## Latin America's Economic Development: <br> Contemporary and Historical

Angel Alvarado, ${ }^{1}$ Fernando Arteaga, ${ }^{1}$ Jesús Fernández-Villaverde, ${ }^{1}$ and Ivan Luzardo Luna ${ }^{1}$
April 30, 2023
${ }^{1}$ University of Pennsylvania

The object of study

## What's in a name?

- Latium: area between the river Tiber and Mount Circeo, which includes Rome.
- Inhabitants: an Indo-European tribe called Latins.
- Etymology: likely from Latus (a plain). Thus, Latins were the people of the plain, and Latin was the language spoken by the people from the plain.
- Latin: highly-inflected language closely related to Sanskrit, Celtic, and Germanic (among others).
- Then, how did we end up calling Latin America "Latin"?



## A 19th century creation

- Name "Latin America" is a recent invention.
- First recorded use: Félix Belly (1816-1886), "Du conflit anglo-américain et de l'equilibre du nouveau-monde," Revue contemporaine 26 (June 15, 1856): 121-155.
- Probably created by Belly (a French) to avoid using words like "Spain" or "Iberian" and help French imperial ambitions in the region (and his economic interests as a promoter of a Nicaraguan trans-isthmian canal).
- Popularized by Francisco Bilbao (1823-1865) in a speech given in Paris on June 22, 1856, to South Americans to protest U.S. recognition of Walker's regime in Nicaragua.
- Bilbao's definition excluded Brazil, Mexico, and Paraguay.
- Also, during the first decades, it applied to people of Spanish, Portuguese, Italian, or French descent ( "Latin race"), not to indigenous people or descendants of Africans.



## A modern definition...

- 20 republics plus a commonwealth: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Uruguay, and Venezuela.
- What about French territories (French Guiana, Guadeloupe, Martinique, Saint Barthélemy, and Saint Martin)? Small population $\approx$ one mil.
- Notice: it excludes territories south of Rio Grande (e.g., English- and Dutch-speaking Caribbean, Belize) and French-speaking North America (e.g., Quebec, Saint-Pierre-et-Miquelon).



## and its discontents

- Modern definition (and name!) is not without its discontents:

1. Some scholars deny the existence of "Latin America" (e.g., Walter Mignolo).
2. Or claim the label is becoming increasingly obsolete.

- Nonetheless, joint study as a common area is more than justified:

1. Strong interactions between all the member countries: a sense of collective identitiy.
2. Events and institutions are often highly synchronized across the region.

## Forms of government, 2021



# The patterns of Latin America's 

 economies
## Main geographical patterns, I

- Large region: 20.1 million $\mathrm{km}^{2}$.
- North-south orientation.
- Distant from the "cores" of Eurasia and North Atlantic.
- Before the railroad and Panama canal, it was hard to travel East-West: landlocked interior.





## Main geographical patterns, II

- American Cordillera: Sierra Madre Occidental, Sierra Madre Oriental, and the Andes: two distinct sides of the continent.
- Three great river systems flow from the Andes to the Atlantic: Amazon, Paraná, and Orinoco (Latin America has $30 \%$ of world freshwater).
- Enormous climatic variation.
- Enormous biodiversity: from deserts to rain forests.
- Enormous mineral resources.

Physical Features of Latin America


Climate Zones of Latin America


Vegetation Zones of Latin America


## Main demographic patterns

- Around 648 million inhabitants (2021):

1. Brazil: 213 million.
2. Mexico: 126 million.
3. Colombia: 51 million.
4. Argentina: 45 million.

- Highly urbanized: 82.7\% (Sao Paulo, Mexico, Buenos Aires) and concentrated by the coast.
- Experimenting a swift demographic transition:

1. Fertility rate: 1.86 in 2021 ( 5.9 in 1960).
2. Population will start decreasing around 2040 (Cuba and Uruguay are already losing population).

- Strong migration flows.

Population Density of Latin America


## Main social patterns

- Linguistically quite homogenous:

1. Spanish: native language of around $62 \%$ of population.
2. Portuguese: native language of around $32 \%$ of population.
3. Indigenous languages: native language of around $4 \%$ of population. Guaraní (around 6.5 million native speakers), Southern Quechua (around 6 million native speakers), Náhuatl (around 2.7 million native speakers). Very few monolinguals left (3 million?).
4. French/Haitian Creole: native language of around $2 \%$ of the population.

- Yet, politically, ethnically, and culturally, quite heterogenous:

1. Between countries: Uruguay vs. Guatemala.
2. Within countries: Rio Grande do Sul vs. Bahia.

## Main economic patterns

- Latin America has a similar set of endowments as North America or Australia: high land/labor ratio and abundance of natural resources.
- But it has experienced a different a growth path:

1. Mid-income per capita, with long periods of stagnation (as the current one since c. 2008).
2. High inequality.
3. Extreme dependence on commodities (and their price fluctuations).
4. It missed the great boom of globalization.

- Why?

IMF DataMapperGDP per capita, current prices (Purchasing power parity; international dollars per capita, 2021)




## Inequality

Secular increase during the XXth C.


Decline during the 2000s



## Life expectancy



The trajectories of Latin
America's economies


Lawrence A. Clayton | Michael L. Conniff | Susan M. Gauss

The ECONOMIC HISTORY of LATIN AMERICA SINCE INDEPENDENCE

VICTOR BULMER-THOMAS




## The Pre-Columbian era, I

- Different levels of state formation.
- More complex:

1. The Maya civilization (Mexico and Central America).
2. Triple Alliance: Mexico-Tenochtitlan, Tetzcoco, and Tlacopan (Mexico).
3. The Inca Empire (Ecuador-Peru-Bolivia).

- Less complex: Guaraní, Mapuche, ...
- Plenty of intermediate cases: we are learning more and more about the rich complexity of the Americas before the European arrival.




## The Pre-Columbian era, II

- In 1492, around half of Americans live in complex state formations, and around 3/4 have gone through the Neolithic Revolution.
- Fast transformation: the Americas would have looked very different in 1592 without the European arrivals than it did in 1492.
- Associated with these different levels of state formation: diverse economic structures.
- Some economic structures are highly hierarchical and unequal. Some are flatter and more equal.
- No sense of common "identity" beyond one's particular group.


## The colonial period (1492-1810), I

- European exploration: voyages of Columbus (1492-1504).
- Rapid conquest: Cortés and Pizarro.
- However, the conquest is followed by a period of accommodation with indigenous elites, which helped the Spanish and Portuguese control their vast territories.
- Tremendous demographic transformation: a catastrophic drop of the indigenous population ( $75 \%$ ? ), the arrival of enslaved Africans, and, in much smaller quantity, Europeans (around 1,500 Spanish and Portuguese per year).
- Kaleidoscopic mixing of populations and cultural fusion.
- Urban-centered colonization. Universities in Santo Domingo (1538), Mexico City (1551), Lima (1551), ...


## The colonial period (1492-1810), II

- The Spanish empire in America: 4 Viceroyalties plus several captaincies.
- New Spain (Mexico).
- Peru.
- New Granada (Colombia).
- Rio de la Plata (Argentina).
- The Portuguese Empire: Brazil.
- Silver, gold, and sugar production.
- Creation of an integrated world economy.



## The colonial period (1492-1810), III

- Complex political structures related to the import of the "municipios" and local adaptation.
- Iberian monarchies always searching (and often failing) for ways to assert their power: local elites design nuanced strategies to reassert their powers and autonomy from Madrid and Lisbon.
- Tensions between peninsulares and criollos aggravated by the Bourbon reforms (after the shock of the capture of Havana by the British in 1762 during the Seven Years' War).
- Corregidores substituted by intendentes.
- Tensions within ethnic groups: the Túpac Amaru rebellion (1780-1783).


## An independent Latin America 1810-1914, I

- Population around 25 m .: 15 m . indigenous, 3 m . European descent, 2 m . enslaved of African descent, and 5 m . mixed heritage.
- Unusually high level of urbanization.
- U.S. Revolution (1765) and Haitian Revolution (1791).
- Independence wars (1808-1826): triggered by the Napoleonic invasion of Spain and Portugal.
- Largest exceptions: Cuba and Puerto Rico, Spanish possessions until 1898.
- Extreme variety of circumstances (e.g., Hidalgo in Mexico vs. San Martín in Argentina).
- Portuguese America unity vs. Spanish America fragmentation.
- Brazilian experiment with monarchy.


## An independent Latin America 1810-1914, I

- Early 19th century: civil wars and state building.
- Deep constitutional differences: Centralism/federalism, Church-State relations.
- Break from traditional trade linkages and market fragmentation.
- End of fiscal and monetary unions.
- Widespread sovereign defaults.
- Unfavorable economic conditions lead to political uncertainty.

TABLE 2
Combined Military and Financlal Expenditures as Percentage of Budget

|  |  | Argentina | Brazil | Chile | Ecuador | Mexico | Paraguay | Peru | Uruguay |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | Venezuela



Default, 1825-1940


Notes: Fraction of years in default shown in parentheses. Poyais is omitted. Source: Taylor (2003). Default data from Tomz (2001), issue dates from Marichal (1989).

Table 1. Default History of Latin American Government Bonds Issued in the 1820s

| Country | Principal owed | Resolution, if any |
| :---: | :---: | :---: |
| Brazil | £21,129,000 | Arrears on interest paid and service resumed in 1829. |
| Mexico | 6,400.000 | Refinancing in 1831 to cover principal and arrears on interest. Quickly defaulted on. New refinancing in 1837. More defaults and refunding. Resolved 1864. |
| Costa Rica | 13,608 | Inherited share of Central American confederation debt. Principal paid off in 1840, but not arrears on interest. |
| Chile | 1,000,000 | Arrears on interest paid and service resumed in 1842. |
| Peru | 1,816,000 | Arrears on interest paid and service resumed in 1849. Default in 1876. |
| Colombia (New Granada) | 3,375,000 | Inherited $50 \%$ share of Gran Colombia debt. Principal and arrears paid off by new loan in 1845. Default in 1850. Principal and arrears paid off by new loan in 1861. |
| Venezuela | 1,923,750 | Inherited $28.5 \%$ share of Gran Colombia debt. Principal and arrears paid off by new loan in 1841. Default in 1847. New arrangements and further defaults then follow. |
| Ecuador | 1,451,259 | Inherited $21.5 \%$ share of Gran Colombia debt. Principal paid off by new loan in 1855. Arrears cancelled in exchange for land warrants and Peruvian bonds. Default in 1868. |
| Guatemala | 68,741 | Inherited share of Central American confederation debt. Principal and arrears paid off by new loan in 1856. |
| Buenos Aires | 1,000,000 | Resumed service in 1857. |
| El Salvador | 27,217 | Inherited share of Central American confederation debt. Paid off $90 \%$ of debt in 1860, but balance not until 1877 . |
| Honduras | 27,217 | Inherited share of Central American confederation debt. Principal and arrears paid off by new loan in 1867 . |
| Nicaragua | 27,717 | Inherited share of Central American confederation debt. Paid off $85 \%$ of debt face value in 1874. |

## An independent Latin America 1810-1914, II

- Late 19th century: the economic take-off (export-led growth).
- Large exporter of oil, sugar, coffee, wheat, wool, bananas, copper, beef, rubber, nitrates, tin, and silver.
- Good terms of trade.
- Large destination of FDI (mainly, but not only, UK and US). Much linked to railroads and mines.
- Scattered abolition of slavery (Cuba in 1886 and Brazil 1889).
- Often overlooked tradition of democracy and constitutionalism.
- Caudillos disappear.
- Even authoritarian regimes "pretend" to be democratic.


Fig. 6. Latin America's Terms of Trade 1820-1950.

Table 2. British Investments in Latin America at the End of 1880

| Country | Total | Private enterprise | Government bonds | Government bonds in default (year) |
| :---: | :---: | :---: | :---: | :---: |
| Argentina | £20,338,709 | 9,105,009 | 11,233,700 | - |
| Bolivia | 1,654,000 | - | 1,654,000 | 1,654,000 (1875) |
| Brazil | 38,869,067 | 15,808,905 | 23,060,102 | - |
| Chile | 8,466,521 | 701,417 | 7,765,104 | - |
| Costa Rica | 3,304,000 | - | 3,304,000 | 3,304,000 (1874) |
| Cuba | 1,231,600 | 1,231,600 | n.a. | n.a. |
| Dominican Republic | 714,300 | - | 714,300 | 714,300 (1872) |
| Ecuador | 1,959,380 | 135,380 | 1,724,000 | 1,824,000 (1868) |
| Guatemala | 544,200 | - | 544,200 | 544,200 (1876) |
| Honduras | 3,222,000 | - | 3,222,000 | 3,222,000 (1872) |
| Mexico | 32,740,916 | 9,200,116 | 23,540,800 | 23,540,800 (1866) |
| Nicaragua | 206,570 | 23,540,800 | - | - |
| Paraguay | 1,505,400 | - | 1,505,400 | 1,505,400 (1874) |
| Peru | 36,177,070 | 3,488,750 | 32,688,320 | 32,688,320 (1876) |
| Uruguay | 7,644,105 | 4,124,885 | 3,519,220 | - |
| Venezuela | 7,564,390 | 1,161,590 | 6,402,800 | - |
| General | 10,274,660 | 10,274,660 | n.a. | n.a. |
| Total | £179,490,261 | 56,412,255 | 123,078,006 | 71,097,020 |

Source: Rippy (1959, 25, 32).

## Modern Latin America 1914-2023, I

- Building of national states between 1914 and 1970 .
- The interwar period: the shock of the Great Depression.

1. De-globalization.

- Import substitution industrialization and inward development.
- Although recall: Latin America was already the most protectionist region in the world by the late 19th century.
- Interesting observation: countries with the highest tariff within the region underperformed the regional average.


Fig. 2. Unweighted Average of Regional Tarifss Before World War II.


Fig. 4. Own Tariffs in Latin America Before World War II.


Fig. s. Unweighted Regional Average of Principal Trading Partners' Tariffs.

## Modern Latin America 1914-2023, II

- Cold war: populism, revolution, and military authoritarianism.
- La violencia in Colombia, Casto in Cuba, Junta in Argentina.
- Return to democracy in the 1980 s:

1. In 1978, only three countries were democracies (Costa Rica, Colombia, and Venezuela). Mexico was an intermediate case.
2. By 1994, only Cuba is not a democracy.
3. No military officer on active duty has served as president in Latin America since 1990.

- Debt crisis in 1980s and partial economic liberalization in the 1990s.
- The commodities boom.


## Troubles ahead, I

1. Low productivity (e.g., few multinationals, very little technological innovation).
2. Informality.
3. Persistent high inequality (income, wealth, and education) and low social mobility (although poverty rate is improving).
4. Large regional and ethnic disparities.

FIGURE 5.1 Informal Workers as a Percentage of the Employe Population, by Gender



FIGURE 7.1 Enrollment Rates by Socioeconomic Status


FIGURE 7.2 Learning Gaps by Socioeconomic Status
Difference in "learning points" of top and bottom quintiles over the life cycle


FIGURE 4.1 Subnational Disparities in Income and Wages in Latin America, circa 2018
Panel A. Household income per capita (constant US\$ 2011 PPP)


FIGURE 4.1 Subnational Disparities in Income and Wages in Latin America, circa 2018 (continued) Panel B. Average wages (constant US\$ 2011 PPP)
$\square$ Maximum $\quad \triangle 90$ th percentile $\quad$ Mean 10th percentile $\quad$ Minimum


Figure 5.5 Monthly Wage Gaps among Afro-Descendants and Indigenous Populations


## Troubles ahead, II

5. Aging population.
6. Challenge of energy transition (both as users and exporters of energy).
7. High crime and slow and unreliable judicial system.
8. More in general, low state capability.
9. Growing (?) erosion of democratic institutions.

## Countries by intentional homicide rate (2006-2018)



FIGURE 9.5 Access to Civil Justice
Index of accessibility and affordability of civil courts in countries of the region compared with average for selection of European countries, Canada, and United States


Figure 2. EIU Democracy Index 202I Global Ranking for Latin American and Caribbean Countries


## Poverty and inequality

Average ratio of income accrued by top 10\% / bottom 10\% of population

## Average Gini coefficient


0.6


FIGURE 2.2 Pre-Tax Income Shares

## Average across countries

0.6
0.5


0


FIGURE 2.3 Average Relative Intergenerational Educational Persisten Correlation coefficient of children's and parents' years of schooling



FIGURE 2.4 The Evolution of Inequality in Latin America and the Caribbean, 1990-2018

Average across countries



FIGURE 2.5 Evolution of the Gini by country, 2002-18


FIGURE 2.6 Decomposition of Changes in Income Inequality in Latin America, 2003-18


FIGURE 2.8 Average Labor Share in the Region and in the World, 1975-2010


FIGURE 8.9 Wage Inequality in Latin America and OECD Countries: Gini Coefficients, circa 2017


FIGURE 12.2 Differences in Income Inequality Pre- and Post-Taxes and Government Cash Transfers in Latin America and the Caribbean, OECD, and European Union, circa 2012


- Disposable income Gini in OECD and European Union countries
- Disposable income Gini in countries of Latin America and the Caribbean
- Market income Gini

Note: Redistribution is defined as the difference between market income and disposable income inequality, expressed as a percentage of market income inequality.

FIGURE 12.6 Differences in Income Inequality, Pre- and Post-Pensions, and Government Cash and In-Kind Transfers in Health and Education


FIGURE 12.7 Pro-Poor and Pro-Rich Spending on Education by Level, Ordered by Market Income, circa 2012


# When did Latin America fall 

 behind?
## When did Latin America fall behind?

- The colonial period: Engerman and Sokoloff (2002), Allen, Murphy, and Schneider (2012).
- The post-independence period (early 19th century): North, Summerhill, and Weingast (1999), Abad and Van Zanden (2016).
- The interwar period (especially the Southern cone countries): Taylor (1998).
- The 1980s and 2020s: the "lost decades."


## Real GDP per capita (2011 \$)

| Year | Argentina | Chile | Colombia | Mexico | Peru | USA | UK |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 6 5 0}$ |  |  |  | 1,172 | 1,062 | 897 | 1,446 |
| $\mathbf{1 7 2 0}$ |  |  |  | 1,522 | 1,100 | 1,769 | 2,715 |
| $\mathbf{1 8 0 0}$ | 1,484 | 853 | 942 | 1,305 | 1,058 | 2,545 | 3,343 |

FIGURE 1
NOMINAL WAGES OF LABOURERS, 1800-1820


FIGURE 2
GRAIN WAGES OF LABOURERS, 1800-1820


FIGURE 3
MEAT WAGES OF LABOURERS, 1800-1820



Figure 5


Figure 2
PUBLIC REVENUES REMITTED TO SPAIN


Figure 3
SILVER PRODUCTION BY DECADE, IN MILLIONS OF KILOGRAMS
Source: Brown and TePaske (2010).

TABLE 3
REAL WAGES OR WELFARE RATIOS FOR SPAIN, MEXICO, BOLIVIA, AND PERU, IN NUMBER OF BARE-BONES BASKETS

|  | $1550-1599$ | $1600-1649$ | $1650-1699$ | $1700-1749$ | $1750-1799$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Madrid | 1.61 | 1.83 | 1.81 | 1.91 | 1.29 |
| Mexico | 0.74 | 1.64 | 2.57 | 2.66 | 2.35 |
| Potosí |  |  |  | 2.95 | 2.20 |
| Arequipa \& Cuzco | $1.08^{\mathrm{a}}$ | 1.19 | 1.03 | 1.18 | 1.64 |

a Only 1590 to 1599.
Sources: Latin America: Arroyo Abad et al. (2012), Spain: Allen (2001).

## AJR's theory in Latin America



## Relative Real GDP/Capita (USA = 1)

1.2


| 0 |  | 1890 | 1910 | 1930 | 1950 | 1970 | 1990 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1870 | 1890 | 2010 |  |  |  |  |  |
| —Argentina | —Brazil | —Chile | —Colombia | —Mexico |  |  |  |
| —Peru | —Uruguay | —Venezuela——USA |  |  |  |  |  |

## Relevance of economic history

## Some ideas

- In this class, we will bring economics and history together from a global perspective to understand better the Latin American experience.
- A road of two directions: we will look at the historical record and ask ourselves what we can learn from it (as well as political science, social theory, anthropology, law, ...).
- But also how we can use economics to understand history.
- Carlo Cipolla says economic history is between two cultures.


# Between Two Cultures 

An Introduction to Economic History
Carlo M.Cipolla

## Some methodological points

- Precise statement of questions to be studied.
- The hypotheses under consideration should be explicitly specified, logically consistent, and falsifiable.
- The relevant variables should be explicitly specified, and the data should be systematically gathered and analyzed.
- Rigorous statistical testing and causality investigation.


## Some historiographical traditions

## Enrique Krauze, Mexico: Biography of power

The weight of the past has sometimes been more present than the present itself. A repetition of the past has sometimes seemed to be the only foreseeable future.

- Weight of "nationalist histories." Instead, we will focus on linkages: within the Americas and with respect to the rest of the world.
- Inheritance of structuralism and dependency theory: Whig history al revés. Balance between structure and contingency.
- Culturalists views.

