

THE CONTOURS OF THE POST-1810 DEPRESSION IN MEXICO: A Reappraisal from a Regional Perspective*

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Scholars generally agree that after 1810 the Mexican economy, shattered by destruction of property and flight of population and capital during the long wars for independence, entered a severe depression. It has usually been assumed that this depression persisted well beyond mid-century, exacerbated by political instability, banditry, and intermittent civil warfare. This assumption was given shape and substance by John Coatsworth's influential 1978 article, which presented a picture of not merely miserable but deteriorating economic conditions for at least a half-century after 1810. Coatsworth calculated that per capita and total income fell until "sometime after 1860" and that a solid recovery was delayed until after 1880.¹

Coatsworth's data seemed merely to confirm what historians had long inferred from the well-known financial decline of the national and state governments and from ample contemporaneous comment on Mexico's economic backwardness. Indeed, Coatsworth devoted little space to defending his income figures, so uncontroversial did they seem. Accordingly, the historiography of the 1980s contains numerous studies that accepted without question this view of an economy moving from bad to worse. One author observed, "Stagnation, depression, and decline—these terms best describe Mexico's economic performance in the first fifty years of national life."² Another commented that the "pulse of the Mexican economy beat slowly" in the first half of the nineteenth century.³ Still

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1. John Coatsworth, "Obstacles to Economic Growth in Nineteenth-Century Mexico," *American Historical Review* 83, no. 1 (Feb. 1978):81.

2. David W. Walker, *Kinship, Business, and Politics: The Martínez del Río Family in Mexico, 1824–1867* (Austin: University of Texas Press, 1986), 8.

3. *Formación y desarrollo de la burguesía en México, Siglo XIX*, edited by Ciro F. S. Cardoso (Mexico City: Siglo Veintiuno, 1978), 18.

another asserted that the national economy “foundered” while members of the elite were caught in a “cycle of decline.”⁴ Some debate has arisen over the underlying causes of the depression, but the only challenges to the idea of the depression itself have been either tentative or indirect.⁵ Rather, when note has been taken of significant economic developments after the depression set in and before 1880, it has usually been to point out the role that the Reform package played in freeing some factors of production (specifically, corporately owned property and Indian labor), thus setting the juridical stage for the transition to capitalism to come during the Porfiriato.⁶

For the regional economy of central Michoacán, the focus of this article, the periodization of economic history emphasizing the lasting importance of economic transformations during the Porfiriato contains much validity. Certainly, the late Porfirian economic boom attained unprecedented proportions. Only the final years of the nineteenth century witnessed a dramatic expansion of capital markets associated with the belated arrival of regional banking institutions, equally impressive movement toward specialization and integration of the national market due to the introduction of the railroad, some mechanization of agriculture, and fairly significant levels of investment in light industry (textiles, slaughter-

4. John Tutino, *From Insurrection to Revolution in Mexico: Social Bases of Agrarian Violence, 1750–1940* (Princeton, N.J.: Princeton University Press, 1986), 215. See also *México en el Siglo XIX (1821–1910): historia económica y de la estructura social*, edited by Ciro Cardoso (Mexico City: Nueva Imagen, 1980), 18; Jaime O. Rodríguez, *Down from Colonialism: Mexico's Nineteenth-Century Crisis* (Los Angeles: Chicano Studies, University of California, Los Angeles, 1983), 19; Antonio García de León, “Las grandes tendencias de la producción agraria,” and Enrique Semo, “Hacendados, campesinos y rancheros,” 88, both in *Historia de la cuestión agraria mexicana*, vol. 1, *El siglo de la hacienda, 1800–1900*, edited by Enrique Semo (Mexico City: Siglo Veintiuno, 1988), 83; Eric Van Young, “The Age of Paradox: Mexican Agriculture at the End of the Colonial Period, 1750–1810,” in *The Economies of Mexico and Peru during the Late Colonial Period, 1760–1810*, edited by Nils Jacobsen and Hans-Jürgen Puhle (Berlin: Colloquium Verlag, 1986), 82.

5. On the origins of the depression, see Enrique Cárdenas S., “Algunas cuestiones sobre la depresión mejicana del XIX,” *HISLA: Revista Latinoamericana de Historia Económica y Social* 3 (1st semester, 1984); Richard Salvucci and Linda K. Salvucci, “Crecimiento económico y cambio de productividad en México, 1750–1895,” *HISLA* 10 (1987); Coatsworth, “Obstacles to Economic Growth”; John Coatsworth, “The Limits of Colonial Absolutism: The State in Eighteenth-Century Mexico,” in *Essays in the Political, Economic, and Social History of Colonial Latin America*, edited by Karen Spalding (Newark: Latin American Studies Program, University of Delaware, 1982); and Rodríguez, *Down from Colonialism*. A brief summary of some aspects of the debate can be found in Hugh M. Hamill, Jr., “Caudillismo and Independence: A Symbiosis?” in *The Independence of Mexico and the Creation of the New Nation*, edited by Jaime O. Rodríguez (Los Angeles: UCLA Latin American Center, 1989).

6. Francisco López Cámara, *La estructura económica y social de México en la época de la Reforma* (Mexico City: Siglo Veintiuno, 1967), 195; Richard N. Sinkin, *The Mexican Reform, 1855–1876: A Study in Liberal Nation-Building* (Austin: Institute of Latin American Studies, University of Texas, 1979), 7; Cardoso, *México en el Siglo XIX*, 18, 61; Coatsworth, “Obstacles to Economic Growth”; Coatsworth's comments on Cárdenas in “Algunas cuestiones,” 99–100; and Antonio García de León, “Las grandes tendencias,” 64.

houses, forest products).⁷ It is wrong, however, to think of the pre-Porfirian economy of Michoacán as uniformly depressed, much less caught in a “downward spiral.”⁸ As this article will demonstrate, the regional economy had rebounded by the early 1830s and by mid-century was experiencing a mini-boom that outstripped the prosperous economy of the late colonial period by many measures.⁹

It is far from clear that this recovery could have been sustained even if the Reform and the ensuing civil war had not intervened. As Coatsworth and others have pointed out (with varying emphases), there were obvious restraints on growth in nineteenth-century Mexico. Some were inherited from the Hispanic state: restrictive banking, commerce, and inheritance laws; poorly defined and unevenly defended property rights; corporate exemptions; and an antiquated system of taxation. Most of these colonial legacies either remained unchanged or became even more inhibiting after independence. Furthermore, even in a legal or institutional environment more nurturing of entrepreneurs, the lack of inexpensive means of freight transport before the railroad became feasible

7. For a preliminary comparison of the mid-nineteenth-century recovery with the Porfirian boom, the reader may wish to consult my dissertation, “A Mexican Provincial Elite: Michoacán, 1810–1910,” Stanford University, 1985. A book in progress on the same subject will include substantial additional data, but the general outlines of the trends presented in the dissertation will remain the same.

8. Walker, *Kinship, Business, and Politics*, 124.

9. The benchmark decade against which the mid-century recovery is measured is the last decade before the Hidalgo rebellion, 1800–1810. As colonialists are well aware, a debate continues over the question of whether this decade represents the high point of colonial prosperity. A consensus seems to be developing that the period before the European wars or even the period before the Bourbon reforms might have been “healthier” than the decade 1800–1810. Preliminary analysis of some of the data collected for Michoacán in the eighteenth century by Frederick Bowser indicates that the picture is mixed for this region, although it seems safe to infer that the decade before 1810 was sufficiently prosperous to justify using it as a standard for measuring the subsequent recovery. Loans indeed fell in the 1800–1810 period in comparison with the 1790s and the 1780s (from about 150,000 pesos a year in the 1780s and 170,000 in the 1790s to 135,000 pesos in the 1800–1810 period). But two other indicators—average price of haciendas and average rural rents—both rose dramatically in the decade before the Hidalgo rebellion. Hacienda prices climbed from 26,000 pesos in the 1770s, to 29,000 in the 1780s, to 34,000 in the 1790s, and to 43,000 in 1800–1810. Rents rose from 1,200 pesos in the 1770s to 1,300 in the 1780s, then fell in the 1790s to 1,000 pesos before skyrocketing to 3,300 in 1800–1810 (unadjusted for inflation). One analyst has argued that the Bourbon reforms constituted a burden rather than a stimulus to the colonial economy. See Claude Morin, *Michoacán en la Nueva España del Siglo XVIII: crecimiento y desigualdad en una economía colonial* (Mexico City: Fondo de Cultura Económica, 1979), 127–40. Morin nonetheless perceives continued growth in agricultural production, based on tithe collections. For similar arguments, see John Coatsworth, “The Mexican Mining Industry in the Eighteenth Century,” in Jacobsen and Puhle, *Economies of Mexico and Peru*; Coatsworth, “Limits of Colonial Absolutism,” in Spalding, *Essays*; Van Young, “Age of Paradox,” in Jacobsen and Puhle, *Economies of Mexico and Peru*; Richard L. Garner, “Exportaciones de circulante en el Siglo XVIII (1750–1810),” *Historia Mexicana*, no. 124 (1982):577–88; and Richard Salvucci, “Economic Aspects of the Transition to Independence in Mexico, 1800–1840,” manuscript, 1991, 52–58.

would still have discouraged specialization and tended to preserve a fragmented market structure, thus reducing incentives for production to outrun local population growth.¹⁰

The intention here, however, is neither to address the question of sustainability nor to discuss the changing nature of obstacles to growth over the course of the nineteenth century. My primary concerns are to present the case for a strong economic recovery by mid-century in Michoacán, to account for its major features, and to sketch the social and political implications of such a recovery (even if it might have proved temporary). If the economic upswing in the late 1840s and early 1850s in Michoacán was duplicated elsewhere, as may well have been the case, then the success of the Reform movement and its timing and direction become much more explicable. That is to say, a social and economic dimension can be added to the dominant ideological and political explanations of the Reform.

THE RECOVERY IN MICHOCACAN

Before turning to the evidence of the economic recovery in Michoacán, it is important to confront the most serious problem in analyzing economic data extracted from nineteenth-century archival records: the absence of price indices for the period preceding the Porfiriato. Yet the need for a general idea about the movement of prices remains, especially if the aim is to examine the extent to which a regional economy was depressed, stagnant, or recovering. If significant inflationary or deflationary trends remain undetected, then any conclusions about the movement of the economy based on unadjusted prices would be distorted at best. With this need in mind, I have developed a preliminary agricultural price index for Michoacán during the first sixty years of the nineteenth century, which is presented in table 1 and explained in the appendix. This price index suggests that although prices were quite high in the insurgent period, prices during the 1820s returned to 1800–1810 levels, where they remained through the 1850s. My ongoing research may eventually alter the data slightly, but the results seem to suggest clearly that no significant price movement occurred that would tend to nullify conclusions about broad economic trends based on unadjusted figures.¹¹

10. Coatsworth, "Obstacles to Economic Growth"; Cárdenas, "Algunas cuestiones"; Salvucci and Salvucci, "Crecimiento económico y cambio"; and Stephen H. Haber, "La economía mexicana, 1830–1940: obstáculos a la industrialización," *Revista de Historia Económica* 8, no. 1 (Winter 1990):81–93.

11. Several studies of late-colonial prices in Mexico all find substantial inflation occurring before 1810. Enrique Florescano found prices rising from the end of the 1770s; see his *Precios del maíz y crisis agrícolas en México, 1708–1810* (Mexico City: Colegio de México, 1969). Richard L. Garner is not sure that such a trend kicked in until the 1790s; see "Price Trends in

TABLE 1 *Agricultural Price Index for Michoacán, 1800–1859*

<i>Decade</i>	<i>Base Period (1800–1809 = 100)</i>
1800–1809	100
1810–1819	163
1820–1829	112
1830–1839	106
1840–1849	96
1850–1859	105

Sources: Archivo Histórico Manuel Castañeda Ramírez (Casa de Morelos), Archivo de Notarías de Morelia, Archivo Histórico Municipal de Morelia, Archivo Histórico de la Ciudad de Pátzcuaro, Archivo General de la Nación, and Archivo Histórico del Poder Judicial.

Note: For content and methods used to construct this index, see appendix 1.

In gauging the ups and downs of the regional economy, my chief sources were the notary records of the capital city of Morelia: real estate sales and rentals, credit operations, wills, estate inventories, business contracts, and similar documents. These were supplemented with the more sporadic notary records kept in Pátzcuaro and Zamora, the almost complete records of mortgages on property (*libros de becerro*) for Pátzcuaro and Zamora, civil court records for Morelia and Pátzcuaro, and miscellaneous documents from the archiepiscopal archive, especially those relating to the collection of tithes. From these sources, I culled eight different kinds of economic data: number and average price of urban and rural property sales, average hacienda rents, and the number of rental transactions, loans, and personal wealth among the economic elite (defined here as those with gross assets of at least 20,000 pesos).¹² Other kinds of data would be immensely useful in the effort to track the performance of the regional economy, but the dearth of reliable published

Eighteenth-Century Mexico," *Hispanic American Historical Review* 65, no. 2 (May 1985):281. Both agree that the inflation was most intense in the first decade of the nineteenth century. Closer to Michoacán, Cecilia Rabell Romero finds prices rising sometime between 1778 and 1796 (more precision is not possible based on tithe records because of a change in collection methods); see her *Los diezmos de San Luis de la Paz: economía en una región del Bajío en el Siglo XVIII* (Mexico City: Instituto de Investigaciones Sociales, Universidad Nacional Autónoma de México, 1986), 43. For the post-1810 period, both Jan Bazant and Antonio García de León surmise that prices were stable after 1810, although neither provides any price indices. See Bazant, *Cinco haciendas mexicanas* (Mexico City: Colegio de México, 1975), 94; and García de León, "Las tendencias grandes," 63.

12. The definition of "elite wealth" as at least 20,000 pesos is based on my sense that this amount usually would have produced income sufficient for a family with modest social pretensions to live comfortably without needing salary supplements. Contemporaries also seem to have reckoned that 20,000 to 25,000 pesos constituted a kind of watershed of wealth and social standing. For example, this range was the minimum proposed requirement for state office by conservatives following the La Piedad–Guadalajara rebellion of 1852. See Moisés González Navarro, *Anatomía del poder en México, 1848–1853* (Mexico City: Colegio de México, 1977), 384.

statistical information for this period is well known, and few raw materials exist for extracting such information. In the absence of title or sales tax records that bear any discernible relation to the volume of agricultural production or trade, notary records provide the only sources of systematic economic data.

These records are far from perfect, although the potential flaw of missing registers was not a serious problem in Morelia. Information was recorded by different notaries in an often eccentric fashion, and the lawyers, appraisers, and nonprofessionals who supplied the information to the notaries in the first place were even more disparate in their ideas about what should be placed on record and what could be left out. For example, no two estate inventories were broken down in quite the same way. Some wills were very descriptive, while others referred only to a *memoria cerrada* in which the testator's worldly goods were listed. Some loan documents contained an appraisal of the property that served as collateral, but others did not. To make matters worse, the traditional Spanish attention to detail decreased markedly with independence, perhaps because of different or inadequate standards of training for notaries. Thus the records made after 1820 are sloppier and less informative than those compiled during the colonial period. When these considerations are added to the fact that the number of sales of haciendas or inventoried estates is necessarily quite modest (given the small population of central Michoacán who notarized documents on a regular basis), the result is that certain kinds of statistical manipulation now possible for the second half of the nineteenth century are not feasible for the first.

Another problem is that the task of coaxing economic data from the notary records is too time-consuming to conduct in all the cities where documents involving persons, businesses, and property in Michoacán might have been notarized: ideally, in addition to the three main cities of Michoacán, also Mexico City and Guadalajara. Fortunately, the *libros de becerro* for the major agricultural districts of Zamora and Pátzcuaro (where all transactions involving mortgages on property in the district were summarized, no matter where notarized) suggest that out-of-region transactions were relatively uncommon during this period. Nonetheless, the data are obviously best for the core regions of the state (from the central *tierra caliente* to Puruándiro, on the Guanajuato border, and from Zinapécuaro in the east to Zamora in the west) and somewhat weaker for the far eastern and far western regions (approaching Mexico City and Guadalajara, respectively).

Finally, data generated from legal records almost invariably yield a fuller picture of the elite-dominated sectors of the economy than of the mainly subsistence sector, and that bias is not avoided here. But the areas of elite domination—estate agriculture, finance, and trade—were unargu-

TABLE 2 *Indices of Economic Growth in Michoacán, 1800–1859*

<i>Period</i>	<i>Equal Weights</i>	<i>Number of Transactions Omitted</i>	<i>Variable Weights^a</i>
1800–1810	100	100	100
1811–1829	61	54	57
1830–1839	94	74	82
1840–1849	103	75	88
1850–1859	140	112	126

Sources: Appendices 2, 3, 4, 5, and 6.

^a“Variable weights” were calculated as follows: loans and personal wealth, .20 each; urban prices, rural prices, and rents, .13 each; and numbers of rural, urban, and rental transactions, .07 each.

ably of pivotal importance to the larger economy, and a study that focuses mainly on these areas can be expected to have captured the general trends that are of concern here.

The statistics generated from these records are presented in appendices 2, 3, 4, 5, and 6. The data demonstrate clearly that the collapse of the regional economy in 1810 was almost total. But they also indicate that following more than a decade of deep depression, some signs of life were emerging by the mid-1820s. Starting about 1825, the economy rebounded rather smartly through the mid-1830s, leveled off over the next decade, then in the late 1840s entered a period of strong growth that lasted until the mid-1850s. As shown above in table 2, three different ways of weighting the data in appendices 2, 3, 4, 5, and 6 to derive a general index of economic trends all suggest that the per capita performance of the non-subsistence sector of the economy had exceeded the levels reached during 1800–1810 by the early 1850s. According to probably the most sensible of the three weighting experiments—the system of variable weights—the pre-Reform economy was one-quarter again as strong as that of the late colonial period.

The earliest signs that the post-1810 depression had bottomed out are to be found in the housing market of Morelia. The number of urban real estate transactions, which had fallen sharply after 1810 from an annual average of fifty-eight a year to just twenty-three a year from 1811 through 1824, regained pre-1810 levels by the late 1820s. Equally important, the average price per transaction also rose in the late 1820s: after falling from 630 pesos before the depression to 400 pesos over the next fifteen years, the average urban property sold for 650 pesos between 1825 and 1829 (see appendix 2). This improvement came in the face of an urban population that by all accounts had dwindled since the eve of the Hidalgo rebellion, although population estimates for Morelia and other cities are

not easy to come by.¹³ In the 1830s, the number of transactions leveled off but rose in the 1840s by another two-thirds and continued to increase into the 1850s. Prices, on the other hand, seesawed, climbing above 900 pesos in the early part of each decade and falling back in the late 1830s and 1840s, but never below 740 pesos (still well above late-colonial levels). The combined effect of a constant increase in the number of annual transactions and generally high prices after 1825 was that the total annual value of urban real estate transactions in Morelia increased from 49,000 pesos in the 1830s to 84,000 pesos in the 1840s and to 121,000 pesos in the early 1850s, well over three times the pre-Hidalgo levels. This increase occurred in an urban population that in 1850 was estimated at only 25,000 inhabitants, just slightly larger than it had been in 1810 (20,000 to 22,000).

To a certain extent, this impressive growth of urban real-estate markets indicates not the health but the precariousness of the economy of Michoacán. Colonial historians have pointed out that mercantile investments in land often represented a conservative investment strategy: wealthy merchants put their money into land so as to shelter it from the risks of trade and to secure a predictable, if unspectacular, income from rents. In fact, even in the colonial period, urban real estate served that function as well or better than investments in land. Urban property produced steady income with even less risk, supervision, and maintenance costs than rural landholdings. Thus the desirability of urban property after 1825, reflected in surprisingly high prices and a large number of transactions, suggests a climate in which other, more productive investments were still perceived as being too risky.

This interpretation of the movement of urban real estate markets squares with the data on the agricultural sector, virtually the only other area of investment in Michoacán. Deep and enduring weakness was indeed characteristic of the rural sector. Estate agriculture was hit particularly hard by the destruction of physical capital during the wars for independence, making the demand for rural real estate (like that for urban real estate) almost nonexistent between 1810 and about 1825. Only four haciendas or large ranchos (costing 5,000 pesos or more) were sold in Morelia and Pátzcuaro, for a paltry annual average volume of 5,100 pesos (see appendix 3). Moreover, there is no indication that research in the archives of Mexico City would substantially alter this picture: despite the fact that many hacienda owners fled to Mexico City in 1810, I have found only one reference to an hacienda sold there during this period.

13. The only contemporary estimate, made by Juan José Martínez de Lejarza, put the population of Valladolid (Morelia) at only 12,000 in 1822, although he observed that "vagrants" might have swelled the number to 20,000. This figure would still fall below the best estimate for 1810 of 22,000. See Juan José Martínez de Lejarza, *Análisis estadístico del estado de Michuacán* [sic] (Morelia, originally published in 1824; reissued in facsimile, Morelia: Gobierno de Michoacán, 1975), 93, 95.

As was true for Morelia real estate markets, the late 1820s saw a revival of interest in the rural sector, with an average of over three haciendas sold per year, about the same as in the period from 1800 to 1810. But unlike the urban markets, the average price in the late 1820s (26,000 pesos) remained far below the 43,000 pesos for which the average property sold in the first decade of the century. Despite the flurry of activity, this land market was characterized mainly by desperation sales, as most haciendas and large ranchos were being sold for scarcely more than the amount of their mortgages, and in some cases for considerably less. In other words, prospects in the rural sector had improved only enough for some owners to unload at bargain prices properties that they were no longer willing or able to hold.

This phenomenon—the more or less forced sale of heavily indebted rural property at very low prices (usually no more than two-thirds of the appraised value)—recurred throughout the first half of the nineteenth century. For example, the hacienda of Araparícuaro had been heavily damaged during the wars for independence, and although its owners struggled for three decades to return the property to profitable production, in 1851 it was sold for the amount of its debts.¹⁴ As the prospects for earning profits in agriculture improved, owners of debt-burdened and undercapitalized haciendas who had been unable to sell or even cede these properties in the 1820s or 1830s were able to do so in the 1840s or 1850s. As a result, a large proportion of the rural properties that were sold each year were distressed, depressing average hacienda prices.¹⁵

Still, as time passed, auctions and sales of ceded or foreclosed property accounted for a dwindling percentage of total rural property sales. To illustrate this trend, I have identified twenty-two haciendas that were sold between 1790 and 1810 and sold again between 1810 and 1860; half were sold for more than their pre-1810 price and half for less. In the latter category, ten of the eleven distressed properties were sold before 1850, while of the eleven that sold for more than their pre-1810 price (an average of 37 percent more), ten sales occurred after 1840. This pattern suggests that the shakeout in the land markets, or the transfer of unproductive and highly indebted haciendas to new owners, was more or less complete by 1850. This trend allowed the average hacienda price in the early 1850s (45,000 pesos) to exceed that of the pre-1810 period (43,000 pesos). Significantly, these higher prices occurred in a context of high turnover: the number of rural property transactions in the early 1850s

14. Archivo de Notarías de Morelia (ANM), cession and sale of the hacienda of Araparícuaro, García, 1851, 27 December.

15. Regarding the church's increased willingness to accept cessions after 1825, see Margaret Chowning, "The Management of Church Wealth in Michoacán, Mexico, 1810-1856: Economic Motivations and Political Implications," *Journal of Latin American Studies* 22, pt. 3 (Oct. 1990):459-96.

was almost one-third higher than that between 1800 and 1810, even after adjusting for population growth.

Much the same pattern can be found in the rental markets for haciendas. The years following the Hidalgo rebellion saw a collapse of average rents, from some 3,300 pesos in the period between 1800 and 1810 to 1,200 pesos in the 1810s and early 1820s (see appendix 4). As in the rural and urban real estate markets, the number of rental transactions beginning in the 1820s exceeded late-colonial levels by a wide margin, rising from an average of 1.6 contracts a year in the decade before Hidalgo to 2.8 a year in the early 1820s and to 4.0 a year in the second half of the decade. But as with hacienda prices, rents remained low, scarcely budging from the 1,200-peso level through the early 1830s, although the number of transactions remained high. In short, this indicator behaved in similar fashion to rural real estate sales: the hyperactivity (by historical standards) in rental markets after 1820 suggests that owners who were frantically trying to retreat from direct production were able to find renters, but only if the rents were very low.

Rents in the late 1830s, however, climbed swiftly to a new level: in the period 1835–1839, average rents doubled over the levels of the past twenty-five years to 2,400 pesos, while the number of contracts went back up to 4.0 a year, having declined to 2.6 a year in the early part of the decade. In the 1840s, rents stabilized at 2,000 to 2,100 pesos, as did the number of contracts at around four a year. As with the other indicators, in the early 1850s another big jump occurred in average rents to 3,250 pesos, virtually even with the 1800–1810 period, combined with continued high levels of activity.

A far less convincing upward trend can be seen in capital markets, where a precipitous drop in notarized loans from 135,000 pesos a year in the first decade of the century to 11,500 pesos in the period from 1811 to 1824 was followed by a slow expansion of credit (see appendix 5). Some slippage can be observed in the late 1840s, perhaps due to non-notarized forced or voluntary loans to the government for the war effort. The shortage of capital is even more striking in light of the fact that between 1800 and 1810, because of increased extractions by the Spanish Crown to finance European wars (most notably the consolidation decree of 1804), lending had already declined 20 to 25 percent from the levels of the 1790s.

Unlike the situation in real estate and rental markets, no mini-recovery occurred in capital markets in the late 1820s and 1830s. The recovery, such as it was, was delayed until the early 1850s. A strong burst of lending in the seven years preceding the Reform reflects the long-delayed reentry of the Catholic Church into the credit markets, but private lending also continued to expand. Still, at 105,000 pesos a year, credit levels remained below the pre-1810 level of 135,000 pesos. With population increases taken into account, the recovery in credit markets appears

even more deficient: per capita lending rose to only about 60 percent of levels before 1810.

Financial-market weakness continued to plague the regional economy throughout the period and was surely one of the most important factors retarding growth.¹⁶ But an economy in which loans cost 12 to 40 percent or more (as some contemporaries claimed) must necessarily develop ways of doing business that allow individuals to circumvent traditional loan markets. These adjustments could not provide the advantages of a modern banking system with modest rates of interest available on long-term loans or even replace the old colonial system of church and mercantile loans, but they did allow the reconstruction of the regional economy to proceed in a way that would have been impossible if the only credit available had been the sums listed in appendix 5. Without going into detail, the adjustments fell mainly into three categories: cash advances by merchants to growers, to be repaid in kind; formal business partnerships between growers and merchants, in which the merchant typically provided financial capital and the *hacendado* or renter provided physical capital (land, tools, animals), with the profits to be split evenly; and the use of commercial paper (*libranzas* and *giros comerciales*) to ease the problem of illiquidity. All of these business practices had been employed during the colonial period, but they seem to have been used more frequently beginning in the 1830s than at any time in the past.¹⁷

These alternative means of acquiring working capital are not fully captured in appendix 5. Cash advances are included in my data when they were notarized, but many such arrangements were apparently extrajudicial. Neither business partnerships nor *libranzas* could be included at all: business partnerships are too vague, often specifying only that one partner agreed to supply up to a certain amount per week for operating expenses, and *libranzas* did not appear in notary records unless the original creditor protested nonpayment. Furthermore, the data in appendix 5 do not include any lending by, say, Mexico City financiers to business owners in Michoacán, which may also have increased after 1830 as more foreign commercial houses were established in Mexico City. In short,

16. For a discussion of the continuing weakness of financial markets well into the Porfiriato, see Stephen Haber, "Industrial Concentration and the Capital Markets: A Comparative Study of Brazil, Mexico, and the United States, 1830-1930," *Journal of Economic History* 51, no. 3 (Sept. 1991): 559-80.

17. On the colonial economy, see Pedro Pérez Herrero, *Plata y libranzas: la articulación comercial del México borbónico* (Mexico City: Colegio de México, 1988), esp. chaps. 9 and 10. Pérez sees the expanding use of *libranzas* in the late eighteenth century as a response to increased Bourbon extractions on the part of Mexico City merchants, who used them to control the shrinking supply of silver. On the independence period, Cárdenas also notes that constriction of the money supply caused first by the consolidation and then by capital flight after 1810 was in part counteracted by the "ever-increasing" use of *libranzas*. See Cárdenas, "Algunas cuestiones," 12-13.

while the various mechanisms for financing economic reconstruction were imperfect at best, the picture may not be quite as bleak as the notary-generated data make it appear.

One of the most complex of all the indicators of recovery is the strong upward trend of gross and liquid personal wealth among the elite late in this period. Gross wealth at death, which averaged 97,000 pesos between 1790 and 1810, fell by almost a quarter to 74,000 pesos from 1811 to 1829. It then gradually increased to 76,000 pesos in the 1830s and to 83,000 pesos in the 1840s. Finally, in the 1850s, personal wealth boomed to 133,000 pesos, over one-third higher than the levels between 1790 and 1810 (see appendix 6). The trend for liquid wealth is roughly similar: from an average of 69,000 pesos in the late colonial period, net assets among the elite fell 19 percent to 56,000 in the 1810s and 1820s, then rose slowly in the 1830s to 58,000 pesos, fell back to 51,000 pesos in the 1840s (probably the result of heavy borrowing to rebuild and restock), and then boomed in the 1850s to 104,000 pesos, 50 percent higher than late-colonial levels. Because these data reflect wealth at death, the high levels of both gross and liquid wealth in the 1850s suggest that the first generation to come of age in the aftermath of the Hidalgo rebellion found enough room to maneuver, even in the profoundly depressed economy of the 1810s and early 1820s, to build a base on which unprecedented fortunes could be founded in later decades.

This inference is supported by individual cases far too numerous to discuss here, but perhaps a few generalizations, illustrated by one spectacular case of individual accumulation, are appropriate. As a rule, the largest fortunes at mid-century had mercantile origins. Although trade contracted during the wars for independence, merchants who managed to connect sources of supply with markets appear to have reaped impressive profits, at least in the late 1810s and early 1820s and probably beyond, as freer trade lowered the cost of many imported goods.¹⁸ Second, many of those who started out as merchants had all but abandoned trade by the late 1840s to concentrate their energies in the rural sector. In some ways, this shift was a natural one: large import merchants during the colonial period also speculated in agricultural commodities and tended eventually to purchase land. But never before had merchants-turned-hacendados been quite so willing to give up their wholesale and retail goods businesses as they were in the 1840s and 1850s.

Third and most significant, hacendados and renters of whole ha-

18. *Comprobantes* and *facturas* required by the *alcabala* collectors show prices paid in Mexico City, Veracruz, or other city of purchase and also give market prices in Valladolid (Morelia) and Pátzcuaro. Thus they yield some idea of the profits that could be earned between 1810 and 1821. The documents consulted are found in the Archivo General de la Nación (AGN), Real Hacienda, Alcabalas, Valladolid, miscellaneous bundles in various boxes, unorganized as of summer 1989.

ciendas in the post-1810 period—whether new buyers or members of established elite families and whether possessed of mercantile wealth or not—tended to approach their agricultural investments aggressively. Land that was often destroyed, abandoned, or run down at best (and which had been purchased on terms that allowed the buyer to assume the entire purchase price of the property as a mortgage) could no longer be viewed as a safe investment, whereas mercantile or inherited fortunes could be maintained with periodic infusions of capital from trade or convenient marriage. Rather, land had to be made at least profitable enough to service its debt out of current production and preferably to pay off at least part of that debt at the earliest possible time.

The search for enhanced hacienda profitability surely entailed lowering or attempting to lower labor costs, but drastic reduction of these costs was not always possible through lower wages, assiduous labor recruitment, payment of wages in kind, sharecropping, or tighter mechanisms of control.¹⁹ It was not easy to extract more profit by lowering wages because the standard wage on the eve of the Hidalgo rebellion was already low in this era of rather steady population increase since the eighteenth century, and there was a limit to how much lower it could go, no matter how skillfully the employer juggled payment in cash, kind, and scrip.²⁰ In fact, it is more likely that many hacendados were forced to offer relatively high wages and good incentives in the initial stages of recuperation after the depression in order to re-recruit the dispersed labor force characteristic of what John Tutino calls the era of “agrarian decompression.” Tutino has confirmed that Indian villagers and peasants frequently resisted conversion into wage workers and that despite a variety of carrot-and-stick devices sometimes used to harness Indian village labor, these measures worked imperfectly.²¹ One alternative to wage labor—sharecropping—

19. On the need to lower labor costs and the attempts to do so, see Jan Bazant, “Peones, arrendatarios y aparceros en México, 1851–53,” *Historia Mexicana* 23 (1975):354; Bazant, “Landlords,” 80; Brading, *Haciendas*, 11–12; Jean Meyer, *Esperando a Lozada* (Zamora: Colegio de Michoacán, 1984), 25, 32; Simon Miller, “The Mexican Hacienda between the Insurgency and the Revolution: Maize Production and Commercial Triumph on the Temporal,” *Journal of Latin American Studies* 16, no. 2 (Nov. 1984):311–12; and John Tutino, “Agrarian Social Change and Peasant Rebellion in 19th-Century Mexico: The Example of Chalco,” in *Riot, Rebellion, and Revolution: Rural Social Conflict in Mexico*, edited by Friedrich Katz (Princeton, N.J.: Princeton University Press, 1988), 127.

20. It is not certain that there was a “steady” increase in population size. Viviane Brachet’s work is a useful compendium of nineteenth-century population estimates, but for Michoacán at least, the fact that it depends so much on these estimates makes it somewhat less than reliable. For example, her work contains no adjustment in the figures to account for the 1833 cholera epidemic, while the adjustment made by one contemporary (and repeated by others and by Brachet) for the 1851 epidemic seems far too high, resulting in an 1855 population of some 492,000, down from 529,000 in 1845. Worse, Brachet puts the 1865 figure at an impossible 871,000. See Brachet, *La población de los estados mexicanos (1824–1895)* (Mexico City: Instituto Nacional de Antropología e Historia, 1976), 103.

21. John Tutino, “Family Economies in Agrarian Mexico, 1750–1910,” *Journal of Family His-*

lowered labor costs markedly but was difficult to supervise, inefficient, and not without expense because the purchase of tools, animals, and seeds for the sharecroppers (*medieros*) could mount up. According to one contemporaneous source, turning over land to sharecroppers was considered an unsatisfactory last resort.²² Finally, state congresses, including that in Michoacán, tried to help hacendados by passing stringent vagrancy laws designed to combat *bandolerismo* and to put able-bodied men to work, but these measures were notoriously difficult to enforce.

The inability to rely solely on squeezing labor for generating high profits led many hacendados in Michoacán to supervise properties closely, vigorously pursue markets, carefully calculate the amount of tolerable debt and repay debts when it was deemed necessary to reduce them, and invest large amounts of capital in stock and improvements of physical plant. Although the process of putting a hacienda back into production was extremely risky, with luck and tenacity the purchasers of distressed haciendas might eventually find themselves owning properties worth far more than their purchase price.²³ Owners and renters, who in many cases were abetted rather than hurt by the frequent localized uprisings that elevated prices in accessible markets, found themselves in a position to accumulate capital in agriculture without needing an ongoing mercantile connection. The success of their strategies is attested to by an apparent increase in complaints by Indian villagers about hacienda expansion in the 1840s and by the overall rise in land values and rents in the early 1850s.²⁴

tory 10, no. 3 (Fall 1985):265; and John Tutino, "Hacienda Social Relations in Mexico: The Chalco Region in the Era of Independence," *Hispanic American Historical Review* 55, no. 3 (Aug. 1975):520–24.

22. Bancroft Library, University of California, Berkeley, *Libro de consultas [del convento de Agustinos de Santa Catarina de Pátzcuaro], 1808–1848*, f. 62 (dated 15 Jan. 1831). By the end of the nineteenth century (and possibly much earlier), sharecropping had become an important feature of the Mexican rural economy. For the best elaboration of this argument, see Miller, "Mexican Hacienda"; and Miller, "Mexican Junkers and Capitalist Haciendas, 1810–1910: The Arable Estate and the Transition to Capitalism between the Insurgency and the Revolution," *Journal of Latin American Studies* 22, pt. 2 (May 1990):227–63.

23. On this point, see Domínico Síndico's argument that from the point of view of structural changes, the fact that land could be acquired on the cheap was fundamental. See Síndico, "Azúcar y burguesía: Morelos en el Siglo XIX," in *El Siglo XIX en México: cinco procesos regionales: Morelos, Monterrey, Yucatán, Jalisco y Puebla*, edited by Mario Cerruti (Mexico City: Claves Latinoamericanas, 1985), 17.

24. By 1850 the governor of the state was fearful of caste war because of the considerable amount of land that had been taken from the Indians, and several uprisings seem to have been closely linked to hacienda expansion. Cited in González Navarro, *Anatomía del poder*, 143. Hacienda expansion at the expense of Indian and peasant landholdings was the chief stated cause of uprisings by Indians in Charo, Indaparapeo, Acuitzio, and Tarímbaro in 1857. In 1840 and 1851, other Indian pueblos defended their land in court cases noted by Elinore Barrett. Donald Brand has also documented loss of Indian lands to expanding haciendas during this period. See Leticia Reina, *Las rebeliones campesinas en México, 1819–1906* (Mexico City: Siglo Veintiuno, 1980), 181; Elinore M. Barrett, *La cuenca de Tepalcatpec: su desarrollo*

Among these aggressive new agricultural entrepreneurs, none was more successful than Cayetano Gómez. Born in the eastern district of Maravatio in 1791 to a respectable but far from wealthy family, Gómez died in 1858 leaving a fortune of nearly 1,200,000 pesos, almost double the wealth of his nearest contemporary, Fernando Román (his daughter's father-in-law) and the largest late-colonial fortune, that of Isidro Huarte (the grandfather of Gómez's wife).²⁵ Gómez started out in the 1810s as a small merchant dealing in domestic and imported goods. Following the colonial pattern, by the mid-1820s he had diversified into speculating in agricultural commodities, mainly sugar and sugar products. But unlike Huarte and other colonial merchant-hacendados, Gómez virtually abandoned trade and speculation in his middle years to focus on his investments in three haciendas: San Bartolomé and Quirio, which produced cereals and chiles, and the sugar estate of Taretán. Gómez more than doubled the value of San Bartolomé, his first purchase in 1834; he nearly doubled the value of Taretán, which he began renting in 1842; and he almost tripled the value of Quirio after buying it in 1837. At the same time, Gómez reduced the debts on all three properties to manageable proportions.²⁶ In fact, his only significant liability at his death was the 200,000 pesos that he owed the Augustinians for Taretán, purchased less than two years earlier in the first phase of the Reform.

Detailed inventories of Gómez's haciendas have not been located, but no evidence suggests that he was a particularly "modernizing" hacendado. Instead, he took over, rebuilt, and expanded the old colonial haciendas, investing in the same kinds of improvements that had been responsible for late-colonial agricultural prosperity: irrigation works, dams, fences, storehouses, and relatively primitive mills for processing wheat and sugar-

moderno (Mexico City: Secretaría de Educación Pública, 1975), 2:41; and Donald D. Brand, *Coalcomán y Motines de Oro* (The Hague: Martinus Nijhoff, 1960), 180.

25. For an inventory of Román's estate, see ANM, García, 1851, 6 March. For Huarte's estate, see numerous documents in the Archivo Histórico Municipal de Morelia (AHMM), filed by name and dated between 1824 and 1830. There is also material on Huarte in the estate of his son-in-law, Pascual Alzúa, also to be found in the AHMM. It is impossible to be more specific about the location of these documents, as the archive was still being reorganized in the summer of 1991.

26. On Gómez's early mercantile activity, see AGN, Real Hacienda, Alcabalas, *Libro Real de Valladolid* for 1817 and 1819, and *Libro Real de Pátzcuaro* for 1819 and 1820. On his speculative activities, see the partnership with Eugenio Garay in the hacienda of Santa Efigenia, elaborated in various documents in the ANM including: José María Aguilar, 1825, 8 July; for the purchase of San Bartolomé: Rincón, 1833, 11 Dec.; for the purchase of Quirio: Rincón, 1837, 11 Aug.; for the rental of Taretán, Valdovinos, 1842, 10 Oct.; and for the purchase of Taretán: Valdovinos, 1856, 3 December. On his redemption of debts, see the marginal notations on the purchase agreements and also Iturbide, 1836, 7 Jan.; Valdovinos, 1838, 15 June; García, 1852, 11 Dec.; and García, 1853, 23 April. On the inference that Gómez received little or no inheritance, see his brother's will: Salomo, 1848, 1 Jan.; and for a detailed accounting of the composition of his estate, see the many relevant documents in the AHMM, filed by his name and the date of his death (1858).

cane. Even among the most successful entrepreneurs, expensive technological innovations in planting, harvesting, or processing agricultural commodities (as opposed to recreating or extending the colonial enterprises) were rare and not always profitable. For example, one traveler to Colima in the mid-1850s reported that the Hacienda de Plan de la Barranca had “imported the complete apparatus for making sugar on the improved system, as practiced in Louisiana.” The 100,000-peso investment had been lost, however, due to the lack of a foundry and machinists, and the hacienda was forced to return to the “old system” of sugar production.²⁷ Another overly ambitious enterprise was a “magnificent” rum distillery built in Ario in 1853, with additional capacities for producing thread, textiles, and even flour. According to one contemporary account, the burdens of taxation and revolution caused the company to dissolve, and by 1860 the building where the factory had been housed was on the verge of ruin.²⁸ The Compañía Michoacana, a silk textile factory established in 1841, boasted fifteen *operarios* and a director brought from France to run its expensive imported machinery (which cost 159,000 pesos). The company’s bankruptcy less than five years later was blamed on poor planning and management as well as bad luck (a harsh winter killed the imported silkworms).²⁹ In fact, the only unequivocally successful large-scale agricultural-industrial investment in Michoacán was San Cayetano, a cotton textile factory founded by Cayetano Gómez in the early 1840s in Colima (then part of Michoacán) at a cost of 100,000 pesos. In 1857 it was said to be yielding an annual net profit, after disbursements, of 20,000 pesos, a 20 percent return on capital.³⁰ According to one historian, the factory also stimulated growth in the population of the southwest part of the state when workers migrated from southern Jalisco and northwestern Guerrero to work on the cotton haciendas of the coastal regions.³¹

Still, even where their success was limited, the fact that large agro-industrial ventures were initiated at all reflects the fairly high level of capital accumulation also implied by the substantial increase in personal wealth among the elite by the 1850s. Apparently, the climate for investment was perceived as propitious—even if the most adventurous invest-

27. Marvin Wheat, *Travels on the Western Slope of the Mexican Cordillera* (San Francisco, Calif.: Whitten, Towne, 1857), 266–67.

28. José Guadalupe Romero, *Noticias para formar la historia y la estadística del Obispado de Michoacán* (Mexico City: Imprenta de Vicente García Torres, 1862), 137–38.

29. Jesús Romero Flores, *Historia de Michoacán* (Mexico City: Imprenta Claridad, 1946), 1:804–5; Roberto Heredia Correa, “Zamora y su distrito en 1844,” *Relaciones* [del Colegio de Michoacán] 20 (Fall 1984):122; and Gobierno de Michoacán, *Memoria sobre el estado que guarda la administración pública de Michoacán . . .* (Morelia: Imprenta de I. Arango, 1846), 16.

30. Wheat, *Travels*, 279.

31. Gerardo Sánchez Díaz, *El suroeste de Michoacán: estructura económico-social, 1821–1851* (Morelia: Departamento de Investigaciones Históricas, Universidad Michoacana de San Nicolás de Hidalgo, 1979).

tors turned out to be too sanguine for what was still a period of political and economic fragility. Private investments in internal improvements also reflect the relatively ready availability of investment capital, although transportation remained a serious problem that was to be resolved only by the railroad. The toll road from Toluca to Morelia was begun in the early 1840s with private capital, and by 1857, it was described as functioning admirably for many years.³² A good bridge was built over the Río Lerma at La Piedad in 1833 with private donations at an estimated cost of 12,000 to 15,000 pesos, and another new bridge was built spanning the wetlands surrounding the city of Zamora in 1849, permitting year-round coach service for the first time. This bridge was one outcome of the steady growth of Zamora's population between 1838 and 1853, an area where progress by the late 1840s was labeled by one observer as "palpable."³³ Similar remarks were made about Puruándiro, an entrepôt northwest of Morelia enjoying a strong revival of commerce following severe damage during the insurrection.³⁴ In contrast, citizens of the other northern entrepôt, Cuitzeo, made several unsuccessful attempts to build a bridge across their lake, but much produce intended for northern markets continued to cross the lake on canoes and rafts.³⁵

Despite this and other impediments to the search for out-of-region markets for Michoacán's agricultural surpluses, the markets in Guanajuato, Zacatecas, and Durango for Michoacán sugar and rice and the Mexico City market for livestock, wheat, and chiles were all clearly being reached.³⁶ This pattern was but a variation on the late-colonial situation: the intendant in 1813 estimated that before 1810, two-thirds of the province's sugar and cotton production, all its indigo, and large proportions of its cattle, wheat, chiles, and garbanzos left the region to be sold elsewhere.³⁷ The fact that urban population growth in Mexico slowed after 1810 should not obscure the fact that the growth did take place. Thus it is reasonable to surmise that Michoacán was able to reconstitute an out-of-

32. Memoria de la Secretaría de Fomento, 1857. Reissued as *Obras públicas de México: documentos para su historia*, vol. 4, *Caminos de la República* (Mexico City: Secretaría de Fomento, 1976), 8.

33. Romero Flores, *Historia* 1:755; Luis González, *Zamora* (Zamora: Colegio de Michoacán, 1984), 81, 88; and Ignacio Piquero, "Apuntes para la corografía y la estadística del Estado de Michoacán" [1849], in *Boletín de la Sociedad Mexicana de Geografía y Estadística* 1 (1861): 165.

34. Romero, *Noticias*, 121.

35. José Corona Núñez, *Cuitzeo* (Morelia: Gobierno de Michoacán, 1979), 90; and Romero, *Noticias*, 103–5.

36. Governor Melchor Ocampo, in an otherwise gloomy message to the state legislature in 1846, noted a large increase in the sheep and cattle exports to Mexico City (in Romero Flores, *Historia* 2:19); see also Gerardo Sánchez D., "Mulas, hatajos y arrieros en el Michoacán del Siglo XIX," *Relaciones* [del Colegio de Michoacán] 17 (Winter 1984): 46–48.

37. Bancroft Library, University of California, Berkeley, M-M, 1830:5, 30 June 1813, "Letter from Intendant of Valladolid, Manuel Merino, to Viceroy Calleja"; see also Morin, *Michoacán en la Nueva España*, 142–45.

region trade whose volume was at least the rough equivalent per capita of that before the crisis. One observer wrote in 1849, "In speaking with many merchants and agriculturalists of this state and others, it is clear that Michoacán is far from being [as moribund as its alcabala receipts would indicate]. . . . Rich and varied resources, middling abundance of capital, and proximity to three great centers of civilization [Mexico City, Guanajuato, and Guadalajara]" all suggested to him that even a volume of commerce of 10,000,000 pesos was an underestimate.³⁸ Nothing in the evidence available suggests that this figure (a fivefold increase in volume of commerce over pre-1810 levels) is at all likely, but even a volume of 3,000,000 pesos would have represented a return to colonial levels of per capita trade.³⁹

Finally, it should be noted that not all the fruits of the recovery were reinvested in the economy in productive fashion. In a partial return to colonial patterns, the church benefited significantly from the relative prosperity. In Zamora a new parish church was begun in 1840, a new hospital in 1841, and a new chapel in 1845.⁴⁰ In Morelia the San Agustín cathedral was repaired and redecorated "in good taste" in 1838; the tabernacle of the cathedral and all altars were renovated in 1845; and the wrought iron doors and railings that enclose the atrium of the cathedral were added in 1854 at a staggering cost of 42,000 pesos.⁴¹ Yet pious works and donations to the church did not increase in nearly the same proportions as the wealth of the elite, and tithe payments were never resumed on a significant scale. In other words, investments in one's economic future far outweighed investments in salvation.

THE RECOVERY ELSEWHERE IN MEXICO

Some collectively persuasive, if fragmentary, evidence points to a mid-century economic recovery in other parts of Mexico. Several historians, generally focusing on one sector of the economy or on a relatively small number of haciendas, have broken here and there with the dominant view that the Mexican economy remained depressed from 1810 to 1880. For the rural sector, an early hint that all was not stagnation and decay came from Moisés González Navarro, who found sufficient evidence in newspapers and contemporary accounts to subtitle a section of his 1977 book on the mainly political events of 1848–1853 "La hacienda

38. Piquero, "Apuntes," 187.

39. Marcela M. Little, "Sales Taxes and Internal Commerce in Bourbon Mexico, 1754–1821," Ph.D. diss., Duke University, 1985, 222.

40. González, *Zamora*, 88.

41. Luis Alfaro y Piña, *Relación descriptiva de la fundación, dedicación etc. de las iglesias y conventos de México* (Mexico City: Imprenta de la Calle Cerrada de la Moneda núm. 1, 1863), 234, 238.

avanza."⁴² Good archival support can be found for González Navarro's seldom-cited hypothesis in scattered regions, including San Luis Potosí, León, Chalco, and Orizaba/Córdoba. Jan Bazant, for example, presents detailed evidence that the value of several large haciendas in San Luis Potosí doubled and even tripled between the mid-1820s and the Reform because of expensive improvements. Of the two haciendas he studied carefully, "one receives the impression that [they] progressed in the period from 1822 to 1856, usually known as a period of stagnation."⁴³ In a similar vein, David Brading calls the evidence of a rise in property values after independence in León "startling," assigning credit to capital investments in improvements.⁴⁴

The best combination of detail and analysis is for Chalco, where John Tutino describes the years from 1849 to 1856 as a period of "estate offensive." At this time, elites tightened the screws on neighboring village lands and labor and also attempted substantial innovations in estate agriculture. Their experiments with new products and new techniques of production included more scientific seed selection, an obsession with discovering ways of stretching manure far enough to fertilize large areas, and the more intensive water management (dams, irrigation systems, and even artesian wells) needed for the alfalfa fields required for new dairy cattle.⁴⁵ Ironically, however, Tutino uses his ample evidence of increased investment in their haciendas to demonstrate that members of the elite were financially weak. He argues that only under dismal and worsening financial conditions denoting a desperate need to increase profits would the elite have turned to such costly experiments in increasing productivity. It seems to me, however, that the actions of Tutino's elite are at least equally susceptible to interpretation along the lines advanced here.⁴⁶ A different aspect of the rural economy is documented in Eugene Wiemers's study of agricultural credit in Orizaba and Córdoba. He concludes that the "contemporary view that things seemed to be improving is

42. González Navarro, *Anatomía del poder*.

43. Jan Bazant, *Cinco haciendas mexicanas*, 42–43, 67, 85–88, 94; and Bazant, "Landlord, Laborer, and Tenant in San Luis Potosí, Northern Mexico, 1822–1910," in *Land and Labor in Latin America*, edited by Kenneth Duncan and Ian Rutledge (Cambridge: Cambridge University Press, 1977), 80.

44. David Brading, *Haciendas and Ranchos in the Mexican Bajío: León, 1700–1860* (Cambridge: Cambridge University Press, 1978), 82–83.

45. Tutino, "Agrarian Social Change," 108–10.

46. It should be noted that Tutino's sources and mine differ considerably and can be expected to yield divergent interpretations of the soundness of hacienda profits and agriculture in general. His accounts by estate administrators were bleak enough to convince him that profits were not at all secure, and I am sure that the perception (on the part of the administrators and Tutino himself) is correct. I am not implying that profits in Mexican agriculture were ever secure, simply that based on less informal evidence of widespread capital improvements in agriculture, the late 1840s and early 1850s must have been a period when the climate for investment was increasingly perceived as relatively propitious.

clearly reflected" in his data, which yielded strong evidence of expansion in the late 1830s, late 1840s, and early 1850s, a trend generally consistent with my data on lending in Michoacán.⁴⁷

Much vaguer support for the recovery comes from Simon Miller, whose valuable studies of estate agriculture do not really cover this period. He seems to accept the view of an 1845 report on conditions in Querétaro suggesting that the economy was rebounding despite continuing problems. Querétaro was apparently unusually slow to recover, perhaps because of loss of population due to the depressed textile industry before the late 1830s. In a more recent article on the period after 1860, Miller mentions in passing that many well-endowed estates "had been cultivated fairly intensively in the 1850s. . . ." ⁴⁸

Others who lend indirect support to the impression of an increasingly commercial and expansive hacienda system are John Hart and Florencia Mallon. Their work is most directly concerned with the actions taken by peasants and villagers in defending their autonomy and lands. Both historians perceive this autonomy as having been threatened by the renewed growth of haciendas. Mallon observes that in Morelos in the 1850s, a "new group of landowners began to invest in, technologically transform, and expand the sugar haciendas." Hart argues that a wave of village-based peasant uprisings between 1842 and 1845 was closely related to the growth of commercial agriculture along Mexico's Pacific coast: "Commercial-capitalist agriculture [had] transformed parts of central and southern Mexico in terms of land ownership and usage, external trade, culture, and class relationships at a time in the nineteenth century customarily described as 'economically stagnant.'" Hart goes on to assert that "the relationship between the expansion of capitalist agricultural activity, changing land tenure systems, and agrarian unrest in southern Mexico from Yucatán to Michoacán requires rejecting the 'stagnation' theory for the southwest of the country."⁴⁹

Outside the agricultural sector, three recent studies have documented impressive growth in the textile industry by the 1840s. Guillermo Beato's work on Jalisco and Guy Thomson's on Puebla agree that by this decade, textile production was relatively dynamic, based on what Beato calls "an internal market far less timid than is usually supposed."⁵⁰ Textile

47. Eugene L. Wiemers, "Agriculture and Credit in Nineteenth-Century Mexico: Orizaba and Córdoba, 1822–71," *Hispanic American Historical Review* 65, no. 3 (1985):525.

48. Miller, "Mexican Hacienda," 312; and Miller, "Mexican Junkers," 243.

49. Florencia E. Mallon, "Peasants and State Formation in Nineteenth-Century Mexico: Morelos, 1848–1858," *Political Power and Social Theory* 7 (1988):13; and John M. Hart, "The 1840s Southwestern Mexico Peasants' War: Conflict in a Transitional Society," in Katz, *Riot, Rebellion, and Revolution*, 249, 252, 262–65.

50. Guillermo Beato, "Jalisco: economía y estructura social en el Siglo XIX," in Cerruti, *Siglo XIX en México*, 154.

growth had led Puebla to a state of “tangible prosperity” by the 1840s (after a difficult decade in the 1830s), and by the early 1850s, investment opportunities in that region had broadened beyond the textile industry to include mining and agriculture.⁵¹ Stephen Haber’s analysis of national statistics helps reconcile these studies with the conventional view of the anemic growth of the industry. He notes that although the mid-1840s were the high point of textile expansion when measured by the number of factories, when measured by consumption of raw cotton and the number of machines in use, the industry’s situation continued to improve up to the mid-1850s.⁵²

Regarding the mining sector, it should be noted that even though silver production by 1850 had not yet returned to pre-1810 levels, the increases from the low ebb in the 1820s had been relatively powerful: according to official statistics, 25 percent in the 1830s, and another 27 percent in the 1840s.⁵³ Furthermore, in some mining districts, pre-1810 levels were surpassed. For example, the discovery of a rich new lode at La Luz in Guanajuato restored the town to its former prosperity in the late 1840s, with mintage reaching record levels from 1848 to 1854. Little-known mining booms also occurred in Real del Monte and Pachuca during this period.⁵⁴

Under these circumstances, it should not be surprising that the great entrepreneurs of Mexico City increasingly diversified their investments after 1840. Whereas they had formerly perceived their advantage in lending to the government, they increasingly invested directly (if sometimes in an unpremeditated fashion, as a result of cessions of property by borrowers) in productive enterprises in textiles, mining, and agriculture. But even where the properties were acquired by default, it appears that many entrepreneurs decided to hold and improve them, eventually coming to view their economic interests as linked to political stability and national economic growth.⁵⁵ Previous interpretations of this process of diversification and productive investment have emphasized the unattractive alternative of lending to an increasingly unreliable government, as if diversification were a sort of lesser of two evils. In light of the argument presented here, it seems equally logical to view greater willingness to

51. Guy P. C. Thomson, *Puebla de los Angeles: Industry and Society in a Mexican City, 1700–1850* (Boulder, Colo.: Westview, 1989), 342–43.

52. Haber, “La economía mexicana,” 90.

53. María Cristina Urrutia de Stebelski and Guadalupe Nava Oteo, “La minería (1821–1880),” in Cardoso, *México en el Siglo XIX*, 128.

54. See Brading, *Haciendas*, 136, 202. I am grateful to John Tutino for pointing out the booms in Real del Monte and Pachuca.

55. See Rosa María Meyer Cosío, “Empresarios, crédito y especulación (1820–1880),” in *Banca y poder en México (1800–1925)*, edited by Leonor Ludlow and Carlos Marichal (Mexico City: Grijalbo, 1986), 102–3; and Barbara Tenenbaum, “Banqueros sin bancos: el papel de los agiotistas en México (1826–1854),” in Ludlow and Marichal, *Banca y poder*, 92–93.

invest in or hold onto factories, mines, and haciendas as reflecting improved opportunities for profit in those areas.

Finally, although I have been mainly concerned with archival evidence of the recovery in Michoacán and elsewhere, Richard Salvucci is also mounting a challenge to Coatsworth's scenario of a century of depression, employing different sources and methods. In an early article experimenting with a model that took political instability and structural changes into account, Salvucci and Linda Salvucci correlated trade and national income from 1895 to 1940 and then extrapolated backward to 1800, using available trade data for the nineteenth century. The resulting estimates of nineteenth-century income turned Coatsworth's downward trend in national income (73 pesos per capita in 1800 to 49 in 1860) on its head, finding instead an upward trend from 44 pesos per capita in 1800 to almost 72 pesos in 1860.⁵⁶ In a recent manuscript, Salvucci approaches the difficult problem of national income estimates from a slightly more traditional angle. Here he brings together contemporary and modern estimates of family income and expenditure to come up with a figure for national income in the late colonial period not far from José María Quirós's often-cited estimate of 228,000,000 pesos, approximately 38 pesos per capita (fairly close to Salvucci's earlier per capita figure of 44 pesos). Salvucci then performs the same exercise for 1840 and finds that despite the deep decline accompanying the insurrection, by that date "real per capita income in Mexico . . . was about what it had been at the end of the eighteenth century. By 1840, then, the losses of the 1810s had been recovered."⁵⁷ Both the Salvucci essays should be considered as preliminary results of a larger work in progress that will extend into the 1880s, but the results are clearly closer to the evidence for Michoacán than are Coatsworth's.

My own efforts here are concerned less with the causes of the recovery than with its shape and implications, but it seems appropriate nonetheless to offer some thoughts on the subject. One important element was surely the presumed increase in the money supply from the mining booms in Real del Monte, Pachuca, and Guanajuato. In the case of the Guanajuato strike, Michoacán benefited in that what had been a major market for tropical products from the state's *tierra caliente*, especially sugar and rice, must have expanded as the mining population increased. Bradling argues that "[I]t is in the recovery in mining and textiles, together with the commercial opportunities presented by the westward expansion of the U.S., that we must seek an explanation of the marked increase in the

56. Salvucci and Salvucci, "Crecimiento económico y cambio," esp. 88.

57. Salvucci, "Economic Aspects," 1–29, material quoted from p. 29. The essay does not capture any additional growth during the late 1840s and early 1850s because the study stops with 1840.

value of haciendas observed after 1840 both in León and San Luis Potosí." It seems reasonable to stretch this hypothesis to include Michoacán.⁵⁸

Looking to the agricultural sector, I argued recently that both a reflection of and a contribution to the economic recovery can be found in the changing policies of the church during this period. The most notable example was a policy of divesting ecclesiastical property after 1845, which may have led to increases in productivity and certainly aided the strong upsurge in low-interest church lending to landowners in the early 1850s.⁵⁹ On a loosely related point, abolition of the tithe should not be underestimated as a cause of increased possibilities for accumulation in the agricultural sector. After 1833 most hacendados tithed not at all or only irregularly (some finally arranged a partial settlement with the church on their deathbeds). This trend implied that an additional 4 to 10 percent of production stayed in the hands of producers instead of being redistributed among the ecclesiastical hierarchy and different branches of the church, most of which loaned little to the agricultural sector.

Finally, as already suggested, the origins of the recovery in the agricultural sector may also be sought in the nature of the post-1810 depression itself. It was so sudden, severe, and enduring that it led to elimination of the most inefficient producers and allowed a new group of ambitious and industrious former renters and other marginal elites to purchase property at very low prices.⁶⁰ Because these new owners usually assumed the full purchase price of the hacienda as a mortgage, they needed to increase their haciendas' productivity immediately by any means possible, including aggressive labor recruitment and capital investment. The combination of all these factors can surely account for the level of recovery posited here.

SOCIAL AND POLITICAL IMPLICATIONS OF A MID-CENTURY ECONOMIC RECOVERY

Let us assume that this picture of the economic landscape of Mexico after 1810 is correct in its broad outlines. What are the social and political implications of a mid-century economic recovery? Briefly, it appears that a social system characterized since 1810 by considerable upward mobility for talented and well-positioned members of the middle class

58. Brading, *Haciendas*, 202.

59. Chowning, "Management of Church Wealth."

60. In addition to my work to date on this subject (including my dissertation on "The Mexican Provincial Elite," currently under revision), see also Héctor Díaz-Polanco, *Formación regional y burguesía agraria en México: Valle de Santiago, El Bajío* (Mexico City: Ediciones Era, 1982), 40–41. Díaz-Polanco discovered an almost complete renovation of the landowning class between 1830 and 1850 in the Valle de Santiago (Guanajuato) because of hacienda turnover due to embargo.

TABLE 3 Distribution of Wealth among the Michoacán Elite, 1790–1859

Share of Elite Wealth, by Decile	1790–1810 ^a (%)	1811–1829 ^b (%)	1830–1849 ^c (%)	1850–1859 ^d (%)
91–100 (richest)	35.0	39.6	31.6	43.8
71–100	63.4	62.1	60.4	69.6
31–70	27.2	26.4	29.9	22.0
1–30	9.4	11.5	9.7	8.4
1–10 (poorest)	2.3	3.3	2.3	2.1

Sources: Archivo de Notarías de Morelia, Archivo Histórico Manuel Castañeda Ramírez, Archivo Histórico de la Ciudad de Pátzcuaro, Archivo Histórico Municipal de Morelia, and Archivo Histórico del Poder Judicial.

^aTotal number of households, 59; total elite wealth 5,681,000 pesos (Gini coefficient, 0.44).

^bTotal number of households, 42; total elite wealth 3,092,000 pesos (Gini coefficient, 0.42).

^cTotal number of households, 47; total elite wealth 3,714,000 pesos (Gini coefficient, 0.41).

^dTotal number of households, 44; total elite wealth 5,842,000 pesos (Gini coefficient, 0.50).

began in the 1840s to harden as productive capacity was rebuilt, markets were reconstructed and expanded, and the possibilities for accumulation were successfully exploited. In short, the disparity in wealth between the very rich and the marginal elite increased. Table 3 indicates that the top 10 percent of the elite controlled almost 44 percent of all elite wealth by the 1850s, compared with some 32 percent in the previous two decades. Patterns of wealth at marriage also reflected constricting opportunities for the middle class and consolidation of the upper elite: in the thirty years after 1810, almost one-third of the eventually wealthy began married life with no money and no prospects of substantial inheritance. But of the marriages that took place in the two decades after 1840, only 19 percent of those who died wealthy had begun married life without capital or inheritance. The increasing inequality of distribution among the elite and restriction of mobility of the *gente decente* was paralleled by a sometimes unobvious circumscribing of access to the political system. This phenomenon was especially notable after 1852, during Santa Anna's last dictatorship, but earlier centralist governments also closed down state congresses altogether or made office holding contingent on proven wealth or occupation or both. Even during the Liberal period from 1846 to 1852, Conservatives bitterly and sometimes successfully challenged the election of many Liberals to state office.

In sum, the tensions between the overlapping categories of wealthy and not-so-wealthy, Creole and mestizo, hacendado and ranchero, propertied classes and salaried employees or professionals probably heightened in the decade or so before the Reform, largely as a result of the strong economic recovery and its social consequences.⁶¹ At the same time, it

61. Others who perceive tensions between the upper elite and the middle class as sig-

appears likely that tensions between landowners and Indians or peasants were also exacerbated by the strength and expansive nature of the recovery in the agricultural sector.⁶² Thus in Michoacán at least, the mid-century economic recovery, even if deficient on many scores, was powerful enough to precipitate social conflict and, in an atmosphere of political crisis and polarization over the Mexican War, to help shape and bring to fruition a relatively radical middle-class political movement. The freeing of factor markets embodied in the Reform thus can be interpreted not only as an essential step in the capitalist modernization of Mexico, a prerequisite to continued growth, but also as an attempt to prevent further closing of access to the rewards of an economic recovery already in full swing.

nificant include David Brading, *The Origins of Mexican Nationalism* (Cambridge: Cambridge University Press, 1985), 98; Tutino, *From Insurrection to Revolution*, 259–60; Meyer, *Esperando a Lozada*, 70; González Navarro, *Anatomía del poder*, 442; Sinkin, *The Mexican Reform*, 122; and Brian Hamnett, *Roots of Insurgency: Mexican Regions, 1750–1824* (Cambridge: Cambridge University Press, 1986), 208–9.

62. This subject has been addressed much more ably elsewhere than can be done here. See Meyer, *Esperando a Lozada*, 25; Tutino, "Agrarian Social Change," 110–17; 138; Hart, "The 1840s Southwestern Mexico Peasants' War"; González Navarro, *Anatomía del poder*, 131–49; and Tutino, *From Insurrection to Revolution*, chap. 6.

APPENDIX 1

Methods Used to Construct a Price Index

For this purpose, three tools were at my disposal. The most important one consisted of the records kept by tithe collectors of the prices received from the sale of tithed commodities. These documents exhibit major lacunae. In the early 1780s, the church shifted from collecting tithes directly to a system of tithe farming under which few records of sales were preserved. Between 1810 and 1817, very few collections were made: I found complete reports of only one district from 1811 to 1817. In the latter year, the church resumed collections in most districts, and price records are fairly good until 1828, when improved conditions convinced the church to turn once again to the pre-1810 system of tithe farming and price records again cease. This second experiment ended with the 1833 law making the tithe voluntary, and from 1834 on, one can find more or less complete records for most districts.

During the crucial years between 1780 and 1817 and between 1828 and 1834, for which tithe data are scanty, one is forced to turn to two other sources: notarized commodity-sale transactions and appraisal values for commodities included in estate inventories and other documents. Notarized commodity-sale transactions include sales of commodities in which the buyer agreed to pay the seller later at a certain price as well as advances of cash to be repaid in kind. The main problems with this source are the unsystematic nature of the data and the fact that the quantities and prices given in these transactions may have been adjusted to include interest on the cash or commodity that was advanced (in order to get around the official strictures against usury), at rates that cannot be determined.

The appraised value of commodities listed in estate and hacienda inventories is also a difficult source to use. One reason is that *peritos* (appraisers) tended to differ wildly in their assessments of the same commodity, even in the same year (such differences may mirror swings in market values but may also reflect other pressures or personal idiosyncrasies of individual *peritos*). Another reason is the murky description of the product being evaluated. For example, many different kinds of mules could be found on an estate—*mulas cerreras, de silla, de cargo, de tiro, de avío grande, de avío chico, aparejadas*, and *muletos* of various ages. Some appraisers carefully distinguished among these categories, but other inventories lump all mules together. Nevertheless, the inventories and the commodity sale transactions provide the only means of filling in the gaps in the tithe records.

I collected data for maize, wheat, sugar, *piloncillo*, beef cattle (from notary records only), and *becerros* (from tithe records only). I averaged prices for each commodity by decade and by type of source and constructed two price indexes, one for tithe data and the other for contract or inventory data. The results for those decades for which data from both sources were reasonably good (at least twelve observations) suggest a strong correlation between the two indexes. On the assumption that this correlation was also true for the decades for which I had only one type of source, I collapsed the data from all sources into a single index for each commodity. I then weighted the commodities, somewhat arbitrarily, in the following manner: maize .5, wheat .2, sugar .075, *piloncillo* .075, *reses* .075, and *becerros* .075. My best guess is that these were roughly the proportions in which these commodities were produced in Michoacán.

Because title data continue to be a good source of information on prices into the 1880s and Frederick Bowser has collected price data for the same region from the mid-seventeenth century to 1780, we plan to develop and publish an index for the period from about 1650 to 1880. In the meantime, I will be glad to share my data and explain my methods in more detail to any correspondents.

APPENDIX 2

Urban Property Sales in Morelia, 1800–1856

<i>Period</i>	<i>Mean Urban Property Prices (pesos)</i>	<i>Mean Number of Annual Urban Property Sales</i>	<i>Urban Sales Adjusted for Population^a</i>
1800–1810	630	58	58
1811–1829	550	31	31
1830–1839	850	58	54
1840–1849	840	99	86
1850–1856	940	130	104

Sources: Archivo de Notarías de Morelia. Also Brachet, *La población de los estados mexicanos*, p. 70; and *Boletín de la Sociedad Mexicana de Geografía y Estadística* 7 (1859), p. 117; 2 (1861), p. 18.

^aBased on the population of Morelia.

APPENDIX 3

Hacienda Sales in Michoacán, 1800–1856

<i>Period</i>	<i>Mean Hacienda Price (in pesos)^a</i>	<i>Mean Number of Annual Hacienda Sales</i>	<i>Sales Adjusted for Population</i>
1800–1810	43,000	2.8	2.8
1811–1829	25,000	1.0	1.0
1830–1839	33,000	3.4	3.0
1840–1849	30,000	3.6	2.8
1850–1856	45,000	4.8	3.6

Sources: Archivo de Notarías de Morelia, Archivo Histórico Manuel Castañeda Ramírez, Archivo Histórico Municipal de Morelia, Archivo Histórico de la Ciudad de Pátzcuaro, Archivo Histórico del Poder Judicial, and Archivo General de la Nación. Also, Brachet, *La población de los estados mexicanos*, p. 103; *Boletín de la Sociedad Mexicana de Geografía y Estadística* 7 (1859), p. 117; 2 (1861), pp. 6, 17; and 9 (1862), p. 270.

^a“Hacienda” includes any rural property sold for 5,000 pesos or more.

APPENDIX 4

Hacienda Rents in Michoacán, 1800–1856

<i>Period</i>	<i>Mean Hacienda Rents (pesos)</i>	<i>Mean Number of Annual Hacienda Rental Contracts</i>	<i>Rental Contracts Adjusted for Population</i>
1800–1810	3,300	1.6	1.6
1811–1829	1,250	2.0	2.0
1830–1839	2,000	3.3	2.7
1840–1849	2,100	4.0	2.8
1850–1856	3,250	4.3	3.3

Sources: Same as appendix 3.

APPENDIX 5

Capital Markets in Morelia, 1800–1856

<i>Period</i>	<i>Loans^a (in pesos)</i>	<i>Loans Adjusted for Population (in pesos)</i>
1800–1810	135,000	135,000
1811–1829	15,000	15,000
1830–1839	33,000	27,200
1840–1849	47,000	33,200
1850–1856	105,000	79,500

Source: Archivo de Notarías de Morelia.

^aLoans include cash advances to be repaid in kind but do not include goods purchased on credit, liquidation of accounts, or mortgages assumed on purchase of property. That is, an attempt was made to weed out extensions of credit that were mainly accounting procedures rather than cash exchanges.

APPENDIX 6

Gross Personal Wealth in Michoacán, 1790–1859

<i>Period</i>	<i>All Assets at Death (in pesos)</i>
1790–1810	97,000
1811–1829	74,000
1830–1839	76,000
1840–1849	83,000
1850–1859	133,000

Sources: Same as appendix 3.

Note: Personal wealth means wealth at death of the head of all known households with gross wealth of 20,000 pesos or more. A household was usually a nuclear family but in a few cases consisted of siblings who managed the estate of their parents in common. In a very few cases where a widow's estate and her husband's were separated by several decades, they are counted separately. All forms of assets are included: financial assets, portable physical capital, land and structures, and household goods. Wealth was calculated in most cases from inventories or probate records. In several cases, however, an estimate was made based on childrens' inheritances or statements of assets in wills combined with the known market value of the major properties near the time of death.

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