# WHO, WHAT, WHEN, AND WHERE: <br> How Many, How Much, and How Often 

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BIOGRAPHICAL DICTIONARY OF AUDIENCIA MINISTERS IN THE AMERICAS, 1687-1821. By mark a. burkholder and d. s. chandler. (Westport, Conn.: Greenwood Press, 1982. Pp. 491. \$49.95.)
la sociedad en chile austral antes de la colonizacion alemANA, 1645-1850. By gabriel guarda. (Santiago: A. Bello, 1979. Pp. 566.)

LOS REGIDORES PERPETUOS DEL CABILDO DE LIMA (1535-1821): CRONICA Y ESTUDIO DE UN GRUPO DE GESTION. By guillermo lohmann villena. 2 volumes. (Sevilla: Diputación Provincial de Sevilla, 1983.)
HISTORICAL STATISTICS OF CHILE. By markos j. mamalakis. (Westport, Conn.: Greenwood Press, 4 volumes to date.) Volume 1: NATIONAL ACCOUNTS (1978. Pp. 300. \$65.00); Volume 2: DEMOGRAPHY AND LABOR FORCE (1980. Pp. 471. \$75.00); Volume 3: FORESTRY AND RELATED ACTIVITIES (1982. Pp. 530. \$85.00); Volume 4: MONEY, PRICES, AND CREDIT SERVICES (1983. Pp. 598. \$95.00.)
ORIGINES DE LA VIDA ECONOMICA CHILENA, 1659-1808. By armando de ramon and jose manuel larrain. (Santiago: Centro de Estudios Públicos, 1982. Pp. 416.)
CUBA: A HANDBOOK OF HISTORICAL STATISTICS. By susan schroeder. (Boston: G. K. Hall, 1982. Pp. 589. \$85.00.)
THE ROYAL TREASURIES OF THE SPANISH EMPIRE IN AMERICA. By JOHN J. tepaske and herbert s. klein. (Durham, N.C.: Duke University Press, 1982.3 volumes. $\$ 125.00$ set.)

Notwithstanding the fact that Spanish American countries are approaching their third century of independence, the lives of many of those who shaped their past remain to be reconstructed. Regardless of the increasing preoccupation of area specialists with figures, few compendia of historical statistics have been produced. It is with pleasure therefore that scholars greet most new reference works and related monographs, whether they be collective biographies or sets of statistics.

Although the traditional questions-who, what, when, and where-have not and never will be superseded, new questions have
been added to them. For some time, scholars have also been asking and attempting to answer the additional questions regarding how many, how much, and how often. Just as current approaches to the past simultaneously diverge from and incorporate those of previous generations, undoubtedly so will the approaches of generations to come. The seven works reviewed here are an admixture of the traditional and newer approaches to the past. The first three treat people as individuals, the other four, people as groups whose collective behavior, or manifestations thereof, is measured numerically.

The first three works-Burkholder and Chandler's Biographical Dictionary of Audencia Ministers, Lohmann Villena's Los regidores perpetuos del Cabildo de Lima, and Guarda's La sociedad en Chile austral-address the ageless questions of who, what, when, and where. All three works were extensively researched. Of the three, Mark Burkholder and Dewitt Samuel Chandler's Biographical Dictionary is of the greatest interest because of the breadth of its geographic coverage and the importance of the 698 officeholders whose lives and careers it encapsulates. Oidores (high court judges) were usually second in authority and prestige only to the chief executive of the district in which they served, insofar as civil authority was concerned. The Biographical Dictionary is also the easiest of the three works to consult. Not only is it indexed, but it includes an appendix of "new men named to American audiencias by court, position, and date."

Some specialists will criticize Burkholder and Chandler for not knowing everything they should about the men they treat. José García de León y Pizarro, president and regent of the Audiencia de Quito (1776-1783), for example, preferred his matronymic, being known coevally and historically as Pizarro, not as García or García de León. ${ }^{1}$ What perturbs me, however, is Burkholder and Chandler's exclusion of those oidores and fiscales (crown attorneys) who held office after 1687 but were appointed before that date. Burkholder and Chandler chose to begin coverage with 1687 appointees partly because that year marked the beginning of the systematic sale of audiencia appointments by the crown, but mostly because the Biographical Dictionary is the complementary result of their earlier work, From Impotence to Authority: The Spanish Crown and the American Audiencias, 1687-1808. ${ }^{2}$ In many respects, From Impotence to Authority is a prosopographic study of appointees to the high courts during the late seventeenth, eighteenth, and early nineteenth centuries.

Quibbles aside, Burkholder and Chandler have produced a welldone reference manual on the regents, judges, and crown attorneys of the late Hapsburg and Bourbon periods. Their Biographical Dictionary is exceptionally useful and welcome not only because no other guide to
audiencia ministers covers either the second half of the colonial period or the entire period, but more importantly because Burkholder and Chandler have incorporated much new data, mostly culled from service records in the Archivo General de Simancas. ${ }^{3}$

Guillermo Lohmann Villena's Los regidores perpetuos will probably interest more scholars than Gabriel Guarda's La sociedad en Chile austral. The Cabildo of Lima was the most important municpal council in the colonies during the sixteenth and seventeenth centuries, and the second most important in the eighteenth and the early nineteenth. Many of its members were men of substance, prestige, and influence in their own right.

Los regidores perpetuos is not an easy work to consult. Although Volume 2 containing the biographical entries is organized alphabetically, the work lacks a name index. The only way to ascertain the permanent membership of the Cabildo by year or period is to compile a checklist from the diachronic chapters in Volume 1. ${ }^{4}$

Part One of Los regidores perpetuos constitutes a chronological review of the organization, membership, and vicissitudes of the council from its establishment through the eve of independence. In this section, Lohmann Villena covers much the same ground as John Moore but not as well, despite the addition of some new details. ${ }^{5}$ Part Two is a prosopographic study of the regidores perpetuos, at least eighty of whom (30 percent) purchased the post, several for two or three lifetimes (that is, with the right of succession). Although Lohmann Villena broaches basic questions about such topics as acquisition of the office, social origins of the regidores, family networks, economic activities, education, and the like, he does not answer them as completely as the data permit.

Part Three, "Elenco historial de los regidores," comprises Volume 2; it compensates for the shortcomings of Parts One and Two. Lohmann Villena is at his best in reconstructing the lives of aldermen as individuals, whether the obscure Jerónimo de Agüero Barreto, who inherited the office from his father in 1688 but nonetheless died impoverished in 1724, or a member of the prosperous, eventually entitled Aliaga family. It is precisely the wealth of information and citations, mostly archival, garnered over several decades in Peruvian, Spanish, and other repositories that renders Los regidores perpetuos worth acquiring and consulting.

Although primarily of interest to Chileanists, Guarda's La sociedad en Chile austral should not be overlooked by those who specialize in other colonies or countries because many of the individuals who figure in its pages originated elsewhere. Of the 761 men and women whose birthplace Guarda was able to ascertain, more than half were immigrants: 302 ( 40 percent) were born in Spain, 55 ( 7 percent) elsewhere in

Europe, and 91 (12 percent) elsewhere in Spanish America. Guarda's work is relatively easy to consult. Organized chronologically, it includes a name index.

Of the three biographical directories, La sociedad en Chile austral is the most comprehensive as well as extensive. Guarda delineates the lives and careers of some two thousand bureaucrats, military personnel, and religious personnel who were assigned or moved to southern Chile (mostly in the vicinities of Valdivia and Osorno) between 1645 and 1845 . He also includes socioeconomic and genealogical data on nearly sixteen thousand of their descendants. Guarda's inaugural and terminal dates were not arbitrarily chosen. Southern Chile was not settled permanently by Spaniards until 1645, and Osorno not until 1796. What may be called the period of the Spanish settlement of the region came to an end not with Chile's separation from Spain, but when German immigrants began to arrive en masse in the 1840s. Most Germans settled in southern Chile, eventually altering not only the region's sociocultural structure but also its economic and political structures. ${ }^{6}$

Like Lohmann Villena's Los regidores perpetuos, Guarda's La sociedad en Chile austral reflects years of intensive research in major and minor repositories. Indicative of Guarda's mastery of sources is his massive bibliography, which includes almost fifteen hundred biographical and genealogical works. My one wish is that Guarda had expanded his introduction into a prosopography of the Spanish settlers of southern Chile. Instead he offers such tidbits as the number of clerics, at least 365 through 1820. In terms of his knowledge of the place, period, persons, and sources, his readability, and his methodological competency, Guarda seems eminently qualified to undertake this task. ${ }^{7}$

The second group of works address themselves to the more modern questions of how many, how much, and how often. John J. TePaske and Herbert S. Klein's The Royal Treasuries of the Spanish Empire in America covers the most ground geographically. It is a corpus of original data, a compendium of time series of cartas cuentas or more or less annual summaries of the receipts and disbursements of the fifteen cajas reales that functioned at one time or another in Lower Peru (Volume 1), the nine cajas of Upper Peru or colonial Bolivia (Volume 2), and the five cajas of Chile and the fourteen of the Río de la Plata (Volume 3). As such, The Royal Treasuries represents many years of tedious research in historical archives in Peru, Bolivia, Chile, Argentina, and Spain.

Not all of the time series are complete. Cartas cuentas were not prepared for every year, especially during the sixteenth century. Of those cartas cuentas that were prepared, originals or copies have not been found for all years in every case. The series for Lima, for example, does not begin until 1580, and that for Santiago de Chile, whose treasury dates from 1548, not until 1613.

The data in The Royal Treasuries will answer some of the basic questions relating to royal finances and colonial economics, such as how much Indian tribute was collected, when and where, and what proportion of total income it constituted. But the data will not answer many other, equally important questions, such as how much of a burden tribute constituted. This situation hardly constitutes a shortcoming on the part of the compilers, being instead inherent in the limited nature of the data at issue. Answers to most questions regarding revenues and what the collected imposts reveal about the economics and societies of the colonies in question may be obtained by consulting daily and revenue-specific ledgers of the royal treasuries. ${ }^{8}$ Libros de guias and tornaguias, for example, reveal much about the volume, value, and other aspects of intercolonial and intracolonial trade. ${ }^{9}$ Thus it would have been useful had TePaske and Klein included a list of all the treasury records they and their collaborators encountered. ${ }^{10}$

My main objection to TePaske and Klein's approach is their reluctance to address the problem of chronology more fully. They assume that the year of establishment of any given treasury was the year for which its earliest carta cuenta was recovered, except in those cases where they found evidence to the contrary. Because chronology is critical to the analysis and interpretation of time series, a more painstaking approach is needed. In order to evaluate the data given, one needs to know what remains to be recovered or has to be estimated. The Caja Real of La Paz, for instance, was definitely, not "possibly," founded before 1624. It was established by the Viceroy Principe de Esquilache (1615-21). Esquilache does not specify the year in his relación de mando, but it should not be difficult to ascertain. ${ }^{11}$

Yet such slights on the part of TePaske and Klein are small in the context of the tremendous amount of fiscal information on the period that they and their collaborators have amassed. All of these data they have ably organized and logically presented, not only for Lower and Upper Peru, Chile, and the Río de la Plata, but also for Mexico. It is regrettable that only one of the separately prepared volumes for Mexico, that of the cartas cuentas of the Caja Real of Mexico City, has appeared. ${ }^{12}$ All of the cartas cuentas recovered or prepared by TePaske and Klein and their associates, however, are available on computer tape.

Susan Schroeder's Cuba: A Handbook of Historical Statistics is chronologically and thematically the most ambitious of the four quantitative works reviewed. It includes time series on virtually every major, as well as many minor, aspects of the demography, economy, geography, polity, and society of colonial and modern Cuba. Unfortunately, that is about all that may be said in its favor inasmuch as Schroeder's Cuba is inadequately researched, poorly executed, and sloppily presented. The
latter problem is the publisher's fault. G. K. Hall should have had the text proofread and retyped instead of photo-offsetting it as submitted. The text is riddled with typographical errors, hand-inserted corrigenda and addenda, and different typefaces in the same tables.

That Schroeder found research in Cuba "impractical" is understandable. What is not acceptable is that she limited research to a handful of published sources, did not exploit adequately or correctly the few primary statistical sets and serials consulted, and relied excessively on secondary studies, especially travel accounts. For example, in order to compile tables on population size and characteristics, Schroeder consulted the 1899, 1907, and 1919 censuses, but not those of 1931, 1943, 1953, and 1970. Similarly, to compile vital rate tables, she consulted the Anuario Estadístico de Cuba, albeit not all issues thereof, yet she ignored the Anuario Demográfico de Cuba. Nor did Schroeder consult all appropriate secondary compendia and studies. She seems to be unaware of a number of basic works. ${ }^{13}$

The inadequacies of Schroeder's research are critical not so much because the historical and demographic chapters constitute the most original part of her work (most of the rest consists of second-hand tables) but because far too many of her population and vital rate tables suffer from errors of omission and commission. For instance, Schroeder's table 3.1, entitled "Live Births and Crude Birth Rates, 1890-1978," omits numbers of births and birthrates for 1900-6, 1917-31, 1942, 1943, and 1954-56, as well as numbers of births for 1977 and 1978. Both kinds of statistics exist in print for all of the missing years. Furthermore, the birthrates supplied for 1890-1899, 1907-1916, and 1932-1941 are far too low, given the gross underregistration of births in Cuba during the late nineteenth century and the first half of the twentieth, a situation that Schroeder neglects to note in her too sparse commentary. In this regard, it must be stressed that statistics do not speak for themselves; they have to be interpreted as well as analyzed.

Questions also arise about Schroeder's analysis and interpretation of statistics. For example, she purports to give "rates of increase" in table 2.2, entitled "Population Estimates for the Years 1511-1899 with Rates of Increase for Census Years." Beyond having confused ratios of intercensal increase with "rates of increase for census years," either Schroeder or one of the sources upon which she relied, miscalculated ratios of increase. It is given as 31 between 1775 and 1792, as 34 between 1792 and 1817, and so on. According to her data, the ratio of intercensal increase was 59 percent between 1775 and 1792, and 110 percent between 1792 and 1817. The average annual rates of population growth (natural increase plus net migration) were 2.6 and 3.0 percent, respectively.

Some of the tables in Cuba: A Handbook of Historical Statistics, at least some of those reproduced verbatim from monographic literature in the economic chapters, appear to be more or less acceptable. Only specialists versed in the sources and familiar with quantitative methodology, however, will know which are and which are not reliable. But these specialists have no need for such a compendium. Presumably intended for nonspecialists, Cuba: A Handbook of Historical Statistics is not a reliable source of diachronic data on the demography, economy, geography, polity, and society of colonial and modern Cuba.

Armando de Ramón and José Manuel Larraín's Orígenes de la vida económica chilena is a history of prices in central Chile, more specifically in Santiago and its district between 1659 and 1808. As such it is a historiographic first. ${ }^{14}$ Although not a reference work, Origenes de la vida económica chilena is included in this essay because it constitutes a prime example of the kind of basic research that must be done before more complete compendia of historical statistics of the colonies or countries of Latin America may be compiled. After having written this, I was pleased, but not surprised, to discover that Mamalakis abstracts Ramón and Larraín's data and findings in the latest volume of Historical Statistics of Chile.

The prices that Ramón and Larraín reconstruct and analyze are those of subsistence commodities (foodstuffs and food, leather and leather products, cloth, building materials, and household goods). They also treat internal and external demand and supply in that order. In other words, they endeavored to determine how much it cost central Chileans to live during the seventeenth, eighteenth, and early nineteenth centuries, what fluctuations or trends in prices occurred, to what extent supply met demand, and the effect that the interaction of demand and supply had on prices.

Ramón and Larraín's first task was to elaborate time series of average annual prices, commodity by commodity, because no such utilizable series existed. ${ }^{15}$ To accomplish this end, they exploited the only record groups that contain both year-by-year and day-by-day expenditures of urban and rural sectors of the population for subsistence commodities-accounts books of ecclesiastical establishments and other communal institutions. In the case of Santiago and its districts, such records yield limited price data for only a few years prior to 1659 (see pp. 318-19), but abundant data for 1659-1718 and 1749-1808. This situation explains why they were unable to study the price history of the first half of the colonial period.

Ramón and Larraín's second task was to construct general and sector-specific price indexes. This undertaking they appear to have accomplished correctly. Given the bulk purchasing power of convents and
monasteries and their own source of supply of horticultural products, the prices are a mixture of wholesale and retail. So too is the general price index.

Ramón and Larraín find that the majority of institutional expenditures went for food, for example, 68 percent in the case of convents and monasteries between 1669 and 1683. To what extent private sector expenditures paralleled those of institutions has yet to be ascertained. In other words, Ramón and Larraín have not demonstrated how much it cost central Chileans to live in the seventeenth or eighteenth century, but they have established the minimal prices that vecinos and moradores could be expected to have paid for many subsistence commodities. In and of itself, this accomplishment is no mean one.

The annual prices series and the five-year averages reveal significant variations in relative prices and substantial cyclical fluctuations. Neither, however, indicates long-term inflationary trends. It would seem therefore that although it cost central Chileans more to live at some times than others, prices did not rise over the long run. The three demonstrable periods of inflation were 1659-63 (which apparently began earlier), 1694-1703, and 1799-1808. According to Ramón and Larraín, the emerging Peruvian demand for Chilean wheat was partly responsible for the 1694-1703 period of inflation while the instability of the final years of the colonial period was largely responsible for the third period of inflation.

These findings may strike some as meager. More complete interpretation of the price data recovered by Ramón and Larraín, however, is contingent upon completion of their time series, especially for 1719-48, and upon the comparison of institutional outlay with private sector spending. Whether sources still exist for completion of the RamónLarraín data set I know not. I do know, however, that analysis of private sector spending will involve sifting thousands of bits and pieces of evidence, the majority of which are meaningless in themselves. Be that as it may, the importance of Ramón and Larraín's Orígenes de la vida económica chilena lies less in their interpretation of price data than in their elaboration and analysis of the data. They have given the profession a base upon which to build.

Markos Mamalakis's Historical Statistics of Chile is a magnificent example of what a compendium of quantitative data should be. It is well researched and written, and it includes statistics previously unpublished or otherwise difficult to obtain. Although many of the tables constitute complex data matrices, they are easy to comprehend because they are well designed and properly explicated. Moreover, Mamalakis interprets the data. He explains how the time series included were compiled and what they mean. Mamalakis undertakes less than Schroeder
attempted in that he analyzes and interprets only demographic and economic statistics. But what he covers, he covers in depth.

Historical Statistics of Chile is a monumental work. Originally consisting of four mimeographed volumes, it will eventually comprise five or more published volumes. ${ }^{16}$ To date, four volumes of the revised, augmented, and updated version have appeared. All four volumes are massive tomes, nearly folio in size, double columned, and each is longer than its predecessors. All four volumes include introductions, general and thematic chronologies, glossaries, and bibliographies.

Volume 1, National Accounts, presents and evaluates national income estimates for 1930-39, the earliest years available, as well as national and sector-specific income estimates for 1940-65 and 1960-74, in coeval and constant values. Post-1974 accounts were not available at the time that Volume 1 was revised. Volume 2, Demography and Labor Force, is largely devoted to data on the size and characteristics of the population from the sixteenth century through the 1970s and data on the movement of the population (that is, fertility, nuptiality, mortality, and internal and external migration) from the 1840s through the 1970s. Volume 2 also presents and evaluates data (mostly twentieth-century) on education, the labor force, wages and salaries, health, and social security. Volume 3, Forestry and Related Activities, presents statistics (including projections) on this topic from the 1940s through the 1980s. These data have been added to the set because the forestry sector has demonstrated considerable dynamism in recent years. As of 1981, forestry exports accounted for 10 percent of Chile's total exports by value. Volume 4, Money, Prices, and Credit Services, is the longest of the set to date. Part 1 presents and evaluates time series on money and money services from the 1840s through the 1980s. Part 2 offers new aggregate statistics on population, labor force, and unemployment for 1970-82. Part 3 summarizes and comments on Ramón and Larraín's price data for the 1600s and 1700s, and it also analyzes and interprets price data, deflators, and indices of the 1800s and 1900s. Parts 4 and 5 present and examine stock market and regional credit statistics of the 1900s.

Many of Mamalakis's series are no more than forty or fifty years old. Only Volumes 2 and 4 include chapters or portions of chapters on the colonial period, the nineteenth century or both. This coverage partly results from the fact that Mamalakis as an economist is unaccustomed to archival research, but mostly it is because the majority of economic indicators that are commonplace nowadays are of recent contrivance.

Mamalakis's Historical Statistics should be evaluated for what it is, not for what it could not be. It is a skillfully articulated, cogently analyzed, and intelligently interpreted compendium of almost all the avail-
able statistics on the demography and economy of past and present Chile. Although primarily useful to historical demographers, economic historians, economists, and policy analysts, future generations of historians will also find Mamalakis's work extraordinarily useful inasmuch as he provides answers or much of the data needed to answer whatever questions they may ask. Moreover, they will be hard-pressed to find elsewhere some of those answers and much of the data included, given the incomplete holdings of North and South American libraries of Latin American government documents and the perishability of such publications.

In the final analysis, the seven works reviewed in this essay are more dissimilar than comparable. But heterogeneity in subject matter, approaches to subject, command of sources, methodological competency, and presentation of findings have always been characteristic of scholarship. More important is the fact that the works in question reflect some of the continuing needs of Latin American historiography. More collective biographies and prosopographic studies, not just of colonial but also of postindependence groups, whether as skillfully wrought as Burkholder and Chandler's Biographical Dictionary of Audiencia Ministers, as prosaic as Lohmann Villena's Regidores perpetuos, or as comprehensive as Guarda's Sociedad en Chile austral, would save research time and reveal much that is yet unknown. More compendia of statistical sources such as TePaske and Klein's Royal Treasuries are in order, given the increasing problematics of conserving and accessing the manuscript originals. Comprehensive digests of quantitative data such as Mamalakis's Historical Statistics of Chile would considerably advance scholarship on the other Latin American colonies and countries. Innumerable studies such as Ramón and Larraín's Orígenes de la vida económica chilena are long overdue inasmuch as the price history of Latin America is virtually unknown.

The seven works in question also reflect the state of Latin American historiography. Although not a random sample, nonetheless they exemplify certain trends. North American as well as Latin American scholars continue to ask and answer the traditional questions of who, what, when, and where. At the same time Latin American as well as North American scholars are endeavoring to determine how many, how much, and how often. Whether the results are superior, lackluster, or unacceptable, what really matters is that Latin American historiography has come of age.

## NOTES

1. The same is true of his brother Ramón García de León y Pizarro, Governor of Guayaquil from 1779 to 1790.
2. From Impotence to Authority: The Spanish Crown and the American Audiencias, 1687-1808 (Columbia: University of Missouri Press, 1977). Only publishers of works in print are given in this and subsequent notes.
3. Apparently there are only three other biographical dictionaries of audiencia ministers, at least of Spanish South America, all of which are audiencia and period specific: Guillermo Lohmann Villena, Los ministros de la Audiencia de Lima en el reinado de los Borbones, 1700-1821 (Sevilla: Escuela de Estudios Hispano-Americanos, 1974); José María Restrepo Saenz, Biografías de los mandatarios y ministros de la Real Audiencia, 1671 a 1819 (Bogotá: 1952); and Abraham de Silva i Molina, Oidores de la Real Audiencia de Santiago de Chile durante el siglo XVII (Santiago: 1903). Lohmann Villena, however, includes entries on fifty-one "ministros criollos y peninsulares casados con criollas que integraron la Audiencia de Lima en los siglos XVI y XVII."
4. Los regidores perpetuos includes a chronological chart, but it is keyed by numbers, not by names (1:241-47).
5. John Preston Moore, The Cabildo in Peru under the Habsburgs: A Study in the Origins and Powers of the Town Council in the Viceroyalty of Peru, 1530-1700 (Durham: 1954); and The Cabildo in Peru under the Bourbons: A Study in the Decline and Resurgence of Local Government in the Audiencia of Lima, 1700-1824 (Durham: 1966).
6. Jeân Pierre Blancpain, Les Allemands au Chile (1816-1945), Lateinamerikanische Furschugen 6 (Cologne: Bohlau, 1974).
7. Guarda is as competent a historian as he is a genealogist. See his Historia urbana del reino de Chile (Santiago: Ed. A. Bello, 1978), which is as monumental as La sociedad en Chile austral.
8. Apparently the only account books published to date are the Libro común and Toma de cuentas of 1529-38 of the Caja Real of Coro, the oldest royal treasury in Spanish South America. See El primer libro de la Hacienda Pública Colonial de Venezuela, 15291538, compiled by Eduardo Arcila Farías, Proyecto de la Hacienda Colonial Venezolana 1 (Caracas: Centro de Investigaciones Históricas, Universidad Central de Venezuela, 1979). TePaske and Klein's time series of cartas cuentas of Potosí would have been far less complete had Peter Bakewell not prepared the equivalent of "about a third" of them, "most of those for the first half of the seventeenth century" from libros manuales or daily ledgers.
9. An excellent introduction to accounts and accounting procedures of the royal treasury system is the little-known 1806 work by José Antonio Limonta, Libro de la razón general de la Real Hacienda del Departamento de Caracas, with an introduction by Mario Briceño Perozo (Caracas, 1962), Biblioteca de la Academia Nacional de la Historia 61; Fuentes para la historia colonial de Venezuela.
10. Only a handful of scholars other than TePaske, Klein, and Bakewell have begun to mine royal treasury accounts. In addition to Bakewell's "Registered Silver Production in the Potosí District, 1550-1735," Jahrbuch für Geschichte von Staat, Wirtschaft und Gesselschaft Lateinamerikas 12 (1975):67-103, see María Luisa Laviana Cuetos, "Organización y funcionamiento de las cajas reales de Guayaquil en la segunda mitad del siglo XVIII," Anuario de Estudios Americanos 37 (1980):313-49; and Javier Tord and Carlos Lazo, Hacienda, comercio, fiscalidad y luchas sociales (Perú colonial) (Lima: Pontificia Universidad Católica del Perú, 1981). Municipal treasury accounts are even less known and all but virgin. For examples of the extraordinarily detailed, frequently unique data they contain and their importance to the history of towns and their districts, see Alfred Moreno Cebrián, "Un arqueo a la hacienda municipal limeña a fines del siglo XVIII," Revista de Indias 41, nos. 165-66 (July-Dec. 1981):499-540.
11. I suspect that the answer to this and other chronological questions may be found in the manuscript works of Francisco López de Caravantes, contador of the Tribunal de Cuentas of Lima from 1607 to 1634 . López de Caravantes recounts the early history of the cajas reales of Lower and Upper Peru and Quito. See Guillermo Lohmann Villena, "El contador Francisco López de Caravantes y sus obras," in Memoria del

## Latin American Research Review

cuarto congreso venezolano de historia del 27 de octubre al 19 de noviembre de 1980, 3 vols. (Caracas: Academia Nacional de la Historia, 1983), 2:157-72; and Engel F. Sluiter, "Francisco López de Caravantes's Historical Sketch on Fiscal Administration in Colonial Peru, 1533-1618," Hispanic American Historical Review 25, no. 2 (May 1945):22456.
12. John J. TePaske in collaboration with José y Mari Luz Hernández Palomo, La Real Hacienda de Nueva España: la Real Caja de México (1576-1816) (Mexico: Instituto Nacional de Antropología e Historia, 1976), Colección Científica 41. The accounts of the twenty-two other treasuries of Mexico proper will appear in John J. TePaske and Herbert S. Klein, Ingresos e egresos de la Real Hacienda en México (forthcoming).
13. For example, Centro de Estudios Demográficos, Universidad de la Habana, La población de Cuba (Havana: 1976); O. Andrew Collver, Birth Rates in Latin America: New Estimates of Historical Trends and Fluctuations (Berkeley: 1965); Gordon Douglas Inglis, "Historical Demography of Colonial Cuba, 1492-1780," Ph.D. diss., Texas Christian University, 1979; Kenneth F. Kiple, Blacks in Colonial Cuba, 1774-1889 (Gainesville: University of Florida Press, 1976); United States Bureau of the Census, Cuba: Summary of Biostatistics (Washington, D.C.: 1945); and United Nations, Demographic Yearbook: Historical Supplement (New York: 1978).
14. Larraín's "Movimientos de precios en Santiago de Chile, 1749-1808: una metodología aplicada," Jahrbuch fur Geschichte von Staat, Wirtschaft und Gesselschaft Lateinamerikas 17 (1980): 199-259, preceded Ramón and Larraín's Orígenes. But the former work, Larraín's licentiate thesis, was prepared under Ramón's supervision; and Ramón and Larraín had already begun work on Orígenes as a team.
15. The only other price series of which I know for colonial Chile are those of Marcello Carmagnani, which are data deficient. See, for instance, his incomplete series of flour, dried beef (charqui), and suet prices for 1680-1811, drawn from accounts of the subasta of Valdivia, in Les Mécanismes de la vie économique dans une société coloniale: le Chili (1680-1830) (Paris: SEVPEN, 1973), 319-21. No disparagement of Carmagnani or his valuable pioneering work is intended.
16. For a précis of the original work, see Mamalakis, "Historical Statistics of Chile: An Introduction," LARR 13, no. 2 (1978):127-37.

