

RECENT TRENDS IN THE STUDY OF SPANISH AMERICAN COLONIAL PUBLIC FINANCE

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Fiscal history has become one of the most active new fields of research on colonial Spanish America. This trend has resulted from a number of recent breakthroughs, most notably the reconstruction of colonial treasury records and the appearance of the first revisionist studies based on the new data. These works are challenging traditional views, particularly the general understanding of the colonial economic experience and the evolution of imperial ties. Indeed, the fiscal series now being made available, if properly supported by qualitative research and regional studies, may affect seventeenth- and eighteenth-century historiography as notably as the demographic works of the Berkeley school affected sixteenth- and seventeenth-century historiography.

Reconstruction of the royal treasury records is placing a powerful new statistical series in the hands of colonial historians. Given their need to provide a broad geographical and chronological context for monographic research and the fact that the new time series are more far-ranging and detailed than any previously available, it may be expected that the impact of these records on fiscal history will be considerable. A number of conditions will have to be fulfilled: the treasury accounts must be shown to correspond to fiscal reality and the conclusions based on them will have to appear coherent with other results. But the quality of the documentary sources and the maturity of the means being used to analyze them suggest that the new Real Hacienda scholarship will produce substantive contributions.

The aim of this article is to discuss the history of treasury-based studies and to examine some of the possibilities and limitations. The essay will analyze the evolution of scholarship in this field and attempt to examine a number of methodological and historiographical issues, including questions raised by the nature of the documentation on which these studies are founded, the early findings of the newer scholarship on the seventeenth-century crisis, and the general problem posed by the costs and benefits of empire in the eighteenth century.

Finally, we will compare the ongoing research on the colonies with similar studies being undertaken on metropolitan public finance during the same period.

NATURE AND EARLY HISTORY OF THE FIELD

The study of the Royal Treasury in Spanish America and of the taxes it collected is at once an old and a new domain of research. During the colonial period, treasury officials (*oficiales reales*) were often compelled to document the history and current status of Crown income and expenditure, and this bureaucratic concern quickly matured into scholarly interest. The older literature produced by a host of famous names testifies to the ongoing attraction of fiscal sources and to the belief that they are a key to deciphering the economic experience of the colonial past. The naturalist Alexander von Humboldt wrote one of the classics of early-nineteenth-century political economy, the *Essai politique sur le royaume de la Nouvelle-Espagne*, primarily on the basis of treasury accounts and retrospective studies by colonial officials.¹ Almost immediately after independence, several Spanish Americans consulted these records as a basis for evaluating the growth of the new republics.²

This interest continued into the more recent past. For example, Ricardo Levene, a highly regarded early-twentieth-century Argentine historian, used the annual accounts (the *tanteos*, *cartas cuentas*, and *relaciones juradas*) to reconstruct the economic development of the Río de la Plata region.³ He was joined by at least one North American luminary of the same vintage, Clarence Haring, who produced an early study of the *libros mayores*, one of the essential elements in the colonial accounting process.⁴ Not all treasury studies were based upon the actual treasurer's accounts, however; such important early works on public finance history as Herbert Priestley's *José de Gálvez* eschewed them almost completely.⁵ But scholars of all periods have been intrigued by the complexity of the royal financial administration and its rich archival remains—the multitudinous accounts, letters, and reports through which the bureaucracy documented its work and the interminable lawsuits (*juicios*) that its activities spawned. This attitude remains very much alive today.⁶

Consequently, a reasonable description of the institutional framework and hierarchy of the colonial treasury has long existed side by side with some scattered quantitative data. But despite this interest in the history of the Spanish American royal treasury and the incredible amount of material preserved in the archives of Europe and America, research has been uneven. No serious attempt was made to collect the accounts systematically nor any thorough analysis of their numbers by region, income, or expenditure category. Until the last few years, quan-

titative research relied on retrospective statistics generated by Crown officials or on a simple listing of annual totals.⁷

Few scholars were willing or able to examine systematically most of the manuscript collections containing the actual account books of auditors, controllers, treasurers, factors, and others. Rather than use fiscal series as the foundation for studies of economic life, historians have preferred until recently to “illustrate” their respective theses with isolated figures or have depended on overviews drawn from the often misleading letters and reports of colonial officials.

Such practices are insensitive to the advantages of seriate data and to the uniqueness of each kind of documentation. It is impossible to know whether “illustrative figures” are characteristic and difficult to establish their relationship to data drawn from other places and eras. Only time-series data can provide the chronological and comparative perspective required in historical and economic studies. Moreover, letters and reports were often meant to further particular career or policy objectives, and the figures they contain are often biased. Account books, in contrast, were designed solely to show that no theft or other malversation had taken place and were subjected to repeated audits. Although interpreting accounts can present problems, standardized bookkeeping practices provide some guarantee that the accounts are a privileged source of relatively accurate and consistent treasury information.

It should be noted that previous generations of scholars were not blind to these opportunities and problems but simply lacked the means to address the difficulties successfully. The size and complexity of the extant documentation overcame those who otherwise might have been interested in these crucial records. With the enormous output of massive *libros mayores* and *manuales* and the interminable sets of *cartas cuentas*, treasury officials left behind too much material for researchers to analyze systematically.

Defeated by such difficulties, some historians have sought to use the fiscal records as a basis for social history.⁸ Innovative and fruitful as such attempts are, they do not represent an optimal use of archival holdings. The numerous sources for social history may be approached through a bewildering variety of methodologies. For purposes of social history (save demography), treasury records are no more than an addition to an already formidable documentary base. But economic history can hardly eschew the quantitative road, and the accounts of the royal treasury are the most voluminous and systematic quantitative records for the Indies. The fact that historical knowledge of colonial economic life has not been based firmly upon fiscal series, which should have been the preferred source for this kind of study, reflects sadly on the means that have been available heretofore.

Although Spanish Americanists have examined the pages of the books and bundles of accounts from time to time, no means existed of exploring these records in any serious manner without costly human labor. The circumstances under which historical research was taking place made such an investment impossible. But the introduction of computers into social science research revolutionized colonial Spanish American fiscal and economic studies. The development of the modern computer in the 1950s and the availability of easily accessible statistical packages and inexpensive interactive computing in the following two decades have finally facilitated copying, storing, and analyzing these vast documentary collections.

THE NEW OPTIONS AND POSTWAR HISTORIOGRAPHY

For computer applications to yield fruit, however, it was essential to define the structure of the colonial treasury, grasp the nature of its accounting process, and comprehend the individual tax categories (*ramos*) that made up the accounts. The account books and bundles would have remained incomprehensible without this preliminary work, which required constructing much straightforward administrative history.

In the early 1970s, two suggestive studies pointed out methodological developments that could help redefine the accounts for both quantitative and comparative analysis on a modern basis. In 1970 Paul Hoffman offered a model based on modern accounting techniques that was designed to deal with the Crown's multitudinous war expenditures;⁹ and in 1973, Herbert Klein suggested a new categorization of the *ramos* in light of the concerns of modern economic history.¹⁰ Fortunately, these problems of defining accounts also concerned colonial officials. Consequently, a fairly extensive body of literature existed on which a sophisticated recategorization could be built.

From the seventeenth century onward, treasury officers were constantly defining the Treasury's legal framework and auditing forms, as well as the nature of royal taxation and its individual branches. In particular, they attempted to detail the historical evolution of the various *ramos* and their current status and worth. Among the earliest of these studies was the survey by Gaspar de Escalona Agüero, *Gazofilacio Real del Perú*, which analyzed the seventeenth-century accounts in the Lima viceroyalty.¹¹ Even more impressive was the late-eighteenth-century *Historia general de Real Hacienda*, a survey of the Mexican *ramos* made by two royal officials, Fabián de Fonseca and Carlos de Urrutia.¹²

In the last four decades, a number of scholars have begun to complete this preliminary work. The research involved has been varied and is too extensive to review thoroughly in an article, but examples are

revealing. In some instances, scholars have produced general discussions of fiscal organization and the policies of major figures or administrative institutions in regional or empire settings.¹³ In other cases, the focus of study has been particular sources of revenues¹⁴ or the auditing process, either in individual studies or through editing colonial documents pertaining to specific regions.¹⁵ In yet other cases, documentary publication efforts have focused on the accounts themselves.¹⁶

As regards regional monographs, the coverage remains spotty and even areas covered by good studies or compilations suffer from a certain unevenness of chronological coverage. Thus beyond standard attention to sixteenth-century beginnings,¹⁷ coverage of institutional history of places as far apart as Mexico,¹⁸ Paraguay,¹⁹ and Chile²⁰ has largely concentrated on the eighteenth century. Only Peru has generated a substantial body of literature, although much of it deals with the seventeenth century and is oriented toward taxation policy²¹ and deficit financing.²² Broader attempts are now being made to synthesize political and economic history based on the treasury accounts.²³ Further, Peruvian studies (like those of other areas) also benefit from a certain amount of monographic literature that discusses eighteenth-century finances or the royal treasury in local regions.²⁴

Mexican-oriented studies of the eighteenth century have focused on the extraction of specie;²⁵ a few take a regional perspective²⁶ but are concerned mostly with specific branches of royal income. Studies are now available of the royal lottery,²⁷ playing cards, tobacco and gunpowder monopolies,²⁸ aguardiente and pulque revenues,²⁹ cockfighting concessions,³⁰ sales taxes,³¹ and mercury sales.³² This research has been supplemented by a few articles that are more administrative or general in nature.³³ But at this level, fiscal studies meld into those dedicated to exploring such eighteenth-century reforms as the imposition of intendancies.³⁴ With their concentration on institutional reforms, these kinds of studies offer little information on the actual movement of tax revenues. This same concern with local taxes or with regional monopolies has also been expressed in most of the studies of the lesser colonies of the empire. This generalization holds for the majority of fiscal studies on colonial Venezuela,³⁵ the Quito Audiencia,³⁶ and Cuba.³⁷

Some recent literature on the fiscal history of other parts of the empire has gone beyond institutional concerns or analysis of specific taxes in attempting to use the treasury records to address points of current debate. One study tried to weight the relative burden of taxation across the various districts of the new viceroyalty of the Río de la Plata.³⁸ Another provided an original analysis of the economy of eighteenth- and early-nineteenth-century Central America showing its long-term secular decline in the midst of the general prosperity of the late eighteenth century.³⁹ Last, Argentine historians made imaginative use

of municipal and royal treasury accounts for the study of late-eighteenth-century local economies.⁴⁰ The most original use of the documentation, although several decades old, may well be that of the demographers.

One branch of taxation has received considerable attention because it provides a way of establishing the demographic history of the Indian populations—the tribute tax collected by the Crown throughout the Americas. The tribute lists (*padrones* or *revisitas de indios*, as they were called) were used by the Crown to determine the number of eligible taxpayers and the changes in that category over time. These tax lists formed the basis of most of the studies of Amerindian populations carried out by Sherburne Cook, Woodrow Borah, Leslie Byrd Simpson, and the so-called Berkeley School of historical demographers.⁴¹ These studies centered on Mexico. Although their techniques have been applied to other regions, reliance on these lists for generating total population numbers has recently been challenged. In the central Andes, the Crown initially taxed only male heads of households between eighteen and fifty years of age who were *originarios* (original members) of their resident communities. But in Mexico and Guatemala, other categories were used and the tendency was to tax all Indians.

The demographic work of the Berkeley School has been disputed on a wide variety of grounds, but for the Andes, the problems are more specific. Indians on the estates of Spaniards and migrating peasants who joined the free Indian communities after their foundation (the so-called *forasteros* or *agregados*), and thus had less access to land than the *originarios*, were not counted. This practice suggests that in the Andean region, total population figures based on the pre-eighteenth-century tribute lists are incomplete.⁴² The problem disappears in the early eighteenth century, however, when the Crown extended the tribute tax to all rural Indians, including estate peones and *forasteros*. A late-eighteenth-century reform transformed the *revisitas* into a complete census count of all men and women, making the rural Indian population the most accurately counted group in the colonies. This late-eighteenth-century census model for registering tribute population, which initially developed in Mexico, was quickly applied to all the Amerindian areas of the empire.⁴³ These *padrones* and *revisitas* have become the basis for detailed demographic studies of the late-eighteenth and early-nineteenth-century Indian populations, especially those in the Andes.⁴⁴

The taxation of the Indian communities, particularly in the Andean area, has become a major area of concern for those dealing with tribute and other Indian-oriented taxes and exactions. Considerable discussion has ensued about the conversion of tribute from goods to specie under Viceroy Francisco de Toledo in sixteenth-century Peru.⁴⁵ Attention recently has focused on the forced sale of European goods to

the Indians and its role in generating native unrest and opposition to the entire colonial system.⁴⁶ Although not directly related to taxes, the government's providing free workers to the miners of Potosí often involved the same taxation officials as those who collected the tribute, and it was closely associated with this ramo of *tributario*.⁴⁷

Other major areas of research based partly on treasury records are the recent studies devoted to estimating the volume and value of trade between America and Spain and among the colonies. The model work for the first category was written by Chaunu and Chaunu and published in the 1950s.⁴⁸ A series of chronological works followed covering the period to the end of the colonial era and the principal Spanish ports.⁴⁹ Numerous studies have also been based on tariff figures, ship registrations, and *consulado* papers on the interprovincial trade between the various American and Asian colonies.⁵⁰ Numerous technical studies have also been conducted on individual tariffs, special taxes, and other royal treasury materials related to American trade.⁵¹

Trade studies have been peculiar in that their discussion of the volume of commerce has been statistical and the quantitative sources used have been inherently hacienda-related. Most, however, have given little attention to the fiscal dimensions of documentation. In consequence, the approach to tax records has sometimes been naive or too bold, opportunities for correlating commercial and other economic activities have been neglected, "illustrative" as opposed to seriate figures have been used, and the two types have even been mixed together to provide longer "series." Such practices can be easily understood and even condoned, however, given the unavailability of usable fiscal series and a dearth of systematic tax histories. Historians did the best they could under difficult conditions until the advent of modern fiscal studies enriched the options of students of trade.

Thus the records of the Royal Treasury are opening new vistas for the history of commerce. They have led to major new areas of research related to the Indian populations under Spanish control and have raised new questions about wealth distribution among the elite. Detailed local studies or short-term synchronic analyses have also opened up larger questions about the nature of regional and imperial economies and the royal system of taxation. As in the case of trade, however, in order to answer the broader comparative and long-term questions, it was essential to assemble a more systematic and cross-regional time series.

THE NEW SCHOLARSHIP AND THE NATURE OF THE DATA

The work being done on fiscal institutions constitutes a necessary base for interpreting the treasury records. If the pitfalls of the past

are to be avoided, however, these accounts must be reconstituted by recording them in computer storage independently of the existing secondary literature. The most comprehensive reconstruction effort presently being carried out is that of John TePaske and Herbert Klein, who are publishing the annual summary accounts for nearly all the treasuries (*cajas reales*) of Spanish America.⁵² A number of other less comprehensive projects underway are supplementing the TePaske-Klein work for peripheral areas and periods they did not cover.⁵³

Given the size of these surveys, most of the recent research has been based on the annual summary statements provided by royal accountants. The figures are often utilized in adjusted form because of the problem posed by transfers of funds (from year to year, from region to region, and from account to account). The use of these statements and the kind of adjustments made has been one of the most controversial areas of this new scholarship. Any proper appreciation of the potential of fiscal history must begin with an understanding of the documentary problems involved.

The annual statements of the colonial treasuries represented the culmination of several layers of accounts—daily records of income and expenditure, monthly summaries, and the annual reports themselves. In each treasury office, daily registers of incomes and expenditures were entered into a monthly manual. The monthly books in turn reorganized daily receipts into their respective taxes or ramos. At the end of the year, a final *libro mayor* was produced that organized all accounts into income and expenditure categories in yearly totals. At the end of this detailed *libro mayor* came a one-page *relación jurada*, *tanteo*, or *carta cuenta*, which was sent to the next higher authority and ultimately to Spain. Although the fiscal year became the calendar year by the late seventeenth century, the *tanteos* were not always finished by December 31. Sometimes the *libros mayores* were closed but the *tanteos* were not finished until the end of the first quarter of the new year, which allowed local officials to account for any delayed funds coming into the local treasury office.

In trying to use these annual accounts uncorrected by the lower-level books, scholars encountered a number of problems. But because these attempts were the first to detail fiscal evolution over long periods of time and across a large number of treasury offices, it was logical to begin reconstruction with the annual summaries. This approach allowed researchers to trace a preliminary view of the broad movements of the colonial treasury and provide basic figures for all kinds of taxes. Such revisions might be viewed as bringing the results of the original research into some measure of disrepute, however, because the original studies tended to be based on lower-level books.

The problem has already arisen. Klein's "Structure and Profitabil-

ity of Royal Finances in the Viceroyalty of the Rio de la Plata in 1790" was one of the first fruits of this new approach.⁵⁴ Some of his figures and conclusions were questioned recently on the grounds that internal transfers of funds, invisible at the level of the annual summaries, inflated the results and concealed important credit mechanisms.⁵⁵ The incident is suggestive because although the revisions were minor and the interpretive thrust of the original article was sustained, it reminds all scholars of the necessity of using the annual summary figures in a provisional and cautious manner. The lesson seems to be that the annual statements are a crude, but faithful, measure of the colonial fiscal situation. More detailed use of the documentation at the micro level can be expected to yield sharper understanding without necessarily altering the essence of the original interpretation. In the case at hand, refinements in techniques and documentation brought altered figures and richer understanding without significantly changing the thrust of the interpretation.

The issue of the accuracy of the treasury summaries is particularly significant when they are to be used as indicators of economic activity.⁵⁶ The boldest assertions have been made by John TePaske, who flatly rejects the notion that "the irregular pattern of alterations hinders the manipulation of cargo (credit) and data (debit) totals."⁵⁷ For him, such accounting problems pose difficulties only for the short term because it is entirely evident that the powers of "creative" accounting are inherently limited and that no fiscal legerdemain can sustain purely fictitious revenues over the long term. Similarly, one might argue that barring a demonstration of increased real tax rates, higher government revenues must inherently derive from heightened economic levels, although the degree and nature of the relationship will vary across tax categories.

None of the foregoing should be taken to mean that this new scholarship focuses only on levels of income and expenditure. Indeed, the thrust of research has been to determine the amounts actually collected and disbursed annually and to detail the structure of income and expenditures as they related to the local economies. The new approach thus promises to provide historians with much more conjunctural and time-series information than has been available from other sources.

To undertake this task, most scholars have found it necessary to abandon the rather arbitrary definitions of ramos adopted by the Crown and to use income categories that reflect the productive units actually being taxed. In the colonial period, the monarchy established a three-tiered system of accounts that clearly distinguished the areas where the income from the taxes could be spent. Some taxes produced funds meant to be sent directly to Spain to meet metropolitan expenses (funds that entered what might be called "the Castilian general fund"). A sec-

ond category of taxes were designated for predetermined costs in Spain and elsewhere (dedicated funds, such as *azogues* or *bulas de cruzada*). A third group generated monies that could be disbursed freely at the local level or anywhere the Crown chose. Finally, the monarchy distinguished between the genuine royal revenues mentioned above and private trust funds (*ramos agenos*) also administered by treasury officials.

In recent research, this division has been replaced with one aggregating those *ramos* that taxed similar aspects of local life, a typology first suggested in the late colonial period. Thus taxes have been regrouped into coherent economic categories such as revenues from mining and minting (the most important industry for the export sector), taxes on trade and manufactures, receipts from state monopolies, Indian tribute, and all the specialized impositions on clerical and civil officeholders. This classification permits the creation of long-term series and allows analyses of economic activity and fiscal burden by social and economic sectors of the local economy.

Admittedly, this kind of typology is far from perfect. The treasury also collected taxes whose nature impedes constructing uninterrupted quantitative series. For example, forced loans and "donations," mostly from the *consulados* and the Church and sales of annuities (*censos*), occasionally appear in the accounts. At times these special levies could reach enormous proportions, but generally they were relatively low producers of funds and their existence does not vitiate the typology adopted. Without wishing to deny the importance of these types of "revenues" for capital markets, it should be said that they are political as well as economic indicators. Other taxes reflected the demographic developments in only one subgroup of the society, as in the case of the tribute tax on Indians,⁵⁸ while another set merely reflected the size and salaries of a small segment of the population, in this instance, state and church officials.

Such episodic and special taxes must be defined and their relative importance determined, just as taxes based on local production and population need to be grouped into larger sectoral categories in order to map better the changes in local economic activity. Various problems related to the timing of the collections also arise. For example, during the first two centuries, large portions of the taxes were collected by private corporations and individuals rather than by treasury officials themselves. These "tax farmers" usually bid for the right to collect such taxes for three to five years, and the resulting income to the Crown did not vary over a short period of time. These early "farmed" receipts are thus the least likely to reflect short-term fluctuations, although they do reflect long-term fluctuations as new auctions of such taxes brought changed bids from private collectors. As Marcello Carmagnani has

shown regarding seventeenth-century tithes, such tax-farmed revenues can still provide a reasonable estimate of long-term trends in agricultural production, although they are less sensitive to annual variations.⁵⁹ Equally, the total amounts recorded with tax farming may not represent exactly the total burden of taxation experienced by the population. The “farmers,” after all, were entitled to their overhead and profit. Here (barring the unlikely eventuality that the books of the tax farmers may be uncovered), only two techniques seem open to answer the question—imaginative reconstruction from later directly collected taxes or alternative estimates from other sources.⁶⁰

Although the majority of taxes eventually passed into the hands of the royal treasuries, the problem remains of the relationship between actual tax collection and real income for the treasury. For example, the Crown periodically entrusted revenue-producing programs to autonomous agencies. The most famous of these was the eighteenth-century *Renta de Tabaco*, established to manufacture and sell tobacco products. Many other administrations of this kind existed, including the mints and the *aduanas*. In general, the treasury received only the net income of these agencies, and sometimes a good deal less than that. The tobacco monopoly, for example, often dealt directly with the peninsular exchequer, bypassing completely the colonial treasuries. The problems are controllable if one keeps in mind which ramos represent gross income and which consist of net revenues.

The problem also arises of changing local rates of taxation, especially important as regards the *alcabala*. Equally, local weights and measures were sometimes changed while formal rates remained fixed, thus changing the tax base. Finally, the Crown granted temporary and permanent tax exemptions rather freely to individuals, corporations, and even whole areas. These exemptions must be carefully reconstructed by detailed analysis of the local documentation in order to comprehend fully the range of the taxes charged and to compute reasonable estimates of the missing incomes.

Thus providing a systematic set of the total aggregated amounts generated by the local treasury is only a first, although vital, step, in recreating the economic experience of any given area. For those interested in short-term fluctuations and local economic patterns, a further set of reconstructions will be required that will involve intensive archival research. Seasonal variations in accounts, for example, and the extremely difficult problem of income transfers among accounts during the course of a given year, can only be addressed by examining the *libros manuales* of each treasury office. Future research on Spanish colonial fiscal history will obviously move in this direction as it attempts to correct the first approximations based on the annual reports. In any

event, this progression is a natural one. As more knowledgeable questions are asked, more sophisticated use will be made of the available accounts.

EARLY RESULTS AND THE SEVENTEENTH-CENTURY CRISIS

Given this preliminary work and the reservations voiced above, what does the current research reveal? To begin with, the annual summary accounts have provided a basic sense of the yield of major taxes within the empire and traced it over time. Among revenues of greatest importance was the *quinto* (and later *diezmo*) tax on mineral production with its associated special levies (such as the 1.5 percent *cobo* tax) and minting fees. These, together with mercury sales, probably accounted for one-third or more of total royal revenues in the key mining centers throughout the colonial period.

Next in importance were the alcabalas (or sales taxes) that, along with the *almojarifazgo* (international trade taxes), probably accounted for another one-fifth of royal revenues. Unlike mining taxes, alcabala taxes were spread more evenly among the treasury offices examined by Klein and TePaske, with all of them reporting some commercial and trade tax income. Next in importance in terms of volume and presence throughout the Americas were the host of Crown monopolies or special consumption taxes. These taxes were levied on gunpowder and mercury for the silver mines, tobacco, snow, and a host of other commodities from stamped papers and lottery tickets to playing cards. These monopolies ranked third in importance, accounting for 5 to 10 percent of royal income (10 to 15 percent if mercury is included). These figures exclude the late-eighteenth-century tobacco *rentas* that were collected separately for direct remittance to Spain. These *rentas* alone approached the value of mining tax receipts by the 1780s.

Accounting for less than a tenth of royal revenues was the head tax on Indian male peasants between eighteen and fifty years of age. This tribute tax, like taxes on mining, was significant in the regions with important concentrations of settled indigenous populations, such as the center and south of the viceroyalty of New Spain and the central and southern highlands of Peru. Finally, the annual charges paid by new officeholders (*media anata*), the salaries of unfilled church offices (*vacantes mayores y menores*),⁶¹ and some of the goods of deceased members of the hierarchy (*espolios*) comprised only one-twentieth of gross receipts.

Obtaining an overview of the structure and relative importance of different groups of taxes over space and time is merely a preliminary step. The ultimate objective is to determine the long-term trends in the colonial economy from the late sixteenth to the early nineteenth cen-

ture. Was the seventeenth century an era of crisis and depression as the traditional historiography has held? Was this period followed by an eighteenth-century recovery, an economic renaissance warped by the new Bourbon imperialism? Were these changes uniform across space, as historians have long maintained, or did sharp regional variations occur?

Traditional interpretations have been attacked by scholars who argue that peninsular-oriented views of the New World experience do not reflect colonial economic realities. Economist André Gunder Frank suggested that while American silver imports into Spain, as recorded by economic historian Earl Hamilton, may in fact have followed the classical pattern described above, the decline in trans-Atlantic trade might not indicate actual American production levels.⁶² Arguing from the dependency perspective, Frank held that the decline of the Spanish center might well have occasioned a renaissance in the peripheral economies of America. The mechanisms suggested by this hypothesis are closely related to the internal life of the treasury administration. Thus one might argue that the seventeenth-century crisis in Spain led to the sale of American fiscal offices to individuals who were deeply implicated in the local power structure, producing a consequent decline in taxing efficiency. This development in turn would have permitted retaining more funds in the colonies as political pressure eased and enforcement ability declined. The recent work of Michel Morineau has questioned the validity of Hamilton's figures for the periods before and after 1680, suggesting that no long-term depression occurred, even from the perspective of Europe.⁶³

With the advent of colonial tax materials, scholars can begin to determine the validity of these competing interpretations. The first studies undertaken in the past decade established that economic evolution was not uniform across the face of America. The viceroyalty of Peru experienced major growth in the late sixteenth century, a boom lasting until the early decades of the seventeenth. Then came a sharp decline in silver production in Potosí and elsewhere, which was immediately reflected in a major drop in royal mining and minting taxes. This depression soon affected all public revenues and lasted through the 1600s, with recovery delayed until the middle of the eighteenth century.⁶⁴

This general picture also seems to be applicable to Upper Peru. Indeed, an examination of *caja* receipts in nonmining zones of Charcas also showed a tendency to collect fewer tax revenues during the years of crisis. These findings support the theories of regional integration recently proposed by Argentine historian Carlos Sempat Assadourian, who argued that semiautonomous regional markets existed within colonial Spanish America.⁶⁵ According to this view, the satellite economies of the northern Río de la Plata provinces and the Upper Peruvian agri-

cultural valleys experienced sharp downturns that were reflected in their local *caja* receipts as they began to lose important segments of their Potosí market. This trend led to local retrenchment of haciendas, the rise of *minifundias*, a general retreat toward local subsistence economies, and declines in long-distance trading. Even in Chile, changes in economic structure during these years point to the pervasive nature of the crisis, although the local Indian wars of that distant colony guaranteed the continued flow of outside funds. Judging from the available figures for Peru at least, the model proposed by André Gunder Frank does not seem to hold. Rather, fiscal records apparently confirm the more traditional theories. But the accounts of the Viceroyalty of New Spain indicate an unexpected divergence from the orthodox picture, a startling result because the Mexican experience was the first used to posit the existence of a seventeenth-century crisis in the Americas.⁶⁶ The local treasury records, however, showed that several new fiscal districts had been created in recently opened mining centers of the North in this period. These new *cajas* absorbed funds previously collected by the central treasury of Mexico City. This diversion caused a decline in the mining taxes reported in the capital but did not signify that revenues or production throughout the colony had actually decreased.⁶⁷

Once these new regional *caja* accounts were added to the old Mexico City records, it became clear that Mexican silver production expanded much earlier than previously supposed. Far from experiencing a seventeenth-century crisis, New Spain was in fact undergoing steady economic growth in this period, led by the expanding mining industries of the northern provinces. Thus the reliance of previous studies on Hamilton's figures and on the Mexico City mint accounts proved to be profoundly misleading.⁶⁸ Historians incorrectly assumed that production declined when in fact the apparent decrease in revenues merely reflected administrative change.⁶⁹

In view of steady growth in Mexican production, could Hamilton's figures about the decline in silver shipments to Spain have been wrong? To resolve the apparent contradiction between old and new data, it was essential to determine what had happened to the silver being produced. Once detailed reconstructions of treasury remittances of specie were completed, it became evident that much of the precious metal produced in this period did not actually go to Spain.

First of all, most American treasure was spent in the Indies. Growing challenges to Spain's hegemony in the New World during the seventeenth century forced colonial authorities to order major increases in expenditures for local defense. The collapse of peninsular sea power led to a massive program of port fortifications paid for by a revitalized silver mining industry. The collapse also spawned a calcification of the

expansive power of the colonies and motivated the subsequent construction of interior fortifications against unpacified Indians throughout North and South America.

A second major outlet for American silver was the port of Acapulco. Vast quantities of treasure were shipped to the Philippines to pay for American importation of Asian luxury goods and for the defence of the Iberian Far East. The decline of royal authority in America meant that illegal Asian imports were booming. Colonial consumption of such goods rose dramatically both in New Spain and in distant Peru. In addition, the Spanish Indies became directly involved in Europe's balance-of-payments problems. European trade with Asia showed a deficit until the nineteenth century due to a fundamental inability to supply the Oriental market. The only means of paying for imports was consequently New World silver. Much of the debt was cleared through the normal channels of trade, but a fair proportion appears to have been paid for through shipments made directly from America to Asia.⁷⁰

Frank's thesis that "peripheral" growth occurs when central control is weakened appears to be partially supported by the Mexican case but not by the Peruvian experience. The fiscal reconstruction that has taken place reveals that local conditions determine how a colony reacts when European crises force a relaxation of metropolitan control. The Peruvian example shows that declines in local production and the consequent crises in regional markets do not allow colonial regions to respond positively to such an opportunity. In contrast, the Mexican case indicates that when a local economy is in a period of expansion, such a relaxation will lead to further local growth as formerly exported surpluses are diverted to colonial markets.

Also under attack are the models positing a return to subsistence agriculture and the emergence of a "feudal" hacienda system in Mexico.⁷¹ The standard view of Mexican rural history is based on the Berkeley school's demographic work, whose significance must now also be reevaluated for the seventeenth century. A number of European and North American scholars have argued that New Spain passed through an economic crisis in the seventeenth century as a result of the demographic collapse of its Indian population.⁷² The Indian population indeed declined severely, but fiscal statistics lead one to believe that its long-term negative impact on the market economy, particularly in regions where Indian populations did not predominate, has been exaggerated.

PRELIMINARY FINDINGS OF EIGHTEENTH-CENTURY IMPERIALISM

Another area where the new data have proved useful is in calculating the costs and benefits of colonialism. This problem is relevant for

the entire colonial period, particularly as regards the shipment of crown revenues from the Americas to Europe.⁷³ The issue is currently most important in eighteenth-century historiography, however.⁷⁴ A recent estimate suggests that Spanish colonials were paying six times as much in taxes as their British North American counterparts and suffered far more costly mercantilist restraints on local manufacturing and trade than their neighbors to the north. Even Alexander von Humboldt claimed that the rather heavily exploited East Indians paid only half of the per capita tax rate of their Mexican contemporaries (who paid two and one-half pesos).⁷⁵ Debate has intensified over the actual level of taxation and forced loans, and it has opened a whole new area of discussion of what some historians have perceived as an increasing level of tax oppression that supposedly characterized late-eighteenth-century Bourbon government. This thesis of what might be called the "reconquest of America" has been proposed by David Brading in his recent work on eighteenth-century Mexico as a fundamental cause of the independence movement.⁷⁶

Brading offers the spectacle of Spanish America pining away under the increasingly authoritarian rule of royal bureaucrats, whose only aspirations were to govern in the interest of the motherland's economy and treasury. It would appear that the new data from the royal accounts does not readily support this model in its starker aspects. The per capita burden may have increased, although this supposition remains to be proved. Nonetheless, newly reconstructed Spanish American treasury accounts show that the Crown actually spent more of its tax income in the colonies than it shipped to the metropolis. In addition, expenditures on such agencies as the navy, which serviced the entire empire, often outstripped remissions from the New World. Thus most of the exportable revenues generated by the mining zones of Upper Peru were used to pay for general government services in the entire viceroyalty as well as the costs of guarding the southern Atlantic coasts, constructing fortifications at the major ports of the Río de la Plata region, and subsidizing the interior forts in the Chaco and along the southern Chilean frontier. While heavy taxes generated major surpluses, over three-quarters of it was spent in America, defending the interior peace of one of the world's largest free-trade zones.⁷⁷ By the eighteenth century, only the Viceroyalty of New Spain consistently sent a major part of its income as surplus funds to the mother country. Moreover, even as far as the Mexican surpluses were concerned, over half on average (nearly eight million pieces of eight) were spent in America versus six million pesos sent to Spain. Of the surplus spent in the colonies, some five million pesos went for subsidies to help sustain the economies of the Caribbean islands, the frontier provinces along the Pacific and Atlantic coasts, and the famous northern mission frontier.⁷⁸

Thus royal revenues collected in the colonies were used to guarantee four centuries of order for Spanish Americans. Maintaining order may have meant oppressing Indians and keeping blacks enslaved, but the Crown's functions in both regards were clear enough. Its policy was carried out with an economy of violence and a singleness of purpose. Despite aggressive imperial raids by all the expanding northern European powers, the Spanish American empire remained intact. All Indian, peasant, and popular rebellions within this frontier from the uprisings of the Tzeltal in Chiapas and the Quechua in Cuzco to the mass movements of Hidalgo in central Mexico (to mention only the largest) were quelled with the aid of royal funds. The colonists' high taxes paid for internal and external security and guaranteed an era of peace and stability unmatched in modern times. The occurrence of cycles of growth and prosperity in all regions is obvious from the data, but imperial tax revenues and their redistribution over the entire empire guaranteed that such factors as war and rebellion would not be the primary cause of alterations in the social and economic conditions of the colonists or in the well-being of the elites.

While recent research has shown the benefits as well as the costs of royal taxation for the colonials, it should also be remembered that the Crown did rather well. Total tax revenues in America were greater than those Madrid obtained from its metropolitan treasuries (on the order of thirty-eight million pesos from America versus some thirty-five million pesos from Spain in the early 1780s). Of these gross revenues, the Crown averaged between eight and nine million pesos of net revenues per annum by the last decades of the century, or approximately 20 percent of gross receipts. These funds in turn represent one-fifth of total royal revenues when net receipts from America are added to total peninsular incomes.⁷⁹

A host of indirect benefits and incomes also ultimately derived from the Crown's possession of its American empire. These gains are not directly reflected in the American treasury records. To begin with, local tax receipts supported a substantial body of colonial offices that were filled by the Spanish-born, some of whom eventually returned to serve in Madrid or elsewhere in the peninsula after training in the colonial service. Moreover, the security of the Spanish American market guaranteed a handsome profit to resident peninsular merchants. The profits from their operations were often shipped to metropolitan Spain, where they were invested by their owners and eventually taxed by the Crown.

More important still, despite significant foreign penetration, the merchants of Spain dominated Indies commerce, one of the largest international trades. Spanish America imported close to sixty million pesos worth of European goods per annum at the end of the eighteenth century. This amount almost equaled the value of all British overseas

exports during the same period. Although the seventeenth-century crisis of the metropolitan economy led to vibrant illegal trade and a smaller role for Spanish-produced goods, the Seville and Cádiz merchant houses never lost dominance. Moreover, once the Spanish economy recovered in the eighteenth century, all sectors of Spain benefited from American commerce.⁸⁰

It should be remembered that Spanish America was the major unexploited market for European manufactured goods, especially textiles, in the eighteenth century. England in particular hungered after this market, which paid for its imports with precious metals and thereby facilitated European trade with the East. Despite the ambitions of English, French, and other interlopers, however, the recovery of Spanish manufacturing in the eighteenth-century was largely based on the American market. With this industrial renewal, economic benefits tended to remain in peninsular hands. American-induced prosperity was subject to royal taxation and was thus reflected in increased royal revenues sent to the peninsula.

Spain derived one final indirect benefit from colonialism. Because all imports and exports from America were required by law to be shipped in Spanish-owned vessels, the control of the American trade guaranteed the maintenance of a major merchant fleet. This requirement had military significance. Given Spain's imperial pretensions in the eighteenth century and its attempt to maintain one of the world's largest naval forces, the merchant marine provided the Crown with a supply of trained personnel for its armadas. By the time of the Napoleonic wars in Europe, Madrid commanded Europe's second- or third-largest fleet, thanks largely to the sailors and timbers coming from America.⁸¹

Thus in terms of direct and indirect taxes and benefits, the Crown gained enormously from controlling its American colonies. Also, although the colonials often paid taxes as high as the Spaniards paid and unquestionably more than most other European colonials, they obtained major benefits. Most surplus American revenues were spent in the colonies. The portion shipped, along with indirect tax benefits in the peninsula, was sufficient to guarantee Spain's role as a major world power. The fact that Spain would eventually waste these resources in a series of ill-conceived and poorly executed wars should not be blamed on the colonies or on colonialism. Dynastic considerations always overshadowed the issues of war and peace to the detriment of both the metropole and its overseas dominions.

As the tax records clearly indicate, international war brought havoc to the Indies-Spain connection and cost far more than it was worth. A classic example of this generalization is seen in the two wars with Britain during the reign of Charles IV (1788–1808), which brought

ruin to Spain and planted the seeds of imperial destruction. In that final cataclysmic period before the start of the wars of independence, the Spaniards redoubled their efforts to repatriate funds.⁸² The magnitude of that effort can now be placed in proper perspective via a soundly based overview of peninsular remissions, made possible by the new scholarship. This gargantuan effort was not characteristic of Spanish colonialism as a whole.

PENINSULAR AND COLONIAL ROYAL FINANCES

The last area where treasury-based studies have already made significant contributions is that of comparative Spanish and Spanish American history.⁸³ The recent reexamination of colonial treasury records has occurred concurrently with a reevaluation of Spain's own accounts. For many of the same intellectual and technological reasons as have operated in the case of Spanish America, the last few decades have seen a revival of interest in the Spanish treasury and in computerized sorting, editing, and analyzing of its records.⁸⁴ Now that these two fields are better developed, some interesting comparative material has come to light regarding the differing aims, structures, and outcomes of these two distinct branches of the Royal Treasury.

Comparisons are made easier by the scholarly attention that Spanish finances have always attracted and the concomitant substantial support. Indeed, the current wave of interest in the subject has itself partly resulted from tax reforms that have been underway in Spain over the last several years. The works of such scholars as Ramón Carande, Modesto Ulloa, A. Domínguez Ortiz, Josep Fontana, and Miguel Artola, although less statistical than some might like, provide a good basis for comparison.⁸⁵

It is obvious that in this case, as with so many other royal institutions transplanted to America in the fifteenth and sixteenth centuries, the Crown was concerned with creating a more modern and rational structure than existed in Spain itself. Thus the evolution of the Spanish American treasury was completely different from its European counterpart. To begin with, the Crown rationalized the jurisdictions of the individual Spanish American *cajas* by making them conterminous with a geographic district (unlike the overlapping treasury offices of the metropolis). As each political unit was established, the Crown put a treasury office alongside. The more important the district, the higher the rank of the treasury office; thus clear lines of authority and hierarchy were established. Lima and Mexico City, as the head towns of their respective viceroalties, also had central treasuries to which all the subordinate treasuries of the viceroalty sent their records and surplus revenues. These *cajas principales* sent officials to oversee the local treasuries.

ies. This rationalization process culminated in the early eighteenth century with the nearly complete abolition of tax farms. Finally, unlike in Spain, no taxing authority was permitted outside the control of the Hacienda Real with the sole exception of well-supervised municipal taxes.

The Crown was equally quick to disband a new treasury district. If a new mine region was discovered, a treasury office was quickly established and the local region was removed from the jurisdiction of its old treasury. The opposite occurred if a region went out of production or the focus of economic activity shifted to a new zone. This process of updating and rationalizing the treasury district prevented overlap in jurisdictions. It also ensured that each office would administer coherent political and economic districts as the sole representative of the Royal Treasury. This goal was at least the ideal and was usually carried out. In some cases, delays occurred. In New Spain, for example, the powerful central treasury of Mexico City continued to collect some regional taxes long after the establishment of local offices to which those taxes should have been transferred. But in the end, even Mexico City had to abandon its ambitions in the face of the rationalizing tendencies inherent in the colonial organization.

Another aspect of this modernizing tendency was the Crown's insistence that accounts be prepared yearly. This approach did not constitute a modern double-entry system, in which income and expenditures were fully balanced at the end of each fiscal year. The American treasuries were always permitted to expend funds at their own pace. Thus income generated in one ramo over a number of years might not be spent in any given year but at the end of several years, and then all at once. Provisions were made in the accounting procedure to list these funds in a general way (the *existencia del año anterior*), but no attempt was made to break these funds down by ramos. While in terms of income, a strict annual accounting was the norm, this problem with the expenditure side of the ledgers has led to difficulties in determining long-term trends in royal expenditures.

Finally, accounts payable were carefully controlled items. Each treasury was supposed to pay for local expenses out of clearly defined income groups. Revenues from other ramos were not to be spent locally but shipped on—first to the capital cities and sometimes to Spain itself. Any special payments that the Crown wished to make came out of surplus income. The monarchy attempted as much as possible to keep these funds free and to avoid mortgaging such ramos to outside lenders. Equally, it avoided the issue of script payments to its debtors. Under the name of *data formal* or *entrada por salida*, and through such documents as protested *libramientos formales* and *vales de caja*, this practice became a major factor in peninsular finances and made accounting an extremely complex task in the peninsula.

The rationality of colonial fiscal organization did not prevail within Spain. Rather, the peninsula was afflicted by overlapping authorities and a confusion of roles that caused the fiscal records to reflect only indirectly the economic conditions in their treasury districts. Thus the Caja Principal of Madrid collected and accounted for regional and some national revenues, but its parent office, the Tesorería General, kept separate books on the same accounts. Moreover, the accounting process was so complex that an orderly audit at the end of the fiscal year was not even attempted. Instead, the Crown resorted to maintaining two separate treasuries. One ceased to operate at the start of the new fiscal year, so as to be freed to prepare for its annual audit. While *en cesación* (as this process was called), the other treasury took its place. The reasons for this seeming confusion were based on historic *fueros* (privileges or franchises) and longstanding special arrangements. In the case of the American treasuries, claims of *fueros* could be ignored when the Crown started *de novo* with its entire treasury system.

Yet eighteenth-century Spanish revenue agencies were subjected to a reforming process long before such a policy was applied to the Indies. Successful innovations like the Mexican tobacco administration were based upon halting, but ultimately successful, peninsular experiments. The reasons for this reversal are entirely evident, as are its limitations. The early Bourbons felt a more immediate need for increased income in Europe than in the New World. Italy, not the Atlantic, held their attention. In addition, the peninsular treasury was in greater need of reform than the colonial treasury and so bore the brunt of the reform effort for the first two-thirds of the eighteenth century. Despite this fact, it never became as centralized as its American counterpart.

CONCLUSION

From the historian's point of view, the Spanish American treasury accounts offer one of the best set of records of a Western European society in the prestatistical age by providing usable data for reconstructing local economic history. Probably no other treasury accounts of Europe or its colonial empires were so well-kept, so voluminous, or so reflective of the actual economy as the American accounts between the late sixteenth century and the early nineteenth century.

The mostly reconstructed accounts indicate a vital and thriving economy in the Western Hemisphere. This economy had much in common with that of Western Europe in this period but also displayed unique characteristics. Just as many parts of Europe did not experience the "general crisis" of the seventeenth century, many parts of Spanish America escaped its impact. As historians have come to grasp the fiscal history of colonial Spanish America, its economic experience has become better understood. The most startling findings so far relate to the

vitality of the Mexican economy in the seventeenth century based on thriving trade with Asia and a weaker impact from the American Indian demographic crisis than had heretofore been posited. For the first time, historians are beginning to understand the market economy of sixteenth- and seventeenth-century Spanish colonies.

Equally surprising in these first studies is the amount of surplus that the Crown invested in American activities. This finding has forced a major rethinking of the question of the costs and benefits of empire for the American colonists. Clearly, the Crown benefited from its American holdings, whose flow of silver permitted it to play a more aggressive role in foreign affairs, ultimately to its own detriment as a major world power. But the Crown also invested heavily in maintaining peace and tranquility in what was then the world's largest empire and free-trade zone. The heavy cost of guarding coastal and interior frontiers, suppressing social rebellions, and providing uniform authority and justice was paid for with royal revenues.

The study of the Spanish American royal accounts has only begun to reveal its potential. Clearly detailed reconstructions of local economic histories must be produced in coordination with the picture revealed by the regional accounts. Using this method, the theories of such historians as Sempat Assadourian and Frank can be tested alongside the more traditional neoclassic and Marxist models. More important, it is possible for scholars to explore with increasing sophistication a field that is rapidly becoming one of the most exciting in New World economic history.

NOTES

1. Alexander von Humboldt, *Essai politique sur le royaume de la Nouvelle-Espagne* (6 vols.; Paris, 1811; reprint, Amsterdam: Theatrum Orbis Terrarum, 1971).
2. An example of this tendency is the work of Miguel Lerdo de Tejada, a mid-nineteenth century scholar who consulted Veracruz consulado and treasury records to estimate Mexican commerce before and after independence. See Miguel Lerdo de Tejada, *Comercio exterior de México* (2nd. ed.; Mexico, 1967).
3. Ricardo Levene, *Investigaciones acerca de la historia económica del virreinato del Plata* (2nd. ed.; Buenos Aires, 1952).
4. Clarence H. Haring, "Ledgers of the Royal Treasurers in Spanish America in the Sixteenth Century," *Hispanic American Historical Review* (HAHR) 2, no. 2 (May 1919):173-87; but see also Haring, "The Early Spanish Colonial Exchequer," *American Historical Review* 23, no. 4 (July 1918):779-96. From the same generation is Arthur Scott Aiton's "Real Hacienda in New Spain under the First Viceroy," *Hispanic American Historical Review* 6, no. 4 (Nov. 1926):232-45; and William W. Pierson, Jr., "The Establishment and Early Functioning of the Intendencia of Cuba," *James Sprunt Historical Studies* 19, no. 2 (1927) (Chapel Hill, N.C.).
5. Herbert Ingram Priestley, *José de Gálvez, Visitor-General of New Spain (1765-1771)* (Berkeley, 1916).
6. Manuel Moreyra y Paz Soldán, "Valor histórico de los libros de contabilidad hacendaria colonial," *Revista Histórica* 22 (1955-56):311-35.
7. A recent example may be found in Jacques A. Barbier, *Reform and Politics in Bourbon*

- Chile, 1755–1796 (Ottawa, 1980), particularly pp. 127–34. Alternatively, Latin Americanists might have gone yet further and applied the model provided by J. F. Boshers's *French Finances, 1770–1795: From Business to Bureaucracy* (Cambridge, 1970), in which the author managed to discuss fiscal history without resorting to numbers.
8. Amy Bushnell's *The King's Coffers: Proprietors of the Spanish Florida Treasury, 1565–1702* (Gainesville, 1981) is a good example of this kind of work.
 9. Paul E. Hoffman, "The Computer and the Colonial Treasury Accounts: A Proposal for a Methodology," *Hispanic American Historical Review* 50, no. 4 (Nov. 1970):731–40.
 10. Herbert S. Klein, "Structure and Profitability of Royal Finances in the Viceroyalty of the Río de la Plata in 1790," *Hispanic American Historical Review* 53, no. 3 (Aug. 1973):440–69.
 11. Gaspar de Escalona Agüero, *Gazofilacio Real del Perú* (4th ed.; La Paz, 1941).
 12. Fabián de Fonseca and Carlos de Urrutia, *Historia general de Real Hacienda* (6 vols.; Mexico City, 1845–1853).
 13. Ismael Sánchez Bella, "La jurisdicción de hacienda en las Indias," *Anuario de Historia del Derecho Español* 29 (1959):176–227; Sánchez Bella, *La organización financiera de las Indias (siglo xvii)* (Seville, 1968); and Fernando de Armas, "Los oficiales de la Real Hacienda en las Indias," *Revista de Historia* 16 (1963):11–34.
 14. J. H. Parry, *The Sale of Public Office in the Spanish Indies under the Hapsburgs* (Berkeley, 1953).
 15. See Pedro Santos Martínez, in "Reforma de la contabilidad colonial en el siglo xviii (el método de partida doble)," *Anuario de Estudios Americanos* (1960):525–36, for one model. See another in the recent detailed reconstruction of one year in the Mexican treasury by Cecilia Rossell, *Cartas cuentas la Real Hacienda en Nueva España, 1557* (Mexico City, 1984). For cases of documentary collections, see José de Limonte, *Libro de la razón general de la Real Hacienda del Departamento de Caracas: lo escribió D. José de Limonte, Contador Mayor del Tribunal de Cuentas de su distrito* (Caracas, 1962); and *Hacienda colonial venezolana: contadores mayores e intendentes del ejército y Real Hacienda*, edited by Hector García Chuecos (Caracas, 1946).
 16. *El primer libro de la hacienda pública colonial de Venezuela, 1529–1538*, compiled by Eduardo Arcila Fariás (Caracas, 1979); *Libros de la hacienda pública en Nueva Segovia (1551–1577) y Caracas (1581–1597)* (Caracas, 1983); and *Libros de la Real Hacienda en la última década del siglo xvi* (Caracas, 1983).
 17. See, for example, Martin Lesley Seeger III, "A Study of Four Problems of Real Hacienda in New Spain in the Sixteenth Century," Ph.D. diss., University of California, Santa Barbara, 1966.
 18. See, Luis Navarro García, "El Real Tribunal de Cuentas de México a principios del siglo xviii," *Anuario de Estudios Americanos* 34 (1977):517–35.
 19. See Juan Bautista Rivarola Paoli, "Organización hacendística en la época colonial," *Historia Paraguaya* (1986):161–214; and Rivarola Paoli, "La estructura financiera colonial," *Revista de la Dirección de Impuestos Internos*, supplement to no. 2, series 3:1–24.
 20. See three works by Fernando Silva Vargas: "La visita de Areche en Chile y la subdelegación del Regente Alvarez de Acevedo," *Historia* 6 (1967):153–91 (Santiago); "Perú y Chile: notas sobre sus vinculaciones administrativas y fiscales," *Historia* 7 (1968):147–203 (Santiago); and "La Contaduría Mayor de Cuentas del Reyno de Chile," *Estudios de Historia de las Instituciones Políticas y Sociales* 2 (1967). See also Jacques A. Barbier, "Tradition and Reform in Bourbon Chile: Ambrosio O'Higgins and Public Finance," *The Americas* 34, no. 3 (Jan. 1978):381–99.
 21. See Fred Bronner, "La unión de las armas en el Perú: aspectos políticos-legales," *Anuario de Estudios Americanos* 23 (1966):1133–76; and "Tramitación legislativa bajo Olivares: la reducción de los arbitrios de 1631," *Revista de Indias* 41, nos. 165–66 (July–Dec. 1981):411–43. See also Ronald Escobedo Mansilla, "La alcabala en el Perú bajo los Austrias," *Anuario de Estudios Americanos* 33 (1976):257–71; Escobedo Mansilla, *El tributo indígena en el Perú (siglos xvi–xvii)* (Pamplona, 1979); and José Jesús Hernández Palomo, "El 'estado general de la Real Hacienda de Perú, Chile y Río de la Plata' de Alfonso Rodríguez Ovalle," *Historiografía y Bibliografía Americanistas* 21 (1978):3–58.
 22. See also Rocío Caracuel Moyano, "Los mercaderes del Perú y la financiación de los

- gastos de la monarquía, 1650–1700," *Thirty-Sixth International Congress of Americanists* (Seville, 1966) 4:335–43; María Encarnación Rodríguez Vicente, "Los caudales remitidos desde el Perú a España por cuenta de la Real Hacienda: series estadísticas (1651–1739)," *Anuario de Estudios Americanos* 21 (1964):1–24; and Sonia Pinto Vallejos, *El financiamiento extraordinario de la Real Hacienda en el virreinato peruano: Cuzco, 1576–1650* (Santiago, 1981).
23. See the following works by Kenneth J. Andrien: "The Sale of Juros and the Politics of Reform in the Viceroyalty of Peru, 1608–1695," *Journal of Latin American Studies* (JLAS) 13, pt. 1 (May 1981):1–19; "The Sale of Fiscal Offices and the Decline of Royal Authority in the Viceroyalty of Peru, 1633–1700," *Hispanic American Historical Review* 62, no. 1 (Feb. 1982):49–71; "Corruption, Inefficiency, and Imperial Decline in the Seventeenth-Century Viceroyalty of Peru," *The Americas* 41, no. 1 (July 1984):1–20; and *Crisis and Decline: The Viceroyalty of Peru in the Seventeenth Century* (Albuquerque, 1985). See also Lawrence A. Clayton, "Local Initiative and Finance in Defence of the Viceroyalty of Peru: The Development of Self-Reliance," *Hispanic American Historical Review* 54, no. 2 (May 1974):284–304; Peter J. Bradley, "The Cost of Defending a Viceroyalty: Crown Revenue and the Defense of Peru in the Seventeenth Century," *Ibero-Amerikanisches Archiv* 10, no. 3 (1984):267–89; and Javier Tord and Carlos Lago, *Hacienda, comercio, fiscalidad y luchas sociales (Perú colonial)* (Lima, 1981).
 24. For example, see Kendall Walker Brown, "The Economic and Fiscal Structure of Eighteenth-Century Arequipa," Ph.D. diss., Duke University, 1974.
 25. See, for example, Richard L. Garner, "Exportaciones de circulante en el siglo xviii (1750–1810)," *Historia Mexicana* 31, no. 4 (Apr.–June 1982):545–98.
 26. See, for example, Juan Carlos Garavaglia and Juan Carlos Grosso, "La región de Puebla/Tlaxcala en la Nueva España del siglo xviii," in Eleventh International Congress of the Latin American Studies Association, Workshop W 313: *Historia Regional de Puebla* (1983), unnumbered. See also Garavaglia and Grosso, "Estado borbónico y presión fiscal en la Nueva España, 1750–1821," paper presented at the Congress of the Asociación de Historiadores Latinoamericanistas Europeos (AHILA), Florence, May 1985; and Cecilia Rabell, *Los diezmos de San Luis de la Paz: economía de una región del Bajío en el siglo xviii* (Mexico City, 1985).
 27. José María Cordoncillo Sanada, *Historia de la Real Lotería en Nueva España* (Seville, 1963).
 28. María Angeles Cuello Martínez, *La renta de naipes en Nueva España* (Seville, 1966); David Lorne McWatters, "The Royal Tobacco Monopoly in Bourbon Mexico, 1764–1810," Ph.D. diss., University of Florida, 1979; and James A. Lewis, "The Royal Gunpowder Monopoly in New Spain (1766–1783): A Case Study of Management, Technology, and Reform under Charles III," *Ibero-Amerikanisches Archiv* 6, no. 4 (1980):355–72.
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 30. María Justina Sarabia Viejo, *El juego de gallos en Nueva España* (Seville, 1972).
 31. Robert S. Smith, "Sales Taxes in New Spain, 1575–1770," *Hispanic American Historical Review* 28, no. 1 (Feb. 1948):2–37.
 32. See particularly Antonia Heredia Herrera, *La renta del azogue en Nueva España* (Seville, 1978); and M. F. Lang, *El monopolio estatal del mercurio en el México colonial* (Mexico City, 1977).
 33. See Richard L. Garner, "Reformas borbónicas y operaciones hacendarias de la Real Caja de Zacatecas, 1750–1821," *Historia Mexicana* 27, no. 4 (Apr.–June 1978):542–87; Amalia Gómez Gómez, *Las visitas de la Real Hacienda novohispana en el reinado de Felipe V (1710–1733)* (Seville, 1979); Andrés Lira González, "Aspecto fiscal de la Nueva España en la segunda mitad del siglo xviii," *Historia Mexicana* 17, no. 3 (Jan.–Mar. 1968):67; Linda K. Salvucci, "Costumbres viejas, 'hombres nuevos': José de Gálvez y la burocracia fiscal novohispana (1754–1800)," *Historia Mexicana* 33, no. 2 (Oct.–Dec. 1983):224–64; and Christon Archer, "Bourbon Finances and Military Policy in New Spain, 1759–1812," *The Americas* 37, no. 3 (Jan. 1981):315–50.
 34. For Mexico, see in particular Brian R. Hamnett, *Politics and Trade in Southern Mexico, 1750–1821* (Cambridge, 1971). Equivalent literature for other areas of the empire may

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35. In addition to the material cited in n. 15, see Harold A. Bierk, "Tobacco Marketing in Venezuela, 1798–1799: An Aspect of Spanish Mercantilistic Revisionism," *Business History Review* 39, no. 4 (Winter 1965):489–502; Cam Harlan Wickam, "Venezuela's Royal Tobacco Monopoly, 1774–1810: An Economic Analysis," Ph.D. diss., University of Oregon, 1975; and Jacques A. Barbier, "Venezuelan 'Libranzas,' 1788–1807: From Economic Nostrum to Fiscal Imperative," *The Americas* 37, no. 4 (Apr. 1981):457–78.
 36. María Luísa Laviana Cuetos, "Organización y funcionamiento en las cajas reales de Guayaquil en la segunda mitad del siglo xviii," *Anuario de Estudios Americanos* 37:313–49.
 37. Fernando de Armas Medina, "Organización de la Real Hacienda en la isla de Cuba hasta la creación de la intendencia," *Anuario de Estudios Americanos* 26 (1969):1–64; and Antonio Sánchez Ramírez, "Notas sobre la Real Hacienda de Cuba (1700–1760)," *Anuario de Estudios Americanos* 34 (1977):465–86.
 38. Klein, "Structure and Profitability," *HAHR* 53, no. 3.
 39. See Miles Wortman, "Government Revenue and Economic Trends in Central America, 1787–1819," *Hispanic American Historical Review* 55, no. 2 (May 1975):251–86; and his major work, *Government and Society in Central America, 1680–1840* (New York, 1982), particularly chap. 7.
 40. Pedro Santos Martínez, *Historia económica de Mendoza durante el virreinato, 1776–1810* (Madrid, 1961); and Ernesto J. A. Maeder, *Historia económica de Corrientes en el período virreinal, 1776–1810* (Buenos Aires, 1981). For a study of local municipal taxes, see Edberto Oscar Acevedo, "La sisa para el mantenimiento de las poblaciones del Chaco (1760–1776)," *Investigaciones y Ensayos* 28 (July–Sept. 1980):125–58.
 41. A good summary of this school's work on Mexico is found in Sherburne F. Cook and Woodrow Borah, *Essays in Population History* (3 vols.; Berkeley, 1971–1979). A leading example of this approach to Peruvian history is Noble David Cook's *Demographic Collapse: Indian Peru, 1520–1620* (Cambridge, 1981).
 42. Nicolás Sánchez-Albornoz, *Indios y tributos en el Alto Perú* (Lima, 1978).
 43. See two useful legal studies by Carlos J. Díaz Rementería: "El régimen jurídico del ramo de tributos en Nueva España y las reformas peruanas de Carlos III," *Historia Mexicana* 28, no. 3 (Jan.–Mar. 1979):401–38; and "En torno a un aspecto de la política reformista de Carlos III: las matrículas de tributarios en los virreinos del Perú y del Río de la Plata," *Revista de Indias* 37, nos. 147–48 (Jan.–June 1977):51–139.
 44. Herbert Klein has presented a model on how to use these materials for both demographic and economic analysis in his article "Hacienda and Free Community in Eighteenth-Century Alto Peru: A Demographic Study of the Aymara Populations of Chulumani and Pacajes in 1786," *Journal of Latin American Studies* 7, pt. 2 (1975):193–220. These same padrones were used by Klein to study wealth distribution among the hacienda owners in the same period. See Klein, "The Structure of the Hacendado Class in Late Eighteenth-Century Alto Peru: The Intendencia de La Paz," *Hispanic American Historical Review* 60, no. 2 (May 1980):191–212.
 45. See *Tasa de la visita general de Francisco de Toledo*, edited by Noble David Cook (Lima, 1975).
 46. See Jürgen Golte, *Repartos y rebeliones: Tupac Amaru y las contradicciones de la economía colonial* (Lima, 1980).
 47. The most recent work surveying this institution is Jeffrey A. Cole's *The Potosí Mita, 1573–1700: Compulsory Indian Labor in the Andes* (Stanford, 1985).
 48. Pierre and Huguette Chauau, *Seville et l'Atlantique (1504–1650)* (9 vols.; Paris, 1955–1960).
 49. See Lutgardo García Fuentes, *El comercio español con América (1650–1700)* (Seville, 1978); Antonio García-Baquero González, *Cádiz y el Atlántico (1717–1778)* (2 vols.;

- Seville, 1976); and Carlos Martínez Shaw, *Cataluña en la carrera de Indias, 1680–1756* (Barcelona, 1981). In Latin America, only Veracruz has received such a detailed treatment of its Atlantic trade. See Javier Ortiz de la Tabla, *Comercio exterior de Veracruz, 1778–1821* (Seville, 1978).
50. See, for example, Woodrow Borah, *Early Colonial Trade and Navigation between Mexico and Peru* (Berkeley, 1954); Eduardo Arcila Farias, *Comercio entre Venezuela y México en los siglos xvii y xviii* (Mexico City, 1950); W. Schurz, *The Manila Galleon* (New York, 1939); Carmen Yuste López, *El comercio de la Nueva España con Filipinas, 1590–1785* (Mexico City, 1984); Sergio Villalobos, *Comercio y contrabando en el Río de la Plata y Chile, 1700–1811* (Buenos Aires, 1965); and Javier Cuenca, “Comercio y hacienda en la caída del imperio español, 1778–1826,” in *La economía española al final del antiguo régimen*, vol. 3, *Comercio y colonias*, edited by Josep Fontana Lázaro 389–453 (Madrid, 1982).
 51. The classic work on trade has a focus that is almost entirely institutional. See C. H. Haring, *Trade and Navigation between Spain and the Indies in the Time of the Hapsburgs* (Cambridge, Mass., 1918). See also Guillermo Céspedes del Castillo, *La avería en el comercio de Indias* (Seville, 1945).
 52. The annual summary accounts for the viceroyalties of Peru (including Chile) and the Río de la Plata were reproduced in John J. TePaske and Herbert S. Klein, *Royal Treasuries of the Spanish Empire in America* (3 vols.; Durham, N.C., 1982). The same authors have collected those for the viceroyalty of New Spain in *Ingresos y egresos de la Real Hacienda en México* (3 vols.). The first volume appeared in 1986, and the others will be published by the Instituto Nacional de Antropología e Historia of Mexico. The records for the central treasury of Mexico City were reprinted in John J. TePaske, *La Real Hacienda de Nueva España: la Real Caja de México (1576–1816)* (Mexico City, 1976).
 53. Other such projects now being researched include those of Luis Navarro García for the Viceroyalty of New Granada, Eduardo Arcila Farias for Venezuela, and the more general study of Alvaro Jara, *Plata y pulque en el siglo xviii mexicano* (Cambridge University Center for Latin American Studies, n.d.).
 54. Klein, “Structure and Profitability,” *HAHR* 53, no. 3.
 55. Samuel Amaral, “Public Expenditure Financing in the Colonial Treasury: An Analysis of the Real Caja de Buenos Aires Accounts, 1789–1791,” *Hispanic American Historical Review* 64, no. 2 (May 1984):287–95. This kind of critique is very different from the global rejection of the research enterprise exemplified in D. A. Brading, “Facts and Figments in Bourbon Mexico,” *Bulletin of Latin American Research* 4, no. 1 (1985):61–64.
 56. On the problem of accuracy, see particularly Javier Cuenca Esteban, “Of Nimble Arrows and Faulty Bows: A Call for Rigor,” *Hispanic American Historical Review* 64, no. 2 (May 1984):297–303.
 57. John J. TePaske, “Labyrinthine Corridors of the King’s Countinghouse,” *Hispanic American Historical Review* 64, no. 2 (May 1984):304–9.
 58. On this tax, see José Miranda, *El tributo indígena en la Nueva España durante el siglo xvi* (Mexico City, 1952); and José de la Peña Cámara, *El “tributo,” sus orígenes, su implantación en la Nueva España: contribución al estudio de la Real Hacienda indiana* (Seville, 1934).
 59. Marcello Carmagnani, “La producción agro-pecuaria chilena: aspectos cuantitativos (1630–1830),” *Cahiers des Ameriques Latines* 3 (1969):3–21.
 60. For a remarkable example of imaginative reconstruction from taxes that were later directly collected, see Marcello Carmagnani, *Les mécanismes de la vie économique dans une société coloniale: le Chili (1680–1830)* (Paris, 1973). Alternatively, notarial records are useful for a limited number of taxes.
 61. Church benefices had salaries attached, even if posts were temporarily vacant.
 62. See André Gunder Frank, *Latin America: Underdevelopment or Revolution* (New York, 1969); and Earl J. Hamilton, *American Treasure and the Price Revolution in Spain, 1501–1650* (Cambridge, Mass., 1934).
 63. Michel Morineau, *Incrovables gazettes et fabuleux métaux: les retours des trésors américains d’après les gazettes hollandaises (XVIe–XVIIIe siècles)* (Paris, 1985).

64. In this regard, see the works of Andrien cited in n. 23; also John Lynch, *Spain under the Hapsburgs* 2 (London, 1969); and David A. Brading and Harry E. Cross, "Colonial Silver Mining: Mexico and Peru," *Hispanic American Historical Review* 52, no. 4 (Nov. 1972):545–79.
65. Carlos Sempat Assadourian, *El sistema de la economía colonial: mercado interno, regiones y espacio económico* (Lima, 1982).
66. See, for example, Woodrow W. Borah, *New Spain's Century of Depression* (Berkeley, 1951). For another view, see J. I. Israel, "Mexico and the 'General Crisis' of the Seventeenth Century," *Past and Present* 63 (May 1974):33–57; and Israel, *Race, Class, and Politics in Colonial Mexico, 1610–1670* (London, 1975).
67. Local regional studies, such as the fine work of Peter Bakewell on Zacatecas, already indicated problems with the traditional view of uniform Mexican decline. See Bakewell, *Silver Mining and Society in Colonial Mexico: Zacatecas, 1546–1700* (Cambridge, 1971).
68. It might be argued that a true understanding of the economic situation should be based on per capita figures. Given the problematic nature of the available demographic reconstructions, however, such a result is not to be hoped for at the present time.
69. See John J. TePaske and Herbert S. Klein, "The Seventeenth-Century Crisis in New Spain: Myth or Reality?," *Past and Present* 90 (1981):116–35.
70. For a study of the *situado* (or grant-in-aid) sent to the Philippines, see Leslie Bauzon, "Deficit Government, Mexico, and the Philippines 'Situado' (1606–1804)," Ph.D. diss., Duke University, 1970.
71. For example, see François Chevalier, *Land and Society in Colonial Mexico: The Great Hacienda* (Berkeley, 1970).
72. See Borah, *New Spain's Century of Depression*; and the synthesis by Eric Wolf, *Sons of the Shaking Earth* (Chicago, 1959).
73. See, for example, Antonio Domínguez Ortiz, "Los caudales de Indias y la política exterior de Felipe IV," *Anuario de Estudios Americanos* 12 (1956):311–83; and the works of María Encarnación Rodríguez Vicente, "Los caudales remitidos desde el Perú," *Anuario de Estudios Americanos*; and Julián B. Ruiz Rivera, "Remesas de caudales del Nuevo Reino de Granada en el siglo xvii," *Anuario de Estudios Americanos* 34 (1977):241–70.
74. One of the first attempts to measure this question for the late eighteenth century was reported in John Coatsworth, "Obstacles to Economic Growth in Nineteenth-Century Mexico," *American Historical Review* 83, no. 1 (Feb. 1978):80–100.
75. Humboldt, *Nouvelle-Espagne* 4.
76. See D. A. Brading, *Miners and Merchants in Bourbon Mexico, 1763–1810* (Cambridge, 1971).
77. In this regard, the collection of excise taxes through tollgates or an arrangement resembling a visa should not be confused with customs restrictions.
78. For a treasury-based account of the Mexican economy in this period, see Herbert Klein, "La economía de la Nueva España, 1680–1809: un análisis a partir de las cajas reales," *Historia Mexicana* 34, no. 4 (1985):561–609. One can also consult John J. TePaske, "Economic Cycles in New Spain in the Eighteenth Century: The View from the Public Sector," *Iberian Colonies, New World Societies: Essays in Memory of Charles Gibson*, edited by Richard Gardner and William B. Taylor (n.p., 1985), 19–141. For a wider geographical perspective, see Herbert S. Klein, "Las economías de Nueva España y Perú, 1680–1809: la visión a partir de las cajas reales," *Actas del VII Simposio de Historia Económica* (Lima: Instituto de Estudios Peruanos, forthcoming).
79. For peninsular income, see Jacques A. Barbier and Herbert S. Klein, "Revolutionary Wars and Public Finances: The Madrid Treasury, 1784–1807," *Journal of Economic History* 41, no. 2 (June 1981):315–37; and Jacques A. Barbier, "Peninsular Finance and Colonial Trade: The Dilemma of Charles IV's Spain," *Journal of Latin American Studies* 12, pt. 1 (May 1980):21–37. For data from the first half of the eighteenth century, see Jacques A. Barbier, "Towards a New Chronology for Bourbon Colonialism: The 'Depositaria de Indias' of Cádiz, 1722–1789," *Ibero-Amerikanisches Archiv* 6, no. 4 (1980):335–53.

80. For a somewhat varying view, see Leandro Prados de la Escosura, "Comercio exterior y cambio económico en España (1792–1849)," in *La economía española al final del antiguo régimen*, vol. 3, *Comercio y colonias*, edited by Josep Fontana Lázaro, 171–249 (Madrid, 1982). For the competition over control of trade, see Jacques A. Barbier, "Imperial Policy towards the Port of Veracruz, 1788–1808: The Struggle between Madrid, Cádiz, and Havana Interests," in *The Economies of Mexico and Peru during the Late Colonial Period*, edited by Nils Jacobsen and Hans Jürgen Puhle (Berlin, 1986), 240–51.
81. On the fleet, see Jacques A. Barbier, "Indies Revenues and Naval Spending: The Cost of Colonialism for the Spanish Bourbons, 1763–1805," *Jahrbuch für Geschichte von Staat, Wirtschaft und Gesellschaft Lateinamerikas* 21 (1984):171–88.
82. See Brian R. Hamnett, "The Appropriation of Mexican Church Wealth by the Spanish Bourbon Government: The 'Consolidación de Vales Reales,' 1805–1809," *Journal of Latin American Studies* 1, pt. 2 (Nov. 1969):85–113; Geoffrey A. Cabat, "The Consolidación of 1804 in Guatemala," *The Americas* 28, no. 1 (July 1971):20–38; Asunción Lavrin, "The Execution of the Law of Consolidación in New Spain: Economic Aims and Results," *Hispanic American Historical Review* 53, no. 1 (Feb. 1973):27–49; *La deuda pública de España y la economía novohispana, 1804–1809*, edited by H. Masae Sugawara (Mexico City, 1976); John Alexander Jackson, Jr., "The Mexican Silver Schemes: Finance and Profiteering in the Napoleonic Era, 1796–1811," Ph.D. diss., University of North Carolina, Chapel Hill, 1978; and Reinhard Liehr, "Staatsverschuldung und Privatkredit: Die 'Consolidación de Vales Reales' in Hispanoamerika," *Ibero-Amerikanisches Archiv* 6, no. 2 (1980):149–85.
83. See, for example, Jacques A. Barbier, "Anglo-American Investors and Payments on Spanish Imperial Treasuries, 1795–1808," in *The North American Role in the Spanish Imperial Economy, 1760–1819*, edited by Jacques A. Barbier and Allan J. Kuethe, 134–41 (Manchester, 1984); and three previously cited Barbier articles: "Peninsular Finance and Colonial Trade," *JLAS* 12, pt. 1; "Venezuelan 'Libranzas', 1788–1807," *The Americas* 37, no. 4; and "Towards a New Chronology for Bourbon Colonialism," *Ibero-Amerikanisches Archiv* 6, no. 4.
84. For the eighteenth century, a start has been made in Barbier and Klein's previously cited "Revolutionary Wars and Public Finances: The Madrid Treasury, 1784–1807," *Journal of Economic History* 41, no. 2; and in their "Las prioridades de un monarca ilustrado: el gasto público bajo el reinado de Carlos III," *Revista de Historia Económica* 3, no. 3 (Autumn 1985):473–95. See also José Patricio Merino Navarro, "La Hacienda de Carlos IV," *Hacienda Pública Española* 69 (1981):139–82; and Javier Cuenca Esteban, "Ingresos netos del estado español, 1788–1820," *Hacienda Pública Española* 69 (1981):183–208.
85. Ramón Carande, *Carlos V y sus banqueros*, 3 vols. (Madrid, 1943–1967); Modesto Ulloa, *La Hacienda Real en Castilla en el reinado de Felipe II* (2d. ed.; Madrid, 1977); A. Domínguez Ortiz, *Política y Hacienda de Felipe IV* (Madrid, 1960); Josep Fontana, *La Hacienda en la historia de España (1700–1931)* (Madrid, 1980); and Miguel Artola, *La Hacienda del antiguo régimen* (Madrid, 1982).