I. INTRODUCTION

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This volume has its origin in a rather straightforward intellectual curiosity: Is it really true that the two core areas of Spain's American empire were economically moving in opposite directions during the last half - century of the colonial regime, Mexico undergoing an unprecedented boom and presenting itself as a wealthy colonial society, while Peru at the same time was becoming empoverished through a prolonged crisis? This seemed the more puzzling since both viceroyalties, as exporters of precious metals, with a large share of Indian population, and evidencing a similar mix of agricultural enterprises, from tropical plantations to highland cereal and livestock haciendas, appeared to have quite similar economic structures. Indeed it became profitable to raise this question, since recent research on Peru had brought to light much information that contradicted the idea of a secular crisis during the late colonial period. At the same time the past fifteen years had seen an outpouring of innovative research on Mexico's economy during the eighteenth century, which suggested serious restraints, bottlenecks and even reversals to that viceroyalty's late colonial boom.

These developments let it appear timely to bring together some of the scholars who have recently done research on the late colonial economies of Mexico and Peru and attempt a broad comparison between the structures and conjunctures of the two viceroyalties' economies during the half century preceding the Wars of Independence. This is what we had in mind when we organized a symposium of some twenty scholars from Peru, the United States, Canada and various European countries held at the University of Bielefeld in September of 1982. The essays published in this volume are, with two exceptions, revised versions of the papers presented at that symposium. This was the first in a series of European conferences dealing with research problems of Latin American economic history for concise periods between the late colonial era and the last few decades. In the meantime a second conference, organized by Reinhard Liehr in Berlin during September 1983, dealt with the formation of Latin America's national economies and European economic interests in the region during the first half of the nineteenth century. Its results will soon be published in this series also. Two further symposia covering the periods 1850 to 1930 and the epoch since 1940 are in the planning stage. For the crucial years of the world depression there now exists the valuable volume edited by Rosemary Thorp.[1]

Specifically we hoped to focus the comparison between both late colonial economies on three broad strands of inquiry:

1. A comparison between the overall growth of the Mexican and Peruvian economies, 1760 – 1810: Is it possible to arrive at indices for the global development of both viceroyalties, demonstrating changes in gross product, prices and real incomes of various social groups, and the value of foreign trade? Which impact did exogenous factors, such as the onset of Europe's industrialization process, Spanish commerical policies, as well as international wars and disruptions of sea – lanes have on the colonial economies? What was the relative weight of the various economic sectors within the overall structure of Peru's and Mexico's economies?

2. The possibilities and limits of a supraregional economic analysis for each viceroyalty: in view of the marked regional discrepancies of economic development *within* each viceroyalty which have come to light in many recent studies, we hoped to elicit some answers to the question to which degree it still makes sense at all, to speak of a global economic process for New Spain and Peru during the late colonial period. The task here in the first place would consist in checking whether the structures and conjunctures of regional economic complexes within each viceroyalty evinced parallel movements. To which degree did there exist an interregional integration of markets for commodities, labor and capital? Was the era characterized by a progressive integration of markets in the viceroyalties? Or can we see the beginning of the trend characterizing much of Latin America during the nineteenth century by which stronger direct links of regional export economies with Europe lead to the atrophy of broader interregional commercial circuits?

3. These problems immediately raise the question as to the mechanisms by which various regional and sectoral production complexes may have been linked in the late colonial viceroyalties. What kind of multiplication effects were exercised not only by mining, a sector which has long been considered the principal motor of both viceroyalties' economies, but also by agriculture, manufacturing, commerce and transport? What consequences did sectoral growth produce for the social structure of production and markets in other sectors? Did, for example, increasing demand for foodstuff in many of Mexico's booming silver mining

districts during the eighteenth century lead to a long - term rise in the income of apreciable numbers of agricultural producers (i.e. not just a handful of owners of large cereal and livestock estates) and consequently give rise to multiplication effects for the production and trade of textiles and household wares? Or, conversely, did the socio - political control over the peasantry remain sufficiently strong that only a small group of traders and provincial officeholders - other than a few large landholders - profitted from increasing demand for foodstuff? In which directions did sectoral transfers of capital run (only from trade and mining into agriculture, as suggested by David Brading)?[2] Were regional wage differentials large enough to produce interregional labor migrations, or, conversely, what importance did forced labor recruitments still hold in both viceroyalties during the final decades of the colonial period?

4. Finally we hoped to focus attention on the role of the colonial state and church, both regarding their influence on the economic order and the disposition of their income from taxes and tithes and the various and sundry other revenues.

During and even before the symposium it became obvious to us that these ambitious goals of a global comparison between both viceregal economics during the late eighteenth and early nineteenth century were difficult to achieve in their totality for three principal reasons: 1. problems inherent in comparative history; 2. the limits of our knowledge of both viceregal economies and the different state of the historiography on Mexico and Peru; 3. the great variety of historiographical approaches towards Spanish America's colonial economies, not only among the contributions to this volume, but in the literature at large.

Comparative studies in history, as in the other social sciences, are difficult but necessary. Comparison is, as Emile Durkheim has noted, the only "indirect experiment" in the social sciences. In order to be able to make - albeit limited - general statements, we have to compare. Comparative studies make it, more in particular, possible

- to control, to modify or to falsify the generalizing assumptions and hypotheses;
- to clarify the similarities and the differences between the phenomena involved;
- to propose and check the criteria of periodization, and to indicate the open questions, the direction and the adequate dimensions of further research. The latter function is of special importance in such cases, in which the original hypothesis has not been corroborated.

Most comparisons which have been made have remained implicit ones. It is, however, the explicit comparison which is much more needed, although it tends to require a great amount of hard work. Only the explicit comparison can explain its initial assumptions, its theoretical background (or its prejudices and biases!), and give reasons for the criteria for chosing the functional equivalents to be compared.

One problem is that there is no general rule about what is to be and can be compared. What is to be compared depends very much upon the questions we want to raise and the hypotheses we want to check. They define the elements and the scope of a comparison. There is no general rule as to only comparing synchronic events. A concrete set of questions can, on the contrary, make diachronic comparisons necessary. Nor is there a rule that we are only to compare phenomena of a certain similarity, as some theoreticians, like Karl Marx and Marc Bloch, have suggested. Even phenomena which seem to be completely dissimilar, can be legitimate objects of a comparison, if our questions give reasons for comparing them. Nor do the systems, between the elements of which we want to do comparisons, necessarily have to be of the same category or at the same level of their development.

A more fundamental problem of comparative work consists in the fact that in order to be able to embark upon a reasonable and explicit comparison, we need a certain theoretical framework. It is required in order to find the adequate hypotheses and questions to begin with. The problem is that in most cases the elements of this theoretical framework do not become completely clear before we are in the midst of our comparison, so that our questions might be much more general in the beginning than in the end of our study. For some people this has been reason enough not to make explicit the questions they are, in fact, pursuing.[3]

The general problem for comparative work on Latin American societies consists in the fact that much of the empirical data are considerably less elaborated than they are for European or North American history or that they are missing altogether. But this does not obviate the necessity of pursuing the comparative approach, because it is methodologically imprescindible. The necessary adjustment to these difficult conditions for comparative work on Latin American history would seem to consist in the particularly careful design of the questions to be pursued comparatively: The guiding questions and the objects of the comparison must be chosen in such a way that the empirical data, either existing in the literature previously or to be elaborated in the course of the comparative research, allow satisfactory findings.

The most serious obstacle for a global comparison of both viceregal economies in the late colonial period lies in the limitations of our knowledge, in spite of the many significant studies which have recently appeared. For several of the key variables which would need to be considered for a comparison between the conjunctures and the structures of the two economies, we do not possess any data, while for other variables data exist only for regional case studies or for a limited number of years. Thus we practically possess no systematic information on transportation and transaction costs in either viceroyalty. Other than John Coatsworth's base line figures for the value of Mexico's sectoral products in 1800, we do not have any estimates for global production figures – either by volume or by value – for agriculture or for manufacturing, admittedly scarce information for any pre-industrial society. As a consequence, any statements about the growth of the Mexican and Peruvian economies during the late colonial period continue to be mere extrapolations from the data on precious metal mining and foreign trade and from qualitative indicators on the other sectors.

Many key problems have been carefully studied on the local or regional level in recent years. For various areas in both economies we now possess series on prices of agricultural, livestock and even some manufactured commodities, while studies on the volume of agricultural production – based on tithe records – or on wages are still rare. The greatest advances in our understanding of the Spanish American economies during the eighteenth century, particularly concerning Mexico, have come through the large number of recent studies on regional agrarian complexes: For quite a few areas in both viceroyalties we now have abundant information on changing distributions of land, the development of property values, rental rates, shifts in the emphasis in production, credit systems and labor regimes.

Yet, while all these studies greatly facilitate comparisons between the economic development of various regions of both economies, it is at best problematic to generalize from regional data to the global development of Peru's and Mexico's late colonial economies. The number of natural or man-made events and developments which could effect economic growth in a circumscribed region only and not in the rest of the vast and geographically heterogeneous viceroyalties is large: it includes climatic crises, epidemics, new mining strikes and shifting commerical circuits.

All these limitations of our knowledge are made more serious by the highly uneven historiography on the late colonial economies of Mexico and Peru: We simply know much more on many aspects of the Mexican economy than we do about corresponding Peruvian problems, a fact which also is evident in the contributions to this volume.

Comparisons require a clear framework of issues, variables and methodological approaches, all equally applied to the various subjects of the comparison. In contrast, historiography on the Latin American economies has been characterized by a great diversity of issues and methodological approaches. This is, of course, neither a bad thing in itself, nor is it so different from economic historiography on other continents or countries, although we would suggest that in the Latin American case the extremely weak impact of a historiography oriented by issues and methodology of professional economics makes the debate particularly disjointed. In any case, whatever the merits of such methodological diversity, it does pose serious problems for systematic comparisons, and this volume is not free of such problems.

Studies on the institutional framework of trade and production have influenced the economic history on colonial Spanish America longer than the historiography on Europe and North America. Besides its obvious emphasis on the prescribed rather than the real structure of the colonial economies, this approach resulted in a strong emphasis of the Spanish metropolis and a neglect of autonomous economic processes in the colonies. The long survival of the periodization scheme, according to which in the Spanish American core areas a boom during the second half of the sixteenth century was followed by a secular depression between the 1630's and the early eighteenth century which – other than in Peru – gave way to a renewed boom in the era of the Bourbon reforms owes much to this historiographic approach. Also the insistence on the importance of particular Spanish policies for the actual economic evolution of the colonies, which is shared by several contributors to this volume, owes much to the strong impact of institutional studies on the historiography of colonial Spanish American economies. Modern policy studies have overcome many of the problems of this older approach, especially by taking into consideration social and economic conflicts of interest and the evolving economic conjuncture bearing upon the decision – making process of the *Consejo* (or *Ministro) de Indias*, viceroys and lesser bureaucrats. Jacques Barbier, probably the foremost practicioner of this approach for the late colonial period, in his contribution on the Spanish policy concerning trade between Vera Cruz and Habana demonstrates the rich potential of such studies.

During the last fifteen years or so probably the greatest number of contributions to Latin American economy history has come from eclectic studies which focused on both social and economic issues. Utilizing hitherto neglected sources, they contributed much quantitative and qualitative information on the economic activities and income levels of certain social groups, their career patterns, the structure of enterprises in various sectors, etc. But in a period in which economic development theory had become suspect, the issues which most of these studies dealt with stemmed rather from debates in social history than from economic history. Their contributions to the economic history of the Spanish American colonies were incidental to their attempts to analyze societies. The majority of the contributions to this volume follows this approach. Many of these studies have chosen a regional focus in order to be able to analyze the complex web of social and economic interrelationships between the various strata and sectors.

As a reaction to a social analytical approach which tended to portray people as the objects of broad, anonymous historical processes, quite a few historians during the last decade have opted for a vantage point, by which they hope to portray the subjective experience of social, economic and political change particularly by lower class contemporaries, and their struggles to improve their condition. This history "from the bottom up," in the Latin American case closely tied to ethnohistory, can contribute to the field of economic history an appreciation of the differential effects of economic growth on various social strata. In the present volume the contributions by Brooke Larson, Christine Hünefeldt and Albert Meyers owe much to this approach.

The type of economic history, which builds upon the issues and methods developped in the field of economics, has until now found few adherents among students of the colonial period in Latin American history. This poses rather serious problems for the field as it is precisely such an approach which could contribute much towards laying systematic foundations for international comparisons of economic development. In his paper on New Spain's late colonial mining sector in this volume, John Coatsworth skillfully demonstrates the potential of this approach.

Given the limitations of our knowledge and the great variety of methodological approaches characterizing Latin American economic history in general and the contributions to this volume in particular, it will be easily seen how difficult it is to fulfill the exigencies of a systematic comparison between the late colonial economies of Mexico and Peru. This volume cannot claim to present a comprehensive overview over both economies within a comparative framework. But it does present a substantial body of analyses on comparable sectors and problems in both viceregal economies, which put into relief many key similarities and differences between both cases. While achieving less than a comprehensive systematic comparison of both economies, the volume, for its very methodological diversity, also does more: Several contributions emphasize social aspects of economic change, while others carefully demonstrate the complex web of interests and the ideological conditions shaping circumscribed regional economies.

In the following pages we shall outline some of the major substantive findings on the economies of the late colonial Mexico and Peru which result from the papers in this volume.

Periodization: For the case of New Spain Coatsworth and TePaske suggest that the real value of mining output and revenue collection grew most rapidly during the early and middle decades of the eighteenth century respectively. The years of the famous reform era boom, roughly between the late 1770's and mid-1790's, in their view saw the real value of mining output and revenue stagnate inspite of impressive nominal growth. For the period between 1795 and 1810 Coatsworth suggests decline.

Comparisons with the Peruvian case are difficult, since for the lack of long-range price series so far nobody has undertaken to deflate figures indicating the value of mining production, fiscal revenues, or any other indicators of economic growth. Nevertheless some broad outlines of periodization become discernible. Nearly nobody argues that Peru underwent noteworthy economic growth between the late seventeenth century and 1730. For the decades of the Bourbon reform era, roughly from the mid-1770's to the early 1790's, TePaske's figures on revenue and Fisher's data on mining output and on imports from Spain, show very strong growth, commensurate with comparable Mexican nominal growth rates. Flores Galindo even locates the beginning of commercial affluence of Lima's merchants in the 1750's. Just as in the Mexican case, there is a change in Peru's economic conjuncture during the mid-1790's, coinciding with Spain's involvement in the Napoleonic Wars: While both Fisher and Haitin demonstrate that sectors as mining and Lima-based commerce did not enter a severe crisis before the outbreak of the Wars of Independence, the years between 1796 and the early 1810's show stagnation in most available indices on Peru's economic growth. If Tandeter's and Wachtel's recently published price series for Potosí during the eighteenth century are indicative of the general Peruvian trend, then the rapid nominal growth between the mid – 1770's and early 1790's may safely be translated into equally rapid or even greater real growth, since prices for both agricultural and manufactured commodities were declining between 1755 and 1790.[4] Since the 1790's Peru, according to Haitin and Tandeter/Wachtel, again joins the Mexican tendency towards price rises, although they appear steeper in the northern viceroyalty.

In the perspective of the year 1800 Peru, the erstwhile pearl of the Spanish Indies, had become the relatively poor cousin of wealthy New Spain. But it is becoming clear, that the diverging rates of economic growth which lead to this reversal, or at least vast differentiation, in the magnitude of both economies, did not occur in the era of the Caroline reforms, say between the 1770's and the early 1790's. The period in which New Spain's economy surged ahead, while many indicators for Peru suggest not merely stagnation but decline, spanned the decades from about 1690 to 1730.

The middle decades of the century, from the 1730's to about 1770, render more ambivalent results in the comparison of economic performance between the two viceroyalties: In the Mexican case Coatsworth posits a slowing growth of the real value of mining output, with a long phase of stagnation between the late 1720's and early 1750's, followed by stop and go growth until the late 1770's. TePaske locates the most rapid expansion of revenue between 1740 and 1775, while van Young's and Thomson's studies suggest a gradual expansion of agriculture and cotton textile production during this period. But there are also signs for a recovery of the Peruvian economy since the 1730's, with a slow growth of mining output, and, according to Tandeter's and Wachtel's figures for High Peru, an expansion of agriculture production.

According to this periodization scheme, then, the great divergence in the economic growth of both viceroyalties would have occurred early in the eighteenth century. When Peru turned around from decline to slow recovery since the 1730's, the margin between the growth rates for both viceroyalties may have gradually narrowed. By the time of the Bourbon reforms, between the 1770's and mid – 1790's nominally the Peruvian economy seems to have grown as much as the Mexican economy. Between 1796 and the outbreak of the Wars of Independence both economies stagnated. The various external and internal strains and bottlenecks probably hit the Mexican economy harder and earlier than the Peruvian economy, as suggested by the growing inflationary pressures which in New Spain began to affect purchasing power and real economic growth since the 1780's.

In their commentaries on the papers of Coatsworth and TePaske, Carmagnani and Kossok raise important caveats on the methodology which produced the reevaluation of New Spain's phases of economic growth and stagnation during the eighteenth century. In fact nobody draws into question the tremendous wealth which characterized the various entrepreneurial groups as well as the royal and church institutions in New Spain during the forty years preceding the Hidalgo revolt. But it would seem that since about 1780 an increasingly skewed distribution of income, coupled with inefficient allocation of capital and a mounting tax burden on most sectors other than mining and overseas commerce acted as a ceiling on New Spain's economic growth.

Population: The periodization scheme just outlined suggests the significance of demography for economic growth in late colonial Mexico and Peru: The Andean viceroyalty's lag in the commencement of population recovery – it only set in around 1730, some eighty to hundred years later than in New Spain – is mirrored in a lag of at least forty years in the onset of economic growth. For agriculture population growth provided both an increased supply of the labor force and growing demand for foodstuff, as Eric van Young has shown. The renewed expansion of silver mining in Mexico and Peru during the eighteenth century was unthinkable without the onset of recovery from the extremely low demographic nadirs. Either the necessary labor for new mining operations would not have been available or high wage levels would have made many enterprises unprofitable.

Production technologies, productivity: The general stability of the price of labor throughout the eighteenth century, a consequence of demographic expansion, royal policies and increasingly unequal distribution of productive property and income, apparently operated as a disincentive for the employment of labor saving devices in most sectors of both viceroyal economies. Increasing availability of capital usually lead to the expansion of production in periods of high profit margins by putting increments of the factors of production into operation – be they land, labor, looms or mining shafts. Usually these processes of expansion neither lead to a shift in the ratio of factor inputs, nor to the employment of more efficient productive technology. In the face of growing competition, the textile industries in both viceroyalties attempted to turn to the production of better quality, higher priced products, rather than pursue a reduction of costs of production.

There did occur technological changes in Mexican mining, such as the application of gunpowder to obtain the ore and to construct drainage tunnels, the installations of whims for hauling ore and water out of the mining shaft, and the increased use of mule – drawn mills to crush the ore. But according to John Coatsworth such changes did not lead to productivity increases. These changes undertaken simultaneously with rising costs of production due to increasing input prices as well as deeper shafts and water problems, could not have kept the operation of many mines from becoming uneconomical, had it not been for the substantial government help for the industry. Nevertheless, the productivity of the Mexican mining industry during the late colonial period now appears as a key problem for future research. On the other hand, the backwardness and low productivity of Peru's mining industry seems beyond doubt, as becomes evident from John Fisher's research.

While most authors see little technological advances in the growing economies of late colonial Mexico and Peru, several contributions stress changes in the industrial organization of enterprises, at least for the case of New Spain. In various sectors their average size grew significantly during the eighteenth century and there was a tendency to integrate all phases of production within one enterprise. Such changes could come about as a consequence of market forces and the unequal distribution of capital and credit, as in the case of New Spain's cotton and wool industries or in the mining sector. It could also be the result of government intervention, as in the case of Mexico's and Lima's tobacco factories, described by Susan Deans – Smith and Christine Hünefeldt. There is much less evidence for such changes occurring in Peru than for New Spain.

In his comments on the contributions dealing with the textile industry, John Coatsworth ventures the hypothesis (and it can be no more than that at the present state of our knowledge), that productivity was "substantially lower" in Peru than in Mexico in the eighteenth and early nineteenth centuries. Given the quite similar level of technology in both viceroyalties (with the possible exception of the mining sector), however, "physical productivity" (i.e. physical output per unit of input) could hardly have been much higher in Mexico than in Peru. Indeed, Coatsworth would not deny this, but suggests that still Peruvian productivity *in market terms* was much lower, since its economy probably faced "higher transport costs, limited effective demand, high information and transaction costs, fewer opportunities for regional specialization, minimal access to credit, and inelastic supplies of labor." A key difference between both economies would thus have its origins in the distinct ecologies, socioethnic structures and settlement patterns of both viceroyalties. Jacobsen sees these same factors as differentiating both colonies' livestock economies.

The impact of the colonial state on the economy: The debate about the significance of the "Bourbon reforms", that catch – all phrase covering all the decrees, reorganization schemes and fiscal measures churned out by the Spanish Crown and its new corps of bureaucrats between the 1760's and 1790's, continues vigorously and is in evidence among the contributions of this volume. Any discussion of the impact of the various reformist crown policies on the American colonial economies must keep in mind that they were far from homogeneous. As Horst Pietschmann suggests, it is possible to discern both a mercantilist and a proto – liberal strand of policy – making during the reign of Charles III.

John TePaske demonstrates that between the 1740's and early 1790's tax revenues in New Spain grew considerably faster than population. Even if we account for economic growth, and the loans raised by the treasury from civil and ecclesiastical corporations, there can be little doubt that for numerous social groups in both New Spain and Peru the burden of taxation was increasing particularly during the 1770's and 1780's. Scarlett O'Phelan shows how the new fiscal policies affected Indian peasants, mestizo muleteers and creole landholders and merchants alike by raising the rate of old taxes, decreeing their extension to cover previously exempted segments of the population, and establishing new levies. In O'Phelan's view this new taxation program overestimated the strength of Upper and Lower Peru's monetary economy and thus lead to the crisis of the colonial society which erupted into the cycle of rebellions in the early 1780's. – Yet the viceroyalty of New Spain was not shaken by similar rebellions at that time, although, as John TePaske tells us, the levying of new taxes was much more marked there than it was in Peru. This discrepancy in the correlation between rising level of taxation and rebellion either might point to a higher degree of monetarization and, possibly, a higher income level for large segments of Mexico's population – making it easier to absorb increasing taxes without serious disruptions of the economy –, or alternatively might suggest a greater degree of acceptance and legitimacy of the Crown and its viceregal bureaucracy.

Parallel to other regimes of enlightened despotism in Europe, the Spanish Bourbons attempted to strengthen the influence of the state on the economy, also in its American colonies. This goal was not pursued only through the intensification of the fiscal and administrative infra-structure but also through a greater direct involvement in the economy. The papers by Deans-Smith and Hünefeldt demonstrate that the tobacco monopolies, while successful fiscally, contributed rather little to the economic development of the two viceroyalties. The concentration and supervision of production and processing of the tobacco did not lead to changes of technology and productivity increases. The real income of most growers and of the workers in the factories declined under the monopoly. The only beneficiaries were a handful of large growers, the bureaucratic administrators, and a few muleteers and traders, most of whom improved their income through some form of trickery, graft or contraband.

Also in this case one can observe that the Peruvian viceregal bureaucracy had much greater difficulties to impose an effective control over the industry than its Mexican counterpart. Given the haphazard operation of the Peruvian monopoly, shot through with generous loopholes for contraband trade in the interior of the viceroyalty, it is difficult to understand that nevertheless it was able to create the kind of artificially shielded market conditions under which Peruvian tobacco could withstand foreign competition. Since the early 1820's, with the monopoly's gradual demise, Peru was rapidly swamped by tobacco imports from Virginia and Cuba.

The direct impact of the new Bourbon policies varied from sector to sector. Van Young speaks of the almost total neglect of agriculture by the Bourbon reformers. In his view, whatever changes occurred in the agrarian economy of New Spain during the late colonial period, these were consequences of exogenous factors, primarily the rise of population and the large upswing in transatlantic trade. Salas and Larson do not note any significant royal policies directed towards the development of textile production in Lower and Upper Peru. Thomson sees Puebla's cotton industry indirectly benefitting from policies designed to promote the Catalan textile producers, and particularly from Spain's frequent wars, blocking transatlantic trade. The wars, to be sure, were a boon for industries everywhere in Spanish America, and lead to many short-lived cycles of rapid industrial expansion, as in the case of Cochabamba's cotton trades between 1796 and 1802. But they can hardly be considered as asset of the Crown's economic policies towards the colonies. At the same time, these three studies present little evidence for the often repeated hypotheses that Spain's policy explicitly aimed at disrupting the American colonial textile industries during the late eighteenth century. On balance Spain's *explicit* policies towards this sector in Mexico and Peru might best be described as one of neglect.

It is in trade and in mining where the direct impact of the Bourbon reform policies is usually considered to be most evident. Indeed at face value it appears obvious that both Peru and Mexico saw their trade with Europe expand tremendously as a consequence of Charles's III free trade ordinance of 1778 (1789 for New Spain). But while the precise timing of this quantum leap owed much to Crown policy, its underlying causes lie in the upswing of Europe's industrial and proto-industrial production, improved ship technology, and growing amounts of species in the colonies with which to purchase European goods. There is much cause to agree with Lockhart's and Schwartz's recent assessment that the Caroline trade reforms reacted to secular changes rather than having created them.[5] As Jacobsen notes in his commentary on Jacques Barbier's paper, this type of reactive trade liberalization in the face of the inevitable also characterized Madrid's decision in 1807 to allow the reexport of European goods from La Habana to Vera Cruz.

The case of silver mining was different. In both Peru and Mexico during the late eighteenth century the industry reached what Carmagnani calls "the maximum of its possibilities given its technology of extraction and refining" due to government subsidies such as lowered mercury and gunpowder prices and tax reductions. Coatsworth thinks that in New Spain these subsidies lead to an expansion of output at ever lower or even negative marginal productivity. For fiscal reasons the crown in this view would have propped up a mining industry, which without this aid inevitably needed to shrink drastically. In John Fisher's view, however, it was the disruptions brought about by the Wars of Independence, and not intrinsic problems of the industry, which brought the decline of Lower Peru's silver output during the second decade of the nineteenth century. Put differently, the vast expansion of output between the 1770's and 1790's, which owed much to Crown policy, according to Fisher did not create an oversized industry characterized by rapidly declining marginal productivity. For Upper Peru's modest mining recovery during the second half of the eighteenth century, on the other hand, Fisher's assessment is more compatible with Coatsworth's evaluation of the case of New Spain between the 1780's and 1810, when he notes that "the industry in Potosí remained dangerously dependent upon the state for the provision of labour, mercury and financial subsidies." It is perhaps germane as further evidence for the difference between Mexico's and Upper Peru's silver industries on the one hand and that of Lower Peru on the other, that only Lower Peru's industry seems to have recovered the high level of its late colonial output within fifteen to twenty years after the Wars of Independence.

But what about indirect, not explicitly aimed at, effects of the Bourbon policies on the two viceregal economies? John Coatsworth succinctly outlines one major position on this question: The Bourbon's singleminded pursuit of revenue maximization lead them to favor the increasingly inefficient mining sector to the detriment of the rest of the economy. The transferral of capital (through subsidies and credits) and other factors of production (especially labor) to the mining sector represented a misallocation of resources. The withdrawal of these resources from sectors like agriculture and manufacturing throttled their growth prematurely and contributed greatly to bottlenecks and inflationary pressures, which characterized New Spain's economy at least since the 1790's.

The opposite view is taken by Guy Thomson. Referring specifically to New Spain's industries, he rules out that a putative "Leviathan - like colonial state or tyrannous and interventionalist petty officials" were among "the primary obstacles to the further growth." It should be noted that this view does not imply a strongly favorable impact of the Bourbon policies on the economies of Mexico and Peru, a position which does not find any convinced adherents in this volume. Rather it turns the primary focus in accounting for the stagnation of both economies at least since the 1790's to key structural, not policy - related elements in the two colonies' ecology, economy and society.

It is not possible to come down on either side of this debate conclusively. We would need to measure to which degree increasing subsidies to the mining sector and rising revenue collections made capital for other sectors of the economy scarcer and more expensive. It does seem clear, however, that in specific instances the Bourbon policies, affected the social and geographic distribution of production and income. *Comercio libre* may have hurt the established monopoly merchants, as Alberto Flores Galindo contends, while at the same time it created new opportunities for numerous new traders, often with "lesser means." The tobacco monopoly brought decreasing incomes to the majority of the producers and workers, while it was a boon for a few large privileged growers. At the same time the monopoly in New Spain favored a handful of cities, notably Mexico, as locations of tobacco factories, while withdrawing income earning possibilities in this industry from other towns.

Overall one arrives at a rather motley picture of the Bourbon reformers' impact on the colonial economies of Mexico and Peru. It would appear, as if the policies may have affected the timing and rate of economic changes, but not the secular trends. Economic growth depended primarily on the structure of production and markets, factor costs and productivity. These may have been influenced to a degree by higher taxation, subsidies for mining inputs and liberalization of trade flows. But the primary variables having a bearing on these factors were the demographic development, the natural environment, technology and the social distribution of the means of production.

More significant than the Bourbon policies' immediate impact on economic growth in Mexico and Peru was the fact that the reforms initiated by Charles III and his ministers and bureaucrats began a long-term trend towards rearranging the relation between the state and the economy. The expansion and the intensification of the fiscal infrastructure in the viceroyalties, coupled with a more activist economic policy, heightened the stakes involved in Crown economic and fiscal decision-making for the colonies' *intereses creados*. This increased the potential for conflicts between various social groups and the viceregal administrations. The outcome of such conflicts did not inevitably have to lead to a permanent alienation of the wealthy creole social strata in America from the Spanish metropolis, as Manfred Kossok assumes. The weakness of the Spanish state – and hence its narrow limits of autonomy – became fully apparent with the mounting fiscal crisis since the mid-1790's. In Mexico and Peru the Crown's dependence on donations and loans, forced or otherwise, from the Consulados and other civil and ecclesiastical corporations grew considerably during the remaining twenty-five years of the colonial regime. This opened the door to renewed accomodations with the *intereses creados*, albeit in a new political and economic environment. The legacy of the late colonial regime in Mexico and Peru would seem to consist in a weak state, which nevertheless pursued an activist economic project containing both neo-mercantilist and proto-liberal facets, and thus laid itself open to dependence on powerful economic pressure groups.

Regional economic development within the viceroyalties: Both in Mexico and in Peru there were significant shifts in the economic center of gravity during the late colonial period, or, put differently, some regions experienced a notably higher rate of growth than others. In both cases the direction of the shift was northwestwards and was accompanied or caused by shifts in the distribution of population. But while in

Mexico it was a gradual process, gaining steam over most of the eighteenth century, in Peru the shift may have been more dramatic, becoming evident to contemporaries within a short time span.

In New Spain it was primarily the regions lying on, or slightly north of a belt stretching from Vera Cruz over Mexico City, Querétaro, León, Guanajuato, Celaya to Guadalajara, which experienced strong growth during the eighteenth century. Responding to rapid demographic increase – particularly in the burgeoning cities – and the upswing of the silver output in nearby mining districts, agricultural production, both of cereal and industrial crops, some branches of manufacturing, and trade in both European and domestic goods underwent a sustained growth during most of the eighteenth century.

In contrast the economies in the Intendancies of Puebla and Oaxaca developed much more haltingly and in some aspects experienced serious reversals. The middle decades of the century saw an agricutural crisis in both Intendancies – accompanied in Puebla by a great loss of population through epidemics and emigration. While cereal production seems to have increased again during the last three decades of the century, and in Puebla cotton manufacturing underwent its erratic growth process, other trades in that old industrial center decayed, and Oaxaca saw its important cochineal production decline since 1780. Apart from deleterious government policies (affecting the cochineal trade), major causes for the southeastern regions' more sluggish economic development may have consisted in the difficulties to compete with the central and western regions in supplying the largest urban centers and mining districts with agricultural and manufactured goods and the greater share of Indian population which brought with it slower population growth (especially in cities), a lower degree of monetarization, and narrow limits for commercial agriculture.

In Peru the regional economic differentiation was more dramatic and of greater consequence than in New Spain. The decline of the Lima – Potosí circuit, although a long – term process, reached a critical phase during the late 1770's and early 1780's. The integration of the Audiencia of Charcas (High Peru) into the newly formed viceroyalty of Buenos Aires in 1776 seriously affected the trade from Lower Peru's southern highlands (the regions of Cuzco, parts of Arequipa, and Puno – even though this intendancy belonged to the new viceroyalty until 1796) to Upper Peru, as Scarlett O'Phelan affirms. Inspite of John Fisher's suggestion that southern Peru's late colonial regionalism had more cultural than economic causes, the evidence for deep economic problems is mounting. Miriam Salas shows, how by the 1780's woolen textile production in Vilcashuaman was declining and the *obrajeros* were attempting to redirect their trade from Upper Peru to Lima. Recent studies have also suggested the stagnation or decline of agriculture and livestock herding in Cuzco and Puno since the 1770's.[6] Since that decade, Upper Peru's modest mining recovery apparently benefitted mostly the economies of that region itself and certain parts of the La Plata basin.

With this multifaceted crisis of trade and production in much of southern Peru, the center of gravity of the viceroyalty shifted northward. For the period between the 1780's and 1810 most indications for economic growth concern the central and northern Sierra and the central coast. These regions benefitted from expanding silver mining output, more rapid population growth than in the south, and Lima's growing urban demand, all of which seemed to have spurred agricultural production on the central cost and in at least some of the *serrano* provinces in the Intendancies of Tarma and Trujillo. The increasing imports of European commodities, channelled by Lima's merchants into the new mining regions and made possible by the growing output of silver, apparently affected the textile manufactories in the central and northern Sierra as adversely as in the south.

Did the integration of commodity, capital and labor markets above the regional level increase in late colonial New Spain and Peru? Alberto Flores Galindo's contribution outlines for the Peruvian case, as John Kicza's recent monograph does for Mexico, how the wholesale merchants of the capital constructed a web of itinerant traders, stores and agents throughout the viceroyalty.[7] Through this web flowed European products and a few imports from other colonies, such as cocoa, downward, and high value colonial products such as sugar, cochineal, livestock products and chinchona bark upward. As the spatially distant and socially low echelons of the trade hierarchy were characterized by a severe chronic shortage of specie, these interregional commercial webs were articulated through credit. The growing output of silver permitted the commodity and credit flows through these interregional commercial webs to increase considerably during the last third of the eighteenth century. In New Spain the credit system appears to have become more agile also during this period, as bills of exchange became a common instrument for domestic transactions.

Nevertheless the greater part of the credit transactions and certainly the bulk of commodity flows never went beyond the realm of a region articulated by a provincial urban center. While credit for mining more often than not was handled by the importers and wholesalers in the viceregal capitals, the credit for manufacturing and particularly for agriculture, for which provincial ecclesiastical lending institutions played such a prominent role, was raised overwhelmingly within the region. Most agricultural products, building materials and even the cheaper types of domestic manufactures had a too low unit value to stand the extraordinary costs of interregional transport. Most importantly, as Flores Galindo underlines, the expansion of an integrated viceregal market encountered a barrier in the continued vitality of a subsistence economy, in which the majority of the rural population kept monetary exchanges to the minimum required by state, church and private surplus extraction. – John Coatsworth suggests, that both the degree of monetarization and per capita incomes were higher in Mexico than in Peru. But much of this higher margin of per capita commercial transactions in New Spain might have resulted in the intensification of *intra*-regional commerce, the exchange between a provincial urban center and its hinterland, the importance of which is underscored by Van Young.

One key variable determining the rate of integration of interregional markets is the degree of specialization of the regional economies and hence their complementarity. The contributors disagree on this issue: Thomson and Van Young assume that the specialization of regional economies in New Spain did not advance enough during the late colonial period to broaden the interregional market through significant volumes of complementary exchanges. Coatsworth, on the other hand, does see a movement in this direction. The relocation and concentration of some previously dispersed economic activities during the late colonial period, such as wheat growing, livestock raising, cotton and wool manufacturing, would seem to present evidence in this direction. Except for shifts in the production of sugar from the north to the central coast, there are no signs of growing specialization in regional economies in Peru during the eighteenth century.

In sum, the limited information which we have so far on the question of interregional market integration, renders a contradictory picture: In both viceroyalties the volume of trade with European commodities increased particularly since the 1780's. But in New Spain the bottleneck which constrained the growth of commercial circuits was woven into the very model of eighteenth century expansion: The falling real income of labor in the countryside and in the city, without which neither silver mining nor, as a consequence, overseas trade could have grown so much, limited the expansion of the interregional market. Again it would seem that the model of economic growth followed in New Spain during the eighteenth century contained its own barrier through the increasingly unequal distribution of income and factors of production.

Mining as a lead sector for the late colonial economies? Much recent literature has suggested that economic fluctuations in the core areas of colonial Spanish America had their origin in the ups and downs of precious metal mining. John Fisher cautiously takes this position for late colonial Peru, and is seconded for the Mexican case by Marcello Carmagnani. Systematic research testing the correlations between output, productivity and wage levels in the mining sector with the corresponding values for other sectors and tracing the effects of increments of silver output in the economy at large have not been undertaken so far. But some bits and pieces of evidence, also contained in this volume, make it necessary to attach a more limited, but also more complex role to the mining sector.

Silver mining could affect the economy primarily through its demand for inputs and its supply of circulating medium, silver coin. Even if the volume of inputs demanded by the industry, and silver output entering the Mexican and Peruvian economies had fluctuated parallelly – which they did not, due to changes in productivity and the share of silver immediately withdrawn from the domestic circuit as Crown revenue –, the impact of these two aspects of mining on the general economy at any given time could be rather different.

The silver output was primarily diffused through the whole monetarized viceregal economy by way of the commercial webs controlled by the large wholesale merchants in the capitals (and the one or other large provincial city in New Spain). As we have seen, these merchants channelled their money primarily into the import of European goods and secondarily into the purchase of high value colonial goods. Thus any increment in the mines' output of silver only lead to a much smaller increment in the demand for goods produced in the colony itself, and was smallest for the great mass of low value goods, such as food crops, building materials and low grade textiles. Conversely, any decrease in the output of silver would have created a proportionally much smaller decrease of demand for these low value colonial goods. To the degree European imports competed with commodities produced in the viceroyalty, any increase of silver output threatened the domestic commodities' market position through expanding European imports. There can be little doubt that much of the textile industry in both Mexico and Peru suffered from this consequence of growing silver production during the last third of the eighteenth century.

The mining sector's demand for domestically produced inputs affected primarily the local and regional economies in which the mining districts were situated. Only for those higher value domestic products which were not replaced by European imports – especially transport and draft animals and livestock products –, the demand from the mining districts affected interregional markets. Some regional markets in New Spain, such as those of Zacatecas, Guanajuato and San Luis Potosí, benefitted comparatively more from the silver mines' demand for inputs than any Peruvian region, since the size of the operations was much larger in the important Mexican districts. While the share of the total population permanently employed in mining was at least as high in Peru as in Mexico towards the end of the eighteenth century (0.8 and 0.5 percent respectively according to Fisher), the size of the operations in Lower Peru, in terms of their labor force, was quite small – only one district had a permanent work force of 2,500 laborers, and three more between 500 and 1,000 –, so that demand for domestically produced inputs could largely be met by narrowly circumscribed regional economies. The rapidly expanding silver mines of Hualgayoc, for example, did not even constitute a sufficiently large market to pull the nearby coastal province of Trujillo out of its late colonial doldrums. In both viceroyalties the cities constituted a larger market for agricultural products than the mining camps and, at least in Mexico, urban demand would seem to have grown faster than that of the mining sector during the half century before the Wars of Independence.

In sum, silver mining affected the various regions and sectors of the two viceroyalties' late colonial economies in rather different ways. Its impact on demand for low value colonial products was rather limited, although it may have accentuated the short-term price cycles for cereals. On the other hand, the growth of silver output played a key role for the vast increase of European imports into the colonies. Through this crucial link to transatlantic and interregional trade, silver mining exerted a strong influence on the structural changes experienced by the viceregal economies, particularly regarding the articulation with the ubiquitous stratum of subsistence production by means of vast credit networks.

Summary:

Parallel and Divergent Trends in the Economies of Late Colonial Mexico and Peru:

Looking at available indices of aggregate economic growth, both viceroyalties seem to have undergone remarkably similar processes during the last half century of unchallenged colonial rule: Mining output, overseas (and probably domestic) commerce, agricultural production and government revenue all grew, at least nominally, from the early 1770's until some time during the 1790's. Most sectors of both economies then entered a phase of stagnation or modest decline lasting until the outbreak of the Wars of Independence. Only the textile manufacturing sector in both viceroyalties hit hard times no later than the 1780's. It experienced short – term cycles of growth in times of international war, which were difficult for other sectors of the economy.

The strong correlation between both viceroyalties' rhythm of expansion and that of the international economy underlines the significance of exogenous influences on the colonies' economy. In the long – term process of increasing flows of commodities, capital and labor between the European metropolis and Spanish America, which has continued, with spurts and pauses, from the sixteenth to the twentieth century, the *rhythm* of economies as those of Mexico and Peru has become ever more tied to that of the European and later North – American economies. The years between the mid – 1760's and early 1790's constituted a period of intensification of these links, as European merchants placed a growing share of some key industrial and proto – industrial commodities (the French "*bretañas*," Silesian linens and English wool and cotton cloth) in the South – and, especially, North – American markets. Obviously the fairly uniform application of the Bourbon fiscal and economic policies in New Spain and Peru also fostered parallel developments in both viceroyalties, what with the growing taxation of domestic trade and Indian tributaries, the establishment of new Crown monopolies, subsidies for mining, and the liberalization of overseas trade which lead to changes in the composition of merchant communities.

But these homogenizing exogenous factors worked upon two colonial economies which, inspite of their common hispanic institutional, social and political heritage, differed from each other concerning some structures of long duration. Perhaps most importantly, the demographic recovery had advanced further in Mexico than in Peru. By the late colonial period in New Spain this lead to rising values of rural property, and increasingly unequal distribution of land and income, and a growing

supply of labor. Although the population also increased in late colonial Peru, its absolute size and its density were still too low in most parts of the viceroyalty to lead to similar processes as in New Spain. Inflationary pressures, due to faster growth of population than of agricultural production, became a problem earlier and more intensely in Mexico than in Peru. Labor mobility was probably also higher in the northern viceroyalty. All of these factors owed much to the stronger entrenchment of the Indian peasant communities in large parts of central and southern Peru, compared with most of Mexico, something underlined by Friedrich Katz.

Mexican late colonial markets were larger than those of Peru, not only because of the different demographic situation (especially regarding the large cities) and the higher degree of monetarization, but apparently also as a consequence of lower transportation costs, which tended to extend the radius in which goods could be profitably sold. The rapid growth of markets in Mexico during the eighteenth century constituted a stimulus for internal colonization, changing crop patterns, and probably even some more regional economic specialization, developments which were scarce in Peru during the period.

The comparison between the experience of the tobacco monopolies has lead us to suggest that in Peru the colonial state may have been weaker than in New Spain. The effectiveness of its measures out in the provinces was very low indeed. This is in a sense paradoxical, because, more than in Mexico, the archaic nature of the viceroyalty's economy, characterized by a low elasticity of labor supply and a low degree of monetarization, required the coercive power of the "state" to articulate the still weak commercial sphere with the vast subsistence sector. But although forced commodity sales and corvee labor drafts ultimately were based on Crown sanction, they only became effective through the consent and involvement of local and provincial authorities and notables. Without their cooperation the state remained weak in Peru, and if the interests of the central Crown bureaucracy and provincial authorities and notables were opposed, this might result in widespread contraband or rebellion.

In all, one is left with the impression that economic growth in late colonial Peru only spread a thin and fragile veneer of progress over parts of the viceroyalty. This type of growth relied on the articulation of a rather archaic socio-economic substrate, characterized by widespread subsistence production, a low degree of monetarization, scarce and inelastic labor supplies, extremely high transaction and transportation costs, weak integration of local and regional markets and the continued importance of coercive practices.

While such elements were of course not absent in Mexico, it nevertheless appears that the northern viceroyalty experienced more profound transformations in the course of the eighteenth century. Here economic growth was coupled with changes in the land tenure pattern and the spatial distribution of agricultural production, growing importance of wage labor, increasing inequalities in the distribution of income, expansion of markets, reorganization of the surviving textile industry towards more complex arrangements reminiscent of proto-industrial complexes in Europe and, possibly, an increase of productivity in market terms.

By 1800 both the Peruvian and Mexican economies had entered a phase of stagnation. While the Napoleonic wars certainly played a role in this, there were important domestic structural causes as well. In Mexico they had to do with the inflationary pressures brought about by the very model of economic growth: Markets having grown faster than agricultural production and population; growing costs of industrial inputs, declining real wages. In Peru the problems may have consisted in the very limited market sphere, coupled with a crisis of commercial agriculture for export.

In this introduction we have only touched upon some of the issues involved in a comparison of the late colonial economies of Mexico and Peru. Many more problems are raised by the contributions themselves. Quite a few questions remain unresolved and will require further research. But we hope that this volume will demonstrate that the difference between the late colonial economies of Mexico and Peru has little to do with varying or even opposite conjunctures. Rather it is in some important structural elements of both economies and societies, where we should hope to find the roots of their distinctiveness.

NOTES

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5. James Lockhart and Stuart B. Schwartz, *Early Latin America. A History of Colonial Spanish America and Brazil* (Cambridge, 1983), p.368.
6. Luis Miguel Glave and Maria Isabel Remy, *Estructura agraria y vida rural en una región andina; Ollantaytambo entre los siglos XVI y XIX* (Cuzco, 1983); Magnus Mörner, *Perfil de la sociedad rural del Cuzco a fines de la colonia* (Lima, 1978); Nils Jacobsen, "Landtenure and Society in the Peruvian Altiplano Azángaro Province, 1770 – 1920," (Ph.D. Diss., University of California, Berkeley, 1982).
7. John Kicza, *Colonial Entrepreneurs, Family and Business in Bourbon Mexico City* (Albuquerque, N.M. 1983).