* 152. https://doi.org/10.1016/j. jdeveco.2021.102680.
- Álvarez, Beatriz. 2011. "La desigualdad de la riqueza en Tucumán entre 1869 y 1884. Una aproximación a su medición a partir de los inventarios post mortem." *Población & Sociedad* 18 (2): 107–144.
- Anand, Sudhir, and Paul Segal. 2008. "What Do We Know about Global Income Inequality?" *Journal* of *Economic Literature* 46 (1): 57–94. https://doi.org/10.1257/jel.46.1.57.
- Angeles, Luis. 2007. "Income Inequality and Colonialism." *European Economic Review* 51 (5): 1155–1176. https://doi.org/10.1016/j.euroecorev.2006.09.001.
- Ardente, Analía, Fernanda Díaz, and Tatiana Rossi. 2004. "Crecimiento económico y distribución del ingreso en Uruguay." *Licentiate thesis*, Universidad de la Republica, Montevideo.
- Arroyo Abad, Leticia. 2013. "Persistent Inequality? Trade, Factor Endowments, and Inequality in Republican Latin America." *The Journal of Economic History* 73 (1): 38–78. http://www.jstor.org/stable/41811500.
- Arroyo Abad, Leticia, and Pablo Astorga Junquera. 2017. "Latin American Earnings Inequality in the Long Run." *Cliometrica* 11 (3): 349–374. https://doi.org/10.1007/s11698-016-0150-9.
- Astorga Junquera, Pablo. 2017. "Functional Inequality in Latin America: News from the Twentieth Century." In *Has Latin American Inequality Changed Direction? Looking Over the Long Run*, edited by Luis Bértola, and Jeffrey Williamson, 17–41. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-44621-9\_2.
- Atkinson, Anthony B. 1970. "The Economics of Inequality." *Journal of Economic Theory*. https://doi. org/10.1016/0022-0531(70)90039-6
- Atkinson, Anthony B. 2014. "The Colonial Legacy: Income Inequality in Former British African Colonies." 2014/045 WIDER Working Paper. https://doi.org/10.35188/UNU-WIDER/2014/766-0.
- Atkinson, Anthony B. 2015a. "Top Incomes in Central Africa: Historical Evidence." Working Papers 201504. World Inequality Lab.
- Atkinson, Anthony B. 2015b. "Top Incomes in East Africa before and after Independence." Working Papers 201502. World Inequality Lab.
- Atkinson, Anthony B. 2015c. "The Distribution of Top Incomes in Former British West Africa." 201503 Working Papers. World Inequality Lab.
- Austin, Gareth. 2008. "Resources, Techniques, and Strategies South of the Sahara: Revising the Factor Endowments Perspective on African Economic Development, 1500-2000." *The Economic History Review* 61 (3): 587–624. https://doi.org/10.1111/j.1468-0289.2007.00409.x.
- Badia-Miró, Marc, Julio Martínez-Galarraga, Esteban A. Nicolini, Daniel A. Tirado-Fabregat, and Henry Willebald. 2020. "La desigualdad económica regional en América Latina (1895-2010)." Investigaciones de Historia Económica 16 (3): 15–29. https://doi.org/10.33231/j.ihe.2020.09.001.
- Bergad, Laird W. 1999. Slavery and the Demographic and Economic History of Minas Gerais, Brazil, 1720–1888. Cambridge Latin American Studies. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511572708.
- Berry, Albert. 1990. "International Trade, Government, and Income Distribution in Peru Since 1870." Latin American Research Review 25 (2): 31–59.
- Bértola, Luis. 2005. "A 50 años de la curva de Kuznets: Crecimiento económico y distribución del ingreso en Uruguay y otras economías de nuevo asentamiento desde 1870." *Investigaciones de Historia Económica* 1 (3): 135–176. https://doi.org/10.1016/S1698-6989(05)70022-9.
- Bértola, Luis, Cecilia Castelnovo, Javier Rodríguez, and Henry Willebald. 2010. "Between the Colonial Heritage and the First Globalization Boom: On Income Inequality in the Southern Cone\*." *Revista*

de Historia Económica / Journal of Iberian and Latin American Economic History 28 (2): 307–341. https://doi.org/10.1017/S021261091000011X.

- Bértola, Luis, Jorge Gelman, and Daniel Santilli. 2015. "Income Distribution in Rural Buenos Aires, 1839-1867." *Revista Uruguaya de Historia Económica* 5 (8): 14–28.
- Bigsten, Arne. 1985. "Income distribution and growth in a dual economy: Kenya 1914-76." Mimeo, Department of Economics, University of Gothenburg.
- Bigsten, Arne. 1986. "Welfare and Economic Growth in Kenya, 1914–76." World Development 14 (9): 1151–1160. https://doi.org/10.1016/0305-750X(86)90117-8.
- Bleynat, Ingrid, Amílcar E. Challú, and Paul Segal. 2021. "Inequality, Living Standards, and Growth: Two Centuries of Economic Development in Mexico." *The Economic History Review* 74 (3): 584–610. https://doi.org/10.1111/ehr.13027.
- Bolt, Jutta, and Ellen Hillbom. 2016. "Long-Term Trends in Economic Inequality: Lessons from Colonial Botswana, 1921–74." *The Economic History Review* 69 (4): 1255–1284. https://doi.org/ 10.1111/ehr.12326.
- Bourguignon, François, and Christian Morrisson. 2002. "Inequality Among World Citizens: 1820–1992." American Economic Review 92 (4): 727–744.
- Bragoni, Beatriz. 2011a. "Antes del alba: composicion y distribucion de la riqueza en Mendoza a traves de fuentes fiscales e inventarios post mortem, 1860-1874." In *El mapa de la desigualdad en la Argentina del siglo XIX*, edited by Jorge Gelman, 219–260. Rosario: Prohistoria Ediciones.
- Bragoni, Beatriz. 2011b. "Recuperación y desigualdad económica en el interior rural argentino del Siglo XIX. Un examen sobre la composición y distribución de la riqueza en la campaña de Mendoza a través de fuentes fiscales (1866)." *América Latina en la Historia Económica* 18 (35): 209–249. https://doi.org/10.18232/alhe.v18i1.464.
- Burnard, Trevor G. 2001. "'Prodigious Riches': The Wealth of Jamaica Before the American Revolution." *The Economic History Review* 54 (3): 506–524. https://www.jstor.org/stable/3091762.
- Burnard, Trevor G., Laura Panza, and Jeffrey Williamson. 2019. "Living Costs, Real Incomes and Inequality in Colonial Jamaica." *Explorations in Economic History* 71 (January): 55–71. https://doi.org/10.1016/j.eeh.2018.09.002.
- Castañeda Garza, Diego, and Erik Bengtsson. 2020. "Income Inequality in Mexico 1895-1940: Industrialization, Revolution, Institutions." Lund Papers in Economic History, no. 2020:212.
- Coatsworth, John H. 2005. "Structures, Endowments, and Institutions in the Economic History of Latin America." *Latin American Research Review* 40 (3): 126–144. https://www.jstor.org/stable/ 3662825.
- Coatsworth, John H. 2008. "Inequality, Institutions and Economic Growth in Latin America"." *Journal of Latin American Studies* 40 (3): 545–569. https://doi.org/10.1017/S0022216X08004689.
- Cornia, Giovanni Andrea. 2014. "Inequality Trends and Their Determinants: Latin America Over 1990-2010." In *Falling Inequality in Latin America*, edited by Andrea G. Cornia, 23–48. Oxford: Oxford University Press.
- Cornia, Giovanni Andrea. 2021. "Latin America's Income Inequality Under Five Political Regimes, 1870-2018." Working Papers Economics wp2021\_12. Universita' degli Studi di Firenze, Dipartimento di Scienze per l'Economia e l'Impresa.
- Cornia, Giovanni Andrea, and Sampsa Kiiski. 2001. "Trends in Income Distribution in the Post-World War II Period." UNU-WIDER Discussion Paper No. 2001/89.
- De Ferranti, David, Guillermo E. Perry, Francisco Ferreira, and Michael Walton. 2004. *Inequality in Latin America: Breaking with History?* Washington D.C.: The World Bank.
- de Haas, Michiel. 2021. "Reconstructing Income Inequality in a Colonial Cash Crop Economy: Five Social Tables for Uganda, 1925–1965." *European Review of Economic History*. https://doi.org/10. 1093/ereh/heab010.
- Djenderedjian, Julio, and Juan Luis Martirén. 2012. "La distribución de la riqueza rural entre tradición y modernidad. Los casos de la Colonia Esperanza y el distrito de Paraná durante la década de 1860." *Población & sociedad* 19 (1): 125–154. https://www.redalyc.org/exportarcita.oa?id= 386939747001.

22 👄 S. GALLI ET AL.

- Djenderedjian, Julio, and Roberto Schmit. 2008. "Avances y límites de la expansión agraria argentina: crecimiento económico y distribución de la riqueza rural en Entre Ríos (1860–1892)." *Investigaciones de Historia Económica* 4 (11): 75–106. https://doi.org/10.1016/S1698-6989 (08)70154-1.
- Engerman, Stanley L., and Kenneth L. Sokoloff. 2005. "Colonialism, Inequality, and Long-Run Paths of Development." Working Paper 11057. National Bureau of Economic Research.
- Fandos, Cecilia A. 2013. "Privatización de la propiedad, riqueza y desigualdad en las "tierras altas" de Jujuy (Argentina), 1870-1910." *Historia Crítica* 51 (9): 45–70. http://hdl.handle.net/11336/28044.
- Fandos, Cecilia A., and Maria P. Parolo. 2011. "La distribucion de la riqueza inmobiliaria en el Norte argentino. Tucumán y Jujuy, 1860-1870." In *El mapa de la desigualdad en la Argentina del siglo XIX*, edited by Jorge Gelman, 333–370. Rosario: Prohistoria Ediciones.
- Federico, Giovanni. 2021. "Introduction to the Symposium on Inequality." *The Economic History Review* 74 (3): 581–583. https://doi.org/10.1111/ehr.13104.
- Felix, David. 1982. "Income Distribution Trends in Mexico and the Kuznets Curves." In *Brazil and Mexico: Patterns in Late Development*, edited by Sylvia Ann Hewlett, and Richard S Weinert, 265–315. Philadelphia: Institute for the Study of Human Issues.
- FitzGerald, Valpy. 2008. "Economic Development and Fluctuations in Earnings Inequality in the Very Long Run: The Evidence from Latin America 1900–2000." *Journal of International Development* 20 (8): 1028–1048. https://doi.org/10.1002/jid.1511.
- Fourie, Johan, and Erik Green. 2018. "Building the Cape of Good Hope Panel." The History of the Family 23 (3): 493–502. https://doi.org/10.1080/1081602X.2018.1509367.
- Fourie, Johan, and Dieter von Fintel. 2010. "The Dynamics of Inequality in a Newly Settled, Pre-Industrial Society: The Case of the Cape Colony." *Cliometrica* 4 (3): 229–267.
- Fourie, Johan, and Dieter von Fintel. 2011. "A History with Evidence: Income Inequality in the Dutch Cape Colony." *Economic History of Developing Regions* 26 (1): 16–48. https://doi.org/10.1080/20780389.2011.582990.
- Frank, Zephyr. 2005. "Wealth Holding in Southeastern Brazil, 1815-60." *Hispanic American Historical Review* 85 (2): 223–258. https://doi.org/10.1215/00182168-85-2-223.
- Frankema, Ewout. 2009. Has Latin America Always Been Unequal?: A Comparative Study of Asset and Income Inequality in the Long Twentieth Century. Leiden: BRILL.
- Frid, Carina. 2011. "Desigualidad y distribucion de la riqueza en escenarios de crecimiento economico: Santa Fe, 1850-1870." In *El mapa de la desigualdad en la Argentina del siglo XIX*, edited by Jorge Gelman, 95–138. Rosario: Prohistoria Ediciones.
- Galli, Stefania, and Klas Rönnbäck. 2020. "Colonialism and Rural Inequality in Sierra Leone: An Egalitarian Experiment." *European Review of Economic History* 24 (3): 468–501. https://doi.org/ 10.1093/ereh/hez011.
- Galli, Stefania, and Klas Rönnbäck. 2021. "Land Distribution and Inequality in a Black Settler Colony: The Case of Sierra Leone, 1792–1831." *The Economic History Review* 74 (1): 115–137. https://doi. org/10.1111/ehr.13020.
- Gelman, Jorge. 2011. "Desequilibrios regionales, desigualidad sociales. Las economias argetinas en el siglo XIX." In *El mapa de la desigualdad en la Argentina del siglo XIX*, edited by Jorge Gelman, 11–46. Rosario: Prohistoria Ediciones.
- Gelman, Jorge, and Daniel Santilli. 2003. "Distribución de la riqueza y crecimiento económico. Buenos Aires en la época de Rosas." *Desarrollo Económico* 43 (169): 75–101. https://www.jstor. org/stable/3455915.
- Gelman, Jorge, and Daniel Santilli. 2010a. "Crecimiento economico, divergencia regional y distribucion de la riqueza: Córdoba y Buenos Aires después de la independencia." *Latin American Research Review* 45 (1): 121–147. https://www.jstor.org/stable/27919178.
- Gelman, Jorge, and Daniel Santilli. 2010b. "Una creciente desigualdad. La propiedad de la tierra en Buenos Aires entre 1839 y 1855." *Investigaciones de Historia Económica* 6 (18): 11–33. https://doi. org/10.1016/S1698-6989(10)70067-9.
- Gelman, Jorge, and Daniel Santilli. 2011a. "Como explicar la creciente desigualidad? La propriedad de la tierra en Buenos Aires entre 1839 y 1867." In *El mapa de la desigualdad en la Argentina del siglo XIX*, edited by Jorge Gelman, 171–218. Rosario: Prohistoria Ediciones.

- Gelman, Jorge, and Daniel Santilli. 2011b. "Crecimiento economico, divergencia regional y distribucion de la riqueza: Córdoba y Buenos Aires después de la independencia." In *El mapa de la desigualdad en la Argentina del siglo XIX*, edited by Jorge Gelman, 71–94. Rosario: Prohistoria Ediciones.
- Gelman, Jorge, and Daniel Santilli. 2018. "La distribución de la riqueza en el Buenos Aires rural entre finales de la colonia y la primera mitad del siglo XIX. ¿Una desigualdad moderada y en declive?" *América Latina en la Historia Económica* 25 (2): 7–41. https://doi.org/10.18232/alhe.v25i1.891
- Gudmundson, Lowell. 1983. "Costa Rica before Coffee: Occupational Distribution, Wealth Inequality, and Elite Society in the Village Economy of the 1840s." *Journal of Latin American Studies* 15 (2): 427–452. https://www.jstor.org/stable/155886.
- Guidetti, Giovanni, and Boike Rehbein. 2018. "Theoretical Approaches to Inequality in Economics and Sociology." In *Inequality in Economics and Sociology: New Perspectives*, edited by Gilberto Antonelli, and Boike Rehbein, 7–29. London: Routledge.
- Huber, Evelyne, François Nielsen, Jenny Pribble, and John D. Stephens. 2006. "Politics and Inequality in Latin America and the Caribbean." *American Sociological Review* 71 (6): 943–963. https://doi.org/10.1177/000312240607100604.
- Johnson, Lyman L. 1995. "Distribution of Wealth in Buenos Aires." In *The Political Economy of Spanish America in the Age of Revolution, 1750-1850*, edited by Kenneth J. Andrien, and Lyman L. Johnson, 197–214. Albuquerque: University of New Mexico Press.
- Johnson, Lyman L., and Zephyr Frank. 2006. "Cities and Wealth in the South Atlantic: Buenos Aires and Rio de Janeiro before 1860." *Comparative Studies in Society and History* 48 (3): 634–668.
- Jones, Alice Hanson. 1980. Wealth of a Nation to Be: The American Colonies on the Eve of the Revolution. New York: Columbia University Press.
- Koby, Peter. 2014. "Digital Visualization of Colonial Cartography: Patterns of Wealth in the Sugar Colony of Barbados." *PhD diss.*, Pennsilvania State University.
- Llorca-Jaña, Manuel, Juan Navarrete-Montalvo, and Roberto Araya-Valenzuela. 2018a. "Inequality in Chile before the First Globalization: An Approach Derived from Agricultural Market Income, 1830s-1850s." *Historia Agraria. Revista de Agricultura e Historia Rural* 74 (April): 103–134. https://doi.org/10.26882/histagrar.074e04l.
- Llorca-Jaña, Manuel, Claudio Robles Ortiz, and Juan Navarrete-Montalvo. 2018b. "Chiloé, una sociedad rural igualitaria. Distribución el ingreso agrícola y de la tierra después de la independencia." *Magallania (Punta Arenas)* 46 (2): 85–105. https://doi.org/10.4067/S0718-22442018000200085.
- Londoño, Juan Luis. 1991. "Capital humano y cambios en la distribución del ingreso en el largo plazo (Colombia, 1938-1988)." El Trimestre Económico 58: 153–194. https://www.jstor.org/stable/23397446.
- Londoño, Juan Luis. 1995. "Distribución del ingreso y desarrollo económico: Colombia en el siglo XX." Banco de la República, Planeación y Desarrollo 23(2).
- Lopez, J. Humberto, and Guillermo Perry. 2008. "Inequality in Latin America: Determinants and Consequences." Policy Research Working Papers No. 4504. The World Bank. http://hdl.handle. net/10986/6368.
- Main, Gloria L. 1977. "Inequality in Early America: The Evidence from Probate Records of Massachusetts and Maryland." *Journal of Interdisciplinary History* 7 (4): 559–581. https://doi.org/ 10.2307/202882.
- Marcondes, Renato Leite. 2005. "Small and Medium Slaveholdings in the Coffee Economy of the Vale Do Paraiíba, Province of São Paulo." *Hispanic American Historical Review* 85 (2): 259–281. https://doi.org/10.1215/00182168-85-2-259.
- Martirén, Juan Luis. 2012. "Colonización agrícola y distribución de la riqueza inmobiliaria en la provincia de Santa Fe, Argentina, 1864-1875." *América Latina en la Historia Económica* 19 (2): 47–71. https://doi.org/10.18232/alhe.v19i2.517.
- Mata, Sara. 2011. "Distribucion de la riqueza rural. Salta a mediados del siglo XIX." In *El mapa de la desigualdad en la Argentina del siglo XIX*, edited by Jorge Gelman, 303–332. Rosario: Prohistoria Ediciones.
- Milanovic, Branko. 2016. *Global Inequality: A New Approach for the Age of Globalization*. Cambridge, MA: Belknap Press.

24 🕳 S. GALLI ET AL.

- Milanovic, Branko, Peter H. Lindert, and Jeffrey G. Williamson. 2007. "Measuring Ancient Inequality." Working Paper 13550. National Bureau of Economic Research. https://doi.org/10.3386/w13550.
- Milanovic, Branko, Peter H. Lindert, and Jeffrey G. Williamson. 2011. "Pre-Industrial Inequality." *The Economic Journal* 121 (551): 255–272. https://doi.org/10.1111/j.1468-0297.2010.02403.x
- Moraes, María Inés, Rebeca Riella, Carolina Vicario, and Pablo Marmisolle. 2021. "Wealth Inequality in Colonial Hispanic-America: Montevideo in the Late 18th Century." Documentos de Trabajo (Working Papers) 21-18. Instituto de Economia IECON; Universidad de la Republica. https://ideas.repec.org/p/ulr/wpaper/dt-18-21.html.
- Nunn, Nathan. 2009. "Slavery, Inequality and Economic Development in the Americas." In *Institutions and Economic Performance*, edited by Elhanan Helpman, 148–180. Harvard University Press.
- Parolo, Maria P., and Cecilia A. Fandos. 2009. "Evolución demográfica y distribución de la riqueza. Diferenciaciones regionales en el siglo XIX argentino. Riqueza, distribución y niveles de desigualdad en el área rural. Tucumán, 1860-1870." In *X Jornadas Argentinas de Estudios de Población. Asociación de Estudios de Población de la Argentina*. San Fernando del Valle de Catamarca. https://www.aacademica.org/000-058/4.pdf.
- Parolo, Maria P., and Cecilia A. Fandos. 2011. "Tierra, ganado y giro comercial. La distribucion de la riqueza en la "prospera" Tucumán de la decada de 1860." In *El mapa de la desigualdad en la Argentina del siglo XIX*, edited by Jorge Gelman, 261–302. Rosario: Prohistoria Ediciones. https://recyt.fecyt.es/index.php/IHE/article/view/70496.
- Prados de la Escosura, Leandro. 2007. "Inequality and poverty in Latin America : a long-run exploration." In *The New Comparative Economic History*, edited by Timothy J. Hatton, Kevin H. O'Rourke, and Alan M. Taylor, 291–315. Cambridge: MIT Press.
- Rodríguez Weber, Javier. 2014. "La economía política de la desigualdad de ingreso en Chile, 1850–2009." *PhD diss.*, Universidad de la Republica. https://doi.org/10.13140/2.1.4871.7604.
- Rodríguez Weber, Javier. 2017a. "Nuevas estimaciones de distribución del ingreso en Colombia entre 1938 y 1988. Metodología de estimación y principales resultados." *Cuadernos de Economía* 36 (72): 43–76. https://doi.org/10.15446/cuad.econ.v36n72.65879
- Rodríguez Weber, Javier. 2017b. "La erosión del poder de la élite en Chile entre 1913 y 1970. Una aproximación desde los ingresos del 1%." *Revista de Historia Economica Journal of Iberian and Latin American Economic History* 35 (1): 49–80. https://doi.org/10.1017/S0212610916000173
- Silveira, Ricardo Antonio Rocha. 1985. "The Distribution of Wealth in Brazil-the Case of Rio de Janeiro: 1870s to 1980s." *PhD diss.*, University of California Berkeley.
- Soares, Rodrigo, Juliano J. Assunção, and Tomás F. Goulart. 2012. "A Note on Slavery and the Roots of Inequality." *Journal of Comparative Economics* 40 (4): 565–580. https://doi.org/10.1016/j.jce. 2012.02.001
- Souza, Pedro Herculano Guimarães de Ferreira. 2016. "A desigualdade vista do topo : a concentração de renda entre os ricos no Brasil, 1926-2013." *PhD diss.*, Universidade de Brasília. https://repositorio.unb.br/handle/10482/22005
- Summerhill, William. 2010. "Colonial Institutions, Slavery, Inequality, and Development: Evidence from São Paulo, Brazil." MPRA Paper 22162. University Library of Munich. https://ideas.repec.org/p/pra/mprapa/22162.html.
- Tadei, Federico, and Guido Alfani. 2019. Income Inequality in French West Africa: Building Social Tables for Pre-Independence Senegal and Ivory Coast. SSRN Scholarly Paper ID 3494245. Rochester, NY: Social Science Research Network. https://papers.ssrn.com/abstract=3494245.
- The World Bank. 2016. "Taking on Inequality." Poverty and Shared Prosperity.
- Vicario, Carolina. 2017. "Human Capital and Wealth Distribution in and Old Regime Economy. Montevideo and its Surroundings 1750-1855." Ch. 5 in *The Formation of Human Capital in Pre-Modern Latin America*. PhD diss. Universität Tübingen. https://doi.org/10.15496/publikation-15454.
- Williamson, Jeffrey G. 2010. "Five Centuries of Latin American Income Inequality." Revista de Historia Económica / Journal of Iberian and Latin American Economic History 28 (Special Issue 02): 227–252. https://doi.org/10.1017/S0212610910000078