The Economic and Social History of Brazil since 1889

This is the first complete economic and social history of Brazil in the modern period in any language. It provides a detailed analysis of the evolution of the Brazilian society and economy from the end of the empire in 1889 to the present day. The authors elucidate the basic trends that have defined modern Brazilian society and economy. In this period Brazil moved from being a mostly rural traditional agriculture society with only light industry and low levels of human capital to a modern literate and industrial nation. It has also transformed itself into one of the world’s most important agricultural exporters. How and why this occurred is explained in this important survey.

Francisco Vidal Luna received his PhD in Economics in 1980 from the Universidade de São Paulo in São Paulo, Brazil, where he also was Professor of Economics until 2002. Author of some 50 articles and papers and 11 books on Brazilian economic history and the Brazilian economy, he has been an academic, a government administrator, and a banker.

Herbert S. Klein received his PhD from the University of Chicago in 1963 and is Gouveneur Morris Professor Emeritus of History at Columbia University. Author of some 25 books and 165 articles in several languages on Latin America and on comparative themes in social and economic history, he is currently a Research Fellow and Latin American Curator at Stanford University’s Hoover Institution.
To Adela Luna Campuzano de Vidal and Bernette Rudolph
The Economic and Social History of Brazil since 1889

FRANCISCO VIDAL LUNA
Universidade de São Paulo

HERBERT S. KLEIN
Columbia University and Stanford University
Contents

List of Graphs, Tables, and Maps    page vi

Introduction    xv

1 The Old Republic, 1889–1930    1
2 The Vargas Period, 1930–1945    82
3 Formative Democracies and the Military Interregnum, 1945–1985    143
4 Consolidation of Democracy since 1985    246

Appendix    355
Bibliography    391
Index    421
List of Graphs, Tables, and Maps

Graphs

1.1. Population of Latin American Countries in 1850 (000)  page 3
1.2. Population of Latin American Countries in 1900 (000)  4
1.3. World and Brazilian Coffee Production, 1852–1991  7
1.4. Importance of São Paulo and Rio de Janeiro in Brazilian Coffee Production, 1884–1939  14
1.5. Coffee-Producing Regions of São Paulo, 1836–1935 (in arrobas)  15
1.6a. Coffee: Prices and the Value of Exports of Brazil, 1857–1906  17
1.6b. Coffee Prices and Production in Brazil, 1857–1906  18
1.7. Growth of per Capita Income, 1800/1989  22
1.8. Total Fertility Rate, 1903–1988  23
1.9. Crude Death Rates for Brazil, 1900–1995  23
1.10. Net Primary School Enrollments by State, 1889–1933  28
1.11. Population of the Principal Capitals of Brazil, 1872–1920 (000)  29
1.12. Percentage of Population by Region, 1872–1920  31
1.13. Estimates of the Balance of Payments, 1886/1897  38
1.15a. Index of Exchange, Prices, and Coffee Exports, 1898–1920  43
1.15b. Index Coffee: Plantings, Production, and Stocks in Brazil, 1898–1920  43
1.15c. Percentage of Brazilian Production and Exports to World Production and Exports, 1898–1920  43
List of Graphs, Tables and Maps

1.15d. Coffee: World Stocks, World Consumption, and Stocks, Brazil/Exports Brazil, 1898–1920
1.16a. Percentage of Brazilian Production and Exportation of Coffee, 1920–1940
1.16b. Percentage of World Consumption and Brazilian Exports, 1920–1940
1.16c. Index of Plantings and Production and Total Stocks of Coffee, 1920–1940
1.16d. Index of Exchange Rate, Coffee Price, and Exports, 1920–1939
1.17. Participation of Principal Exports in Total Exports, 1821/1939
1.18a. Production and Exports of Sugar, 1858–1927
1.18b. Average Price of Sugar Exports, 1857–1937
1.18c. World Cane Production as Percentage of Total World Cane and Beet Sugar Production, 1839–1939
1.18d. Brazilian Sugar Production and Exports by World Totals, 1853–1937
1.19. Index of the Quantity, Value, and Price of Rubber Exports, 1880–1929
1.20. Cacao, Production, Value, and Quantity Exported, 1890–1938
1.21a. Crops as Percentage of Total Value of Production, 1890–1938
1.21b. Crops as Percentage of Total Value of Production, 1920–1930
1.22. Brazilian Products as a Share of World Production, 1920
1.23. Expansion of Railroad System, 1854–1938
1.24a. Machines and Equipment Exported to Brazil, 1875–1938
1.24b. Investment Indicators, 1902–1939
1.24c. Composition of Imports, 1901–1938
1.24d. Production and Importation of Cotton Textiles, 1901–1938
1.25a. Industrial Production and Workers by States – Census 1907
1.25b. Textile Industry – Census 1907
1.25c. Participation in the Importation of Consumer Goods – Census 1907
1.25d. Participation in the Production of Consumer Goods, 1907
List of Graphs, Tables and Maps

1.26. Percentage and Number of Principal Industries and Average Workers per Unit – Census 1920 68
1.27. Evolution of the Real Value of Industrial Production and the Participation of São Paulo, 1907–1938 69
1.28. Participation in GDP, 1929 74
1.29. Rate of Annual Variation in GDP, Population, Total Exports, and Coffee Production, 1850–1929 75
2.1. Prices, Production, and Destruction of Coffee and Brazilian Participation in World Market, 1924–1952 91
2.2. Exports, Imports, and Terms of Trade, 1926–1950 94
2.3. Variation in Real GDP by Economic Sectors, 1926–1947 106
2.4a. Growth of Industry, 1920, 1940, and 1950 108
2.4b. Participation of São Paulo in Industry, 1920, 1940, and 1950 108
2.5. Participation of Regions and Principal States in Industry – Census 1940 109
2.6. Industrial Indicators by Sector, 1940 111
2.7a. Establishments by Number of Workers, 1940 111
2.7b. Percentage of All Workers by Size of Establishment, 1940 112
2.8. Participation of Manufacturing Industry in GDP, by State, 1948 113
2.10. Participation in Exports of Principal Agricultural Products, 1920–1950 116
2.11. Production of Principal Agricultural Products, 1920–1950 117
2.13a. Principal Agricultural Products, Productivity by Area, 1933–1950 119
2.13b. Principal Agricultural Products, Productivity by Area, 1933–1950 119
2.14. Percentage Cultivated Area by State, 1938 and 1947 122
2.15. Agricultural Indicators, 1940 122
2.16. Gini Index of Landownership – Brazil and Principal States, 1920–1950 123
2.17. Distribution of Agricultural Indicators by Region and State, 1940 124
2.18. Foreign Immigration to Brazil by Year, 1884–1945 127
List of Graphs, Tables and Maps

2.19. Relative Importance of Regions in Total Population, 1920, 1940, and 1950 128
2.20. Students Matriculated by Course, 1932, 1945 129
2.21. Literate Adults 18 Years and Older by Regions – Census of 1920 and 1940 131
2.22. Literacy Rate by Sex and Color of the Population Five Years of Age and Older, 1940 131
2.23. Literacy by Age Cohort and Sex in the Census of 1940 134
2.24. Percentage of Workers Who Were Managers, Employees, and Self-Employed by Color, 1940 (n = 7.4 million) 135
2.25. Distribution of the Population by Color by Region, 1872 135
2.26. Distribution of the Population by Color by Region, 1940 136
2.27. Infant Mortality by Region, 1930–1940 137
2.28. Average Life Expectancy by Sex, 1949/1951 138
2.29. Crude Birth Rate for Selected Latin American Countries, 1930 139
2.30. Birth Rate by Age of Mother, Brazil, England, and the United States, 1939–1940 140
2.31. Birth Rate by Age and Color of the Mother, Brazil, 1940 140
3.2. Annual Change in GDP, Monetary Base, and Inflation, 1945–1955 150
3.3. Investments in the Plano de Metas, 1957/1961 161
3.4. Plano de Metas – Forecasted Resources 165
3.5. Annual Change in Fiscal Deficit, M1, and Inflation, 1950–1964 167
3.6. Target Plan – Investments and Foreign Financing 168
3.7. Industrial Establishments and Employees, 1939–1959 (1939 = 100) (establishments in 1939 = 43,250; workers in 1939 = 851,755) 170
3.8. Participation in the Value of Industrial Production of the Principal Sectors, 1939–1959 171
3.10. World Production, Consumption, and the Price of Coffee, 1940–1966 175
3.11. Brazilian Coffee Production by State and Percent in Exports, 1940–1966 175
3.12a. Participation in Exports, 1947 and 1960 177
List of Graphs, Tables and Maps

3.12b. Participation in Imports, 1947 and 1960
3.14a. Index of Change in GDP by Sector, 1950–1964 (1957 = 100)
3.14b. Annual Change in GDP and GDP per Capita, 1950–1964
3.15a. Income per Capita – Brazil, Regions, and States, 1960
3.15b. Percentage of GDP by Regions and States, 1960
3.20. Grain Production in Brazil, 1961–2003 (wheat, cotton, peanuts, rice, beans, corn, and soybeans)
3.22. Illiterates by Age and Sex in 1970
3.23. Illiterates by Color and Sex in 1982
3.25. Size of Urban and Rural Populations in Brazil, 1940–1980
3.27. Distribution of Births by Age of Mothers in 1903, 1963, and 1988
3.28. Total Fertility Rate by Region, 1940–1980
3.29. Age Pyramid of the Population of Brazil in 1980
3.31. Relative Share of Various Age Categories, Brazil, 1940–1980
3.34. Share of Total Mortality by Age Group, 1950/1955 to 1980/1985
3.35. Infant Mortality by Region, 1950–1980
3.37. Life Expectancy at Birth by Region and Sex in 1980
3.38. Annual Geometric Growth Rate of the Population, 1872–2010
List of Graphs, Tables and Maps


4.2. Variation of Average GDP per Decade, 1960–2000

4.3. Evolution of Rural Credit in Constant Prices, 1969–2010


4.7. Monthly Variation in General Price Index (FGV), 1944–2012

4.8. Industrial Source of Funds Collected for Privatization

4.9a. Brazilian Dollar Reserves by Month, 1994–2004

4.9b. Brazilian Dollar Reserves, Annual, 1994–2011


4.10b. Growth of BRICs (Brazil, Russian, India, and China), 1995–2011


4.12. Public-Sector Borrowing Requirements (PSBR), Primary Surplus and Interest Payments, as a Percentage of GDP, 2000–2009

4.13. Exchange Rate, and Effective Exchange, 2000–2012 (effective rate and effective exchange rate)


4.15. Participation of Manufacturing in the GDP, 1995–2011


4.17. Index of Agro-Pastoral Commodity Prices – IC-Br, 2005–2012

4.18. Rate of Investment and Variation in the GDP, 1965–2010


List of Graphs, Tables and Maps

4.22. Percentage of Economically Active Population by Sex, 1992–2007 313
4.24. Total Fertility Rate by Region, 1940–2010 316
4.27a. Infant Mortality Rates by Region, 1997–2008 320
4.29. Age Pyramid of the Brazilian Population in 2010 325
4.30. Evolution of the Percentage of Extremely Poor Households in the States in 1981 with Rates over 30 Percent 331
4.31. Percentage of Indigent and Poor Families in Brazil, 1977–2004 333
4.32. Reduction of Poverty for Brazilian Families, 2004 and 2009 334
4.33. Literacy Rate of Brazilian Population 15 Years of Age and Older, 1900–2010 341
4.34. Percentage Illiterates by Age by Color/Race, 2010 (15 years of age and older) 342
4.35. Marriages by Type, 1960–2010 344
4.36. Heads of Families by Type, 1992–2009 345
4.38. Average Years of Schooling by Color for Persons 25 Years of Age and Older, 1992–2009 351

Tables

2.1 Agro-Pastoral Establishments, Total Area, and Utilization, 1920–1950 120
2.2 Persons 10 Years of Age and Older Who Have Completed a Course of Studies by Sex and Color, 1940 132
2.3 Students (5 to 39 years of age) Matriculated by Level of Course, Sex, and Color, 1940 133
3.1 Plano de Metas – Sectors, Goals, and Level of Attainment 162
3.2 Productivity of the Principal Agricultural Crops, 1931–1962 172
List of Graphs, Tables and Maps

3.3 Crop Areas, Personnel, Tractors, and Plows Employed by State, 1950–1960 173
3.4 Principal States for Coffee Production, with Area Planted and Output, 1956–1962 176
4.1 Annual Change in GDP of the Principal Latin American Countries, 1980–1989 (%) 260
4.2 Indicators of External Debt, 2007–2011 (U.S. $ million) 297
4.3 Principal Characteristics of Agriculture in the Agropastoral Census of 2006 302
A.1 Basic Data on the Coffee Economy of Brazil, 1870–1990 355
A.2 Economic Indicators for the External Sector, 1870–2011 360
A.3 Economic Indicators for the Internal Sector, 1870–2011 366
A.4 Principal Agricultural Exports, 1821–1939 (in £000) 371
A.5 Principal Agricultural Exports, 1953–2010 (in U.S.$000) 376
A.6 Brazilian Exports by Type of Product, 1964–2011 (in U.S.$ millions FOB) 378
A.7 Value of Industrial Production by States, 1907–1938 (in contos de réis) 379
A.8 Annual Indices of Industrial Production by Class and Type of Product, 1971–2000 (1991 = 100) 380
A.9 Distribution of the Population by State and Region in the Demographic Censuses of Brazil, 1872–2010 383
A.10 Origin of Brazilian Transoceanic Immigrants, 1820–1972 384
A.12 Religion of the Brazilian Population, 1872–2010 390
A.13 Number of Students Enrolled in Higher Education by Type of Institution, 1960–2010 390

Maps

1.1. Regions of S˜ao Paulo, 1900, by Sequence of Settlement 15
1.2. Regional Distribution of the Brazilian Population in 1872 (n = 9.9 million) 30
1.3. Regional Distribution of the Population in 1920 (n = 30.6 million) 31
4.1. Population by State, 1950 328
4.2. Population by State, 2010 329
Our object in writing this general economic and social history of Brazil since the founding of the republic in 1889 is to provide the reader with the basic trends that have defined modern Brazilian society and economy. There have been previous surveys in Portuguese and other languages covering many aspects of the economic evolution of this major world economy, but there have been few works that have covered this entire period or have surveyed the social transformations that accompanied these major economic changes.

As we will see in this volume, Brazil has had an uneven march toward modernization, often falling behind many of its peer nations and then engaging in protracted periods of growth that suddenly moved the country more in step with international trends. These spurts have left sectors behind in their traditional forms, while revolutionizing other parts of the economy and society in impressive ways. Overall Brazil has moved from a significantly underdeveloped society with a majority rural and illiterate population at the beginning of this period to a modern literate and urbanized society that is a world competitor in the one area in which it was most backward in 1889, that is, in agricultural production.

Not only is Brazil now a literate society where the majority live in modern urban centers, but it is among the half-dozen leading nations in terms of production of science and in providing the best in tertiary education. It has also become a serious industrial nation, though with only modest technical advancement compared to its Asian peers. Finally, it is a model developing society in terms of integrating its population into a national health and pension system through the progressive integration of the national labor force into the formal labor market, the expansion
of basic services, and income transfers on a massive scale to its unincorporated population.

There had also been steady improvement in poverty reduction in general and extreme poverty in particular, both of which have been reduced to historic lows. Although Brazil remains one of the world's more unequal societies in terms of income distribution, in the past two decades there has been a massive increase in the share of the working and middle classes within the total population with a resulting historic decline in inequality.

It is our aim to show how the economy and society of one of the world’s largest countries has evolved and the causes and consequences of these changes over time. Given the differing pace of economic and social changes, we have found that a division of chapters that parallels long-term political changes is the most adequate way to divide this study. Finally, given that the state has been such an important actor in all of these social and economic institutions and their evolution, we have also provided a basic political history to orient the reader in the role that the state has played in these developments.

In writing this work we have tried to explain any special terminology to the reader the first time we use it. We have also translated the names of most institutions into English, although we have retained the Portuguese initials used to name these organizations. At the same time we have provided a full citation to the Portuguese title the first time it was used. We have also used “external” interchangeably here as a synonym for “international” when referring to economic conditions.

This book is based on a collaboration of the two authors over many years of joint research and publications, and we would both like to thank Matiko Kume Vidal and Judith C. Schiffner for their encouragement and support throughout these many years.