# 13

# THE ECONOMIC CONSEQUENCES OF INDEPENDENCE IN LATIN AMERICA

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In his classic work on Latin America, Victor Bulmer-Thomas concludes, "The economic development of Latin America since independence is a story of unfulfilled promise," and stresses that "the gap between living standards in Latin America and those in the developed countries has steadily widened since the early nineteenth century."[1] This view has been qualified by Stephen Haber, who pointed out that the income gap between Latin America and Anglo-Saxon America "is not a product of the twentieth century."[2] John Coatsworth, in turn, added that today's Latin American underdevelopment arose during the colonial era and in the aftermath of independence.[3] Evidence on levels of per capita income supports the view that Latin America as a whole did not worsen its position relative to the United States during the twentieth century (Table 13.1).

Independence, achieved in most of Latin America between 1808 and 1825, and the resulting insertion into the international economy (a long process that gathered momentum between 1850 and 1873) appear as the

[1] Victor Bulmer-Thomas, *The Economic History of Latin America since Independence*, 2nd ed. (Cambridge, 2003), 392. This essay focuses exclusively on the effects of independence on economic performance and does not address the background to struggles for independence. A comprehensive coverage of the process of independence and its aftermath can be found in Leslie Bethell, ed., *The Cambridge History of Latin America* (Cambridge, 1985), vol. 3. I have received useful advice from the editors. I would also like to acknowledge Jeremy Adelman, Bob Allen, Stan Engerman, Alejandra Irigoin, Héctor Lindo-Fuentes, Carlos Marichal, Alfonso Quiroz, Joan Rosés, and especially Patrick O'Brien for their comments. I am solely responsible for any remaining errors.

[2] Stephen Haber, ed., *How Latin America Fell Behind. Essays on the Economic Histories of Brazil and Mexico, 1800–1914* (Stanford, CA, 1997), 1.

[3] My italics. John H. Coatsworth, "Notes on the Comparative Economic History of Latin America and the United States," in Walther L. Bernecker and Hans Werner Tobler, eds., *Development and Underdevelopment in America: Contrasts in Economic Growth in North America and Latin America in Historical Perspective* (New York, 1993).

Table 13.1. *Relative GDP per head in Latin America, 1900–5*

| | Latin America (*1970 $ PPP*) | | Latin America (*USA = 100*) | |
|---|---|---|---|---|
| | Six countries | All | Six countries | All |
| 1900 | 185 | | 12.5 | |
| 1910 | 228 | | 13.3 | |
| 1920 | 235 | | 12.4 | |
| 1930 | 277 | | 12.9 | |
| 1940 | 320 | | 12.9 | |
| 1950 | 413 | 394 | 12.5 | 11.9 |
| 1960 | 521 | 487 | 13.6 | 12.7 |
| 1970 | 707 | 649 | 13.7 | 12.6 |
| 1980 | 973 | 884 | 15.4 | 14.0 |
| 1990 | 938 | 837 | 12.7 | 11.3 |
| 1995 | 990 | 879 | 12.8 | 11.4 |

*Source:* Pablo Astorga and Valpy Fitzgerald, "Statistical Appendix," in Rosemary Thorp, *Progress, Poverty and Exclusion. An Economic History of Latin America in the 20th Century* (Washington, DC, 1998), 353.

two most important events in assessments of economic performance in nineteenth-century Latin America.[4]

However, no consensus exists on how independence came about. Was it the result of an external shock, such as the Napoleonic Wars and the French invasion of the Iberian peninsula? Was it a consequence of institutional inefficiency or, conversely, a reaction against reforms and modernization associated with the introduction of new liberal ideas and institutions in the metropolis and, hence, an endogenous phenomenon? Was it, perhaps, the outcome of the struggle against liberal reform and modernization in central colonies (Mexico and Peru), whereas in peripheral colonies (New Granada and the Rio de la Plata), it resulted from militaristic opportunism, stimulated by smuggling interests, at the time of the Napoleonic invasion of the Iberian peninsula?

In David Landes's view, it was not the outcome of colonial initiative "but of the weaknesses and misfortunes of Spain and Portugal at home, in the context of European rivalries and wars."[5] Samuel Amaral, writing on

[4] See, for example, Bulmer-Thomas, *Economic History of Latin America*, and Haber, *How Latin America Fell Behind.*

[5] David S. Landes, *The Wealth and Poverty of Nations: Why Some Are So Rich and Some So Poor* (New York, 1998), 313.

Argentina, argues that independence was a consequence of local pressure on institutions that could not provide for the needs of trade and production.[6] And Stanley and Barbara Stein have written that "perhaps it would be more accurate to argue that many of the colonial elite hoped to maintain allegiance to embattled Spain while enjoying the right to trade directly with Europe and the United States."[7]

Fewer research monographs than grand interpretations make assessments of independence unpersuasive. Still, while no consensus of the causes of independence exists, it is evident that the consequences were the fragmentation of political power, the militarization of society, and the mobilization of resources and men for war.[8] Political turmoil did not end with independence. Disputes over national borders and civil wars continued for decades. In Landes's words: "New World strongmen exploited the vacuum and seized the power... anarchic negativism invited macho warlordism."[9]

A widely held view among historians is that independence was followed by a marked decline in economic activity in which per capita income did not return to colonial levels until the mid-nineteenth century.[10] Moreover, the break with Spain and Portugal did not bring with it any immediate changes in the existing social and economic structures.[11] The land tenure system and factor markets, it has been argued, did not suffer drastic changes after independence. For example, slavery lasted until the mid-nineteenth century, and until the 1880s in Brazil and Cuba. The fiscal system remained in part: *mita* ended but *tributo* often returned. Debt peonage and forms of *repartimiento* persisted in some regions until the late nineteenth century. Finally, openness to trade and factor inflows was reduced. Change, nevertheless, was brought about by independence. Among its positive effects on

[6] Samuel Amaral, "Del mercantilismo a la libertad: Las consecuencias económicas de la independencia argentina," in Leandro Prados de la Escosura and Samuel Amaral, eds., *La independencia americana: Consecuencias económicas* (Madrid, 1993), 202–3.

[7] Stanley J. Stein and Barbara H. Stein, *The Colonial Heritage of Latin America. Essays on Economic Dependence in Perspective* (New York, 1970), 131.

[8] Tulio Halperín Donghi, "Economy and Society," in *The Cambridge History of Latin America*, vol. 3.

[9] Landes, *Wealth and Poverty of Nations*, 313.

[10] Coatsworth, "Notes on the Comparative Economic History." In the case of the United States, conjectural estimates show that per capita income stagnated in the quarter century after independence, whereas it grew below 0.3 percent yearly in the opening decades of the nineteenth century. Cf. Peter C. Mancall and Thomas Weiss, "Was Economic Growth Likely in Colonial British North America?" *Journal of Economic History* 59, 1 (1999): 17–40.

[11] Bill Albert, *South America and the World Economy from Independence to 1930* (London, 1983), 25. Neither did they take place in the former metropolis. It can be conjectured that GDP per head in the 1790s was not surpassed in Spain until the 1840s. Cf. Leandro Prados de la Escosura, *De imperio a nación. Crecimiento y atraso económico en España, 1780–1930* (Madrid, 1988), chap. 1.

growth, historians emphasize the end of the external trade monopoly and the possibility of raising capital in international markets, whereas the end of the *de facto* customs union, capital flight, and the collapse of the colonial fiscal system are stressed among its negative effects.[12]

The costs and benefits of independence have been assessed by Coatsworth, who concluded that in the short run the direct and indirect economic benefits of independence were small, as were the measurable costs of colonialism: the limited net benefits of independence were overcome by new costs, such as prolonged wars, civil strife, and economic instability. In the long run, however, there were economic benefits from the destruction of the colonial institutional order: independence led to institutional modernization.[13]

Should the costs of colonialism include not only what was extracted but what was not produced due to wrong incentives created by colonial institutions and path dependency? And why did the elimination of tax and tariff restrictions fail to promote self-sustained growth? These are recurrent, yet unanswered, questions among historians of Latin America.

To provide an answer to all these crucial questions is well beyond the scope of this chapter and its author's ability. Thus, for the remainder of the paper, I will assess grand interpretations or meta-narratives, centered on the theme of Latin America in the U.S. mirror. Then the alternative approach of evaluating postindependence Latin American performance in the African and Asian mirrors will be proposed. Finally, I will examine the empirical evidence on the main consequences of independence, resulting from the removal of the colonial burden and the opening up to the international economy. Some concluding reflections complete the chapter.

## GRAND INTERPRETATIONS: LATIN AMERICA IN THE U.S. MIRROR

In the three decades after World War II, the Dependency School provided the dominant grand theory about Latin America's underdevelopment. Stanley and Barbara Stein, in their widely read book *The Colonial Heritage of Latin America*, developed an interpretive framework for understanding

[12] Bulmer-Thomas, *Economic History of Latin America*, 28–31.

[13] John H. Coatsworth, "La independencia latinoamericana: Hipótesis sobre los costes y beneficios," in *La independencia americana: Consecuencias económicas*, 19.

Latin American independence. Why did British America and Latin America develop so differently after independence? Why did Latin America remain a primary producer while the United States industrialized? According to the Steins, the core of Iberian colonialism in Latin America was "the organization and maintenance of economies profitable to overseas metropolises and ... through them to the key economies of western Europe: Holland, England, and France."[14] The colonial economic background (with the large estate as its key feature) was reinforced by local conditions (lack of political unity, conflict of economic interests, highly concentrated income, and poverty) and, in particular, by the economic pressure of Great Britain. "The English," they conclude, "had been the major factor in the destruction of Iberian imperialism; on its ruins they erected the informal imperialism of free trade and investment."[15] The Steins' main contention was that the failure to achieve sustained and balanced growth over the nineteenth century was a result of the persistence of the colonial heritage in the new republics.

Perhaps it was Christopher Platt who most firmly opposed the Steins' views. In Platt's assessment, independence had a very limited impact, and only after 1860 did a lagged effect become apparent. Independence brought a redirection of trade from Iberia to northern Europe and the United States, but the volume of Latin American trade did not change significantly. Independence did not make Latin America into a major primary product exporter or into a large market for foreign industrial goods. In addition, modern economic growth was constrained by lack of human and physical capital, shortage of industrial fuels, poor infrastructure, and small markets. The break with Spain, Platt argued, "far from confirming the integration of Latin America as a dependent partner in the world economy, reintroduced an unwelcome half century of 'independence' from foreign trade and finance," leading to the conclusion that nineteenth-century Latin America was "shaped by domestic circumstances rather than by the planned requirements of distant metropolis."[16] Platt's views could be perhaps rephrased by saying that Latin America became prematurely independent before the onset of the first wave of globalization with its powerful stimulus for growth.

The halcyon days of the Dependency School are long past. Empirical research within national boundaries is the way historians deal nowadays

[14] Stanley J. Stein and Barbara H. Stein, "D. C. M. Platt: The Anatomy of 'Autonomy,'" *Latin American Research Review* 15 (1980): 134.

[15] Stein and Stein, *Colonial Heritage*, 155.

[16] D. C. M. Platt, "Dependency in Nineteenth-Century Latin America: An Historian Objects," *Latin American Research Review* 15 (1980): 130.

with the question of what the economic consequences of independence were. The development of the new institutional economic history in Latin America has renewed, though, the grand interpretations tradition and led to an explicit comparison with the U.S. historical experience, stressing the striking differences between British North American and Iberian American colonies. They provide, according to Douglass North, "the best comparative case... of the consequences of divergent institutional paths for political and economic performance."[17] Their radically different evolution reflected the imposition of distinct metropolitan institutions on each colony.[18] North's main proposition is that different initial conditions, in particular the religious and political diversity in the English colonies as opposed to the religious uniformity and bureaucratic administration of the existing agricultural society in the Spanish colonies (Mexico and Alto Peru, in particular) are responsible for differences in performance over time.

North's interpretation has been opposed by scholars who do not accept the claim that institutions are exogenous.[19] For example, for Spanish America, Engerman and Sokoloff posit that the initial inequality of wealth, human capital, and political power conditioned institutional design and, thus, performance. Large-scale estates, built on preconquest social organization and extensive supplies of native labor, established the initial levels of inequality. Elites (by 1800 less than 20% of the population was white) managed to design institutions protecting their privileges. Government policies and institutions reproduced initial conditions leading to the restriction of competition and selective policies in offering opportunities.[20] For example, in Mexico and Peru, a large native population, coupled with Spain's acceptance of preexisting native practices of awarding claims on labor and natural resources to the elite, fostered highly concentrated landholdings and, consequently, social and economic inequality.[21] All this was in sharp contrast with the white population's demographic predominance, more

[17] Douglass C. North, "Institutions and Economic Growth: An Historical Introduction," *World Development* 17, 9 (1989): 1330.

[18] Douglass C. North, *Institutions, Institutional Change and Economic Performance* (Cambridge, 1990), 102.

[19] For a recent assessment, see Dani Rodrik, Arvind Subramanian, and Francesco Trebbi, "Institutions Rule: The Primacy of Institutions over Integration and Geography in Economic Development" (IMF Working Paper 02/189, November 2002).

[20] Kenneth Sokoloff and Stanley L. Engerman, "Institutions, Factor Endowments, and Paths of Development in the New World," *Journal of Economic Perspectives* 14, 3 (2000): 217–32.

[21] Stanley L. Engerman, Stephen H. Haber, and Kenneth L. Sokoloff, "Inequality, Institutions, and Differential Paths of Growth among New World Economies," in Claude Menard, ed. *Institutions, Contracts, and Organizations* (Cheltenham, 2000), 108–34.

evenly distributed wealth, and high endowment of human capital per head in British North America.[22]

Institutional historians have reacted to these factor endowment and wealth distribution arguments by emphasizing the relative independence of institutions, policies, and events from any given distribution of wealth and income. Although acknowledging that the legal system represented an obstacle to growth because the caste system constrained factor mobility, John Coatsworth and Gabriel Tortella deny the links between Iberian institutions transferred to America and the initial unequal distribution of income and wealth, stressing that "the caste system of the New World deliberately weakened the grip of local conquerors and magnates on the underlying indigenous population and placed sharp limits on the growth of inequality in the distribution of wealth by recognizing indigenous property rights and guaranteeing the majority of the indigenous population access to land independent of the colonial elite."[23]

North, Summerhill, and Weingast concede, in turn, that factor endowments were the driving force of European colonization, but are not sufficient to explain postindependence behavior, as the discrepancies between the U.S. path to world leadership and Spanish America's violence and retardation confirm. If factor endowments determined political outcomes, they argue, "Argentina would be as rich as the United States."[24] North and his associates stress the sharp institutional contrast between the independent United States (with a constitution and a stable and well-specified system of economic and political rights) and Latin America (under political instability and warfare). In their view, the absence of institutional arrangements capable of establishing cooperation between rival groups led to destructive conflict that diverted capital and labor from production and consigned the new republics to poor performance relative to the United States.

[22] It should be noted that inequality in Latin America was probably comparable to that in the slave states of North America, where per capita income was, however, surely much higher.

[23] John H. Coatsworth and Gabriel Tortella, "Institutions and Long-Run Economic Performance in Mexico and Spain, 1800–2000" (Working Papers on Latin America, no. 02103.1, David Rockefeller Center for Latin American Studies, Harvard University, 2002).

[24] Douglass C. North, William R. Summerhill, and Barry R. Weingast, "Order, Disorder, and Economic Change: Latin America versus North America," in Bruce Bueno de Mesquita and Hilton L. Root, eds., *Governing for Prosperity* (New Haven, CT, 2000), 19. It should be borne in mind, however, that by 1913 Argentina was the sixth country in the world in terms of per capita income, and in comparison to Europe second only to Great Britain. See Leandro Prados de la Escosura, "International Comparisons of Real Product, 1820–1990: An Alternative Data Set," *Explorations in Economic History* 37, 1 (2000): 1–40.

So far, all the views surveyed take the United States as the yardstick with which to measure Latin American achievements in the nineteenth century. Is such an approach the appropriate strategy to disentangle the causes of Latin America's poor economic performance? In fact, overemphasizing the contrast with North America leads to a negative assessment of Latin America's economic and political behavior both before and after independence. The income gap between colonial British and Latin America kept widening in the half century after independence. According to Maddison, the United States doubled Latin American product per head by 1820 and more than trebled it by 1870.[25]

However, stressing over and over again that a large gap existed has paralyzing effects on research on nineteenth-century Latin American economic history. Actually, it confuses the initial conditions in the new republics with their postindependence performance. Moreover, it diverts attention from the real issue: the extent to which Latin America underperformed in terms of its own potential. Nathaniel Leff's reflections on Brazil can be extended to Latin America as a whole. The fact that the new republics fell behind the United States or northwestern European nations does not imply that development opportunities were necessarily missed. On the basis of predictably large differences in human (and physical) capital to labor ratios it can be hypothesized that British North America and Latin America probably had different *steady states*.

The relevant question, then, would be, what are the feasible counterfactual scenarios that might have led to higher rates of growth?[26] These hypothetical alternatives should be clearly specified before jumping to the conclusion that Latin America failed because it followed a different and less successful path to the twentieth century than the United States or Germany. In fact, per capita income divergence between rich (core) and poor (periphery) countries is the dominant feature of the nineteenth century.[27] Historical research can only elucidate within the limits of feasibility, that is, the extent to which events followed the course they did as determined by a set of initial conditions and some internal logic over time.

[25] Angus Maddison, *The World Economy. A Millennial Perspective* (Paris, 2001), 264.

[26] Nathaniel H. Leff explores alternative scenarios of rising productivity in the domestic sector relative to the external sector, of higher investment in social overhead capital, and of immigration restrictions, to reject all of them as unrealistic. See "Economic Development in Brazil, 1822–1913," in *How Latin America Fell Behind*, 58–9.

[27] This line of reasoning has recently been applied to the study of the USSR's development by Robert Allen, *Farm to Factory: A Reinterpretation of the Soviet Industrial Revolution* (London, 2002). As Allen writes, this is so because "convergence represents the diffusion of the industrial revolution" (1–8).

As Leff put it, "the study of history can spare later observers depressing reflections that have no basis in the realm of the possible."[28]

Moreover, the current historical approach to Latin American economic backwardness resembles historical assessments of continental European backwardness a quarter of a century ago when countries' success or failure depended on the extent to which they were able to replicate Britain's industrialization experience. As a result, a common claim was to depict France as a backward country. Gerschenkron's analysis of latecomers' substitution for missing prerequisites and O'Brien and Keyder's pathbreaking study of growth in France and Britain demonstrate that differences in endowments (and hence relative factor prices) and past economic policies and institutions led to different paths to economic development. Therefore, only the extent to which a country achieved its own unique growth potential should determine its success or failure.[29] Geography, public policies, and political institutions all mattered in shaping Latin American countries' long-run economic performance.

## LATIN AMERICA IN THE AFRICAN AND ASIAN MIRRORS

Because difficulties in modeling growth potential might render the proposal impractical, a promising line of research would be to compare Latin America with other former European colonies. It is worth noting that quite a few Asian, African, and Eastern European countries shared, at the time of their independence, some of the initial conditions of the postindependent Latin American republics, including similar demographic patterns, such as a delayed demographic transition and persistent high fertility until the late twentieth century; low population density (except in Asia); a high share of the adult population employed in agriculture; low social and human capital; poor contract enforcement; and a weak government yielding to interest groups. On top of that, a glance at levels of GDP per capita at the time of independence for the main African and Asian countries

[28] Leff, "Economic Development of Brazil," in *How Latin America Fell Behind*, 59. A more complete discussion of counterfactual propositions and potential effects on Brazilian long-run growth is discussed in Nataniel H. Leff, *Underdevelopment and Development in Brazil*, 2 vols. (London, 1982).

[29] Alexander Gerschenkron, *Economic Backwardness in Historical Perspective. A Book of Essays* (Cambridge, 1962); Patrick O'Brien and Çaglar Keyder, *Economic Growth in Britain and France, 1780–1914. Two Paths to the Twentieth Century* (London, 1978).

(Table 13.2) shows a resemblance with those of Mexico or Brazil around 1820, whereas all of them remained far below the U.S. level at the time of its independence in 1776.

Does all this mean that the current approach that depicts the independence of Latin America as part of the wave of liberal revolutions that swept throughout Europe in the post-Napoleonic era is Eurocentric and inadequate, and that a more appropriate approach would be to compare the postcolonial experience of Latin America to the postcolonial experiences that took place, later in time, in other parts of the periphery, such as Asia and Africa?[30]

Models linking economic geography and institutions that allow for diverse colonial patterns seem useful for the purpose of placing the experience of postindependence Latin America in a more realistic context. Differences in economic prosperity across countries are linked to geographic, climatic, or ecological factors.[31] Jeffrey Sachs, for example, concludes that technology, disease environment, and transport costs are determined by physical geography and climate.[32] Acemoglu, Johnson, and Robinson, in turn, point to the disease environment at the time of European arrival as a determinant of the patterns of European settlement and the subsequent institutional development of the former colonies. In densely populated areas there were diseases (malaria and yellow fever) to which Europeans were vulnerable, preventing them from settling in large numbers.[33]

In another recent contribution, Acemoglu, Johnson, and Robinson stress the differential impact of colonialism. Societies where colonialism led to the establishment of good institutions ("institutions of private property" that allow a broad sector of society to receive returns on their investments) prospered relative to those where colonialism imposed "extractive institutions" (such as forced labor and tribute), under which most of the population

[30] This alternative approach has also been suggested recently by Jonathan C. Brown in his review of Jeremy Adelman's *Republic of Capital. Buenos Aires and the Legal Transformation of the Atlantic World* (Stanford, CA, 1999). See Brown, *Hispanic American Historical Review* 81, 3–4 (2001): 765–71.

[31] Jared Diamond, *Guns, Germs and Steel. The Fate of Human Societies* (New York, 1997).

[32] Jeffrey D. Sachs, "Tropical Underdevelopment" (NBER Working Paper Series, no. 8119, 2001). Also, for a typology of the approaches, see John W. McArthur and Jeffrey D. Sachs, "Institutions and Geography: Comment on Acemoglu, Johnson and Robinson (2000)" (NBER Working Paper Series, no. 8114, 2001).

[33] Daron Acemoglu, Simon Johnson, and James A. Robinson, "The Colonial Origins of Comparative Development: An Empirical Investigation," *American Economic Review* 91, 5 (2001): 1369–1401. Note, however, that a bad disease environment did not always coincide with high population density. The historical consensus on sub-Saharan Africa would be a case in point.

Table 13.2. *Per capital GDP in Latin American, Asian, and African countries at the time of independence*

| | |
|---|---|
| c.1776 | |
| U.S.A. | 1,166 |
| c.1820 | |
| Brazil | 646 |
| Mexico | 759 |
| *average* | *703* |
| 1950 | |
| Afghanistan | 645 |
| Bangladesh | 540 |
| Cambodia | 518 |
| India | 619 |
| Laos | 613 |
| Myanmar | 396 |
| Pakistan | 643 |
| Vietnam | 658 |
| Indonesia | 840 |
| *average* | *608* |
| 1960 | |
| Botswana | 403 |
| Chad | 569 |
| Gambia | 650 |
| Kenya | 726 |
| Mali | 535 |
| Rwanda | 656 |
| Tanzania | 433 |
| Togo | 698 |
| Uganda | 713 |
| Cameroon | 832 |
| Nigeria | 869 |
| Sierra Leone | 856 |
| *average* | *662* |

*Sources:* Angus Maddison, *The World Economy. A Millennial View* (Paris, 2001); U.S. figure for 1820 extrapolated back to 1776 with growth rates taken from Peter C. Mancall and Thomas Weiss, "Was Economic Growth Likely in Colonial British North America?" *Journal of Economic History* 59, 1 (1999): 17–40. A lower figure of $912 would be obtained with Maddison's own conjectures.

risked expropriation at the hands of the ruling elite or the government.[34] European colonialism led, paradoxically, to the development of relatively better institutions in previously poor areas, whereas it introduced or reinforced extractive institutions in previously prosperous areas. The reason is that poor areas were less densely populated, enabling Europeans to settle in large numbers and to develop their own institutions, thus encouraging investment and growth. Conversely, where abundant population showed relative affluence, establishing "extractive institutions" with political power concentrated in the hands of an elite represented the most efficient choice for European colonizers, despite its negative effects on long-term growth.[35]

Examples of colonial "extractive institutions" can be found in Spanish America (principally in Mesoamerica and the Andes), French-dominated Southeast Asia, British India, and regions of Africa under French or British dominance. In the case of Mexico and Peru, the exploitation of silver deposits determined that economic activity would center on the locations where the deposits were found, and this conditioned population settlement, the location of urban centers, and fiscal policies.[36]

There are interesting connections between Acemoglu, Johnson, and Robinson's interpretation of different colonial patterns and Stanley and Barbara Stein's conjecture thirty years ago that "had the Englishmen found a dense and highly organized Amerindian population, the history of what is called the United States would record the development of a stratified, biracial, very different society. In a larger context, the existence of a huge, underpopulated virgin land of extraordinary resource endowments directly facing Europe and enjoying a climate comparable to that of Europe represented a potentiality for development which existed nowhere else in the New World."[37]

It can be concluded, then, that both institutional and geographical approaches predict significantly different outcomes for colonial and postindependence British North America and Latin America, and it could be added that in empty lands more efficient institutional settings went hand

[34] Daron Acemoglu, Simon Johnson, and James A. Robinson, "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution," *Quarterly Journal of Economics* 117, 4 (2002): 1231–94.

[35] An exception seems to have been the American antebellum South.

[36] Cf. Roberto Cortés Conde and George T. McCandless, "Argentina: From Colony to Nation. Fiscal and Monetary Experiences from the Eighteenth and Nineteenth Centuries," in Michael D. Bordo and Roberto Cortés-Conde, eds., *Transferring Wealth and Power from the Old to the New World. Monetary and Fiscal Institutions in the 17th through the 19th Centuries* (Cambridge, 2001), 379.

[37] Stein and Stein, *Colonial Heritage of Latin America*, 128.

in hand with better factor endowments (higher human capital/labor and physical capital/labor ratios).

Evidence on exogenous geographic factors such as climate, latitude, and distance to the seacoast, together with levels of mortality, population density, and urbanization at the time of European colonization (see Table 13.3) tend to support the view that a wider range of similarities existed between most Latin American countries and the European colonies in Asia and Africa than with British North America.

Another way of stressing the similarities between Latin America and these other colonies is comparing assessments of postindependence performance in sub-Saharan African and Latin America. There is a striking degree of similarity between the assessments of sub-Saharan Africa by present-day development economists and the assessments of Latin America by economic historians, suggesting that postindependence Africa (and, presumably, Asia) is a more appropriate benchmark of comparison for Latin America than the United States. Nonetheless, the different timing of independence in Latin America (prior to the first wave of globalization) and in Africa and Asia (during the first stages of the second wave of globalization) surely had a distinctive impact on economic growth.

Let us start with an overall assessment of sub-Saharan Africa's independence that would be accepted by most scholars as a good depiction of the Latin American postcolonial experience: "... in the move to independence ... optimism was widespread. National development plans envisioned rapid growth, fuelled by industrial expansion, diversification of exports, modernization of agriculture, and public investment in health and education. Looking back, the legacy [was] mainly one of disappointment."[38]

Assessments of different aspects of postindependence Africa and Latin America are illuminating:

### THE SHOCK OF POLITICAL INDEPENDENCE

[In Latin America, there was a] complete lack of experience in autonomous decision making and government: state-building required creating institutions from scratch in an environment of change and uncertainty. In its absence, warfare was the norm.[39]

[38] Benno N. Ndulu and Stephen A. O'Connell, "Governance and Growth in Sub-Saharan Africa," *Journal of Economic Perspectives* 13, 3 (1999): 42.

[39] North, Summerhill, and Weingast, "Order, Disorder and Economic Change," 45.

Table 13.3. *Comparative geography and historical demography of Latin America*

| | Mean annual temperature °C | % Land area within 100 km of sea coast | Absolute value of latitude | Europeans' adult mortality rates in early 19th century | Urbanization rate in 1500 | Population density in 1500 |
|---|---|---|---|---|---|---|
| Argentina | 17.1 | 0.123 | 0.378 | 68.9 | 0.0 | 0.11 |
| Bolivia | 21.5 | 0.000 | 0.189 | 71.0 | 10.6 | 0.83 |
| Brazil | 23.7 | 0.093 | 0.111 | 71.0 | 0.0 | 0.12 |
| Chile | 13.4 | 0.662 | 0.333 | 68.9 | 0.0 | 0.80 |
| Colombia | 22.5 | 0.160 | 0.044 | 71.0 | 7.9 | 0.96 |
| Costa Rica | 25.1 | 1.000 | 0.111 | 78.1 | 9.2 | 1.54 |
| Dominican Republic | 25.6 | 1.000 | 0.211 | 130.0 | 3.0 | 1.46 |
| Ecuador | 19.1 | 0.368 | 0.222 | 71.0 | 10.6 | 2.17 |
| El Salvador | 23.6 | 1.000 | 0.150 | 78.1 | 9.2 | 1.54 |
| Guatemala | 21.7 | 0.425 | 0.170 | 71.0 | 9.2 | 1.54 |
| Honduras | 25.4 | 0.669 | 0.167 | 78.1 | 9.2 | 1.54 |
| Mexico | 19.0 | 0.373 | 0.256 | 71.0 | 14.8 | 2.62 |
| Nicaragua | 26.6 | 0.633 | 0.144 | 163.3 | 9.2 | 1.54 |
| Panama | 27.5 | 1.000 | 0.100 | 163.3 | 9.2 | 1.54 |
| Paraguay | 23.0 | 0.000 | 0.256 | 78.1 | 0.0 | 0.50 |
| Peru | 20.5 | 0.173 | 0.111 | 71.0 | 10.5 | 1.56 |
| Uruguay | 18.4 | 0.312 | 0.367 | 71.0 | 0.0 | 0.00 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Venezuela | 24.8 | 0.244 | 0.089 | 78.1 | 0.0 | 0.44 |
| *Central America & Caribbean* | *25.1* | *0.818* | *0.150* | *108.8* | *8.3* | *1.53* |
| *South America* | *20.5* | *0.196* | *0.209* | *72.1* | *3.2* | *0.59* |
| *Southern Cone* | *16.3* | *0.366* | *0.359* | *69.6* | *0.0* | *0.30* |
| Latin America | 22.1 | 0.457 | 0.189 | 86.3 | 6.3 | 1.16 |
| Non-Spanish West Indies | 26.6 | 1.000 | 0.206 | 130.0 | 3.0 | 2.97 |
| Asia | 26.1 | 0.554 | 0.160 | 74.2 | 6.9 | 10.17 |
| Northern Africa | 20.0 | 0.283 | 0.336 | 71.8 | 14.7 | 32.06 |
| Sub-Saharan Africa | 25.6 | 0.170 | 0.112 | 567.5 | | |
| United States | 11.2 | 0.112 | 0.422 | 15.0 | 0.0 | 0.09 |
| Canada | −0.2 | 0.021 | 0.667 | 16.1 | 0.0 | 0.02 |
| Australia & New Zealand | 16.9 | 0.579 | 0.378 | 8.6 | 1.5 | 0.20 |

*Sources:* John W. McArthur and Jeffrey D. Sachs, "Institutions and Geography: Comment on Acemoglu, Johnson and Robinson (2000)" (NBER Working Paper Series 8114, 2001); Daron Acemoglu, Simon Johnson, and James A. Robinson, "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution" (NBER Working Papers Series 8460, 2001).

In most [African] countries, neither the state, operating at national scale, nor private domestic capital... existed in a meaningful sense at the time of independence.[40]

### THE NUMBER AND SIZE OF COUNTRIES AFTER INDEPENDENCE

[The new Latin American republics did] lack self-enforcing institutions that constrained predatory action. In the face of widespread violence, political organization disintegrated into smaller units (around a caudillo for protection).[41]

Because of its colonial heritage, Africa has smaller countries in terms of population than other regions. Many states combined low population with low levels of income.[42]

### INDIRECT GOVERNANCE

[In Latin America,] the caste system of the New World deliberately weakened the grip of local conquerors and magnates on the underlying indigenous population and... recognized indigenous property rights... guaranteeing the majority of the indigenous population access to land independent of the colonial elite.[43]

[The] French administrated their [African] territories federally while the British tradition of indirect colonial governance was less centralizing. They acted to reinforce ethnic identities. It was the existence of national borders that gave rise to a political management problem (local scale of economic and political activity).[44]

### INHERITED INSTITUTIONS OF THE METROPOLIS

[T]he struggle was imbued with ideological overtones that stemmed from the American and French revolutions. Independence [in Latin America] brought United States inspired constitutions, but with radically different consequences.[45]

The inability to limit political power [in Latin America] led to the development of an authoritarian system and rent-seeking.[46]

Political constitutions at the time of [African] independence were modeled on their European counterparts: British colonies, parliamentary systems; French colonies, republican ones with strong executive positions. On paper, these institutions built in substantial pluralism and political liberties. But they were not to last. By 1975, nearly all African political regimes had cast off the trappings of pluralism and replaced it with authoritarian structures.[47]

[40] Ndulu and O'Connell, "Governance and Growth," 63.
[41] North, Summerhill, and Weingast, "Order, Disorder and Economic Change," 44–5.
[42] Paul Collier and Jan Willem Gunning, "Why Has Africa Grown Slowly?" *Journal of Economic Perspectives* 13, 3 (1999): 9.
[43] Coatsworth and Tortella, "Institutions."
[44] Ndulu and O'Connell, "Governance and Growth," 46–9.
[45] North, "Institutions and Economic Growth," 1329.
[46] North, Summerhill, and Weingast, "Order, Disorder and Economic Change," 48.
[47] Ndulu and O'Connell, "Governance and Growth," 47.

INSTITUTIONS, INFRASTRUCTURE, UNDERDEVELOPMENT

Latin America stagnated because economic institutions distorted incentives and constrained development (political risk associated with unpredictable policies and inefficient property rights and tax and regulatory systems) and high transport costs prevented exploitation of natural resources.[48]

Lack of social capital and subsequent high incidence of corruption, heavily regulated financial markets with banks lending directly to the government, poor infrastructure, and poor contract enforcement (with high marginal returns for capital and low rates of investment as its consequences) were obstacles to development in postcolonial Africa.[49]

Some topics for comparative research on postcolonial experiences in Africa, Asia, and Latin America emerge from this discussion. First, the consensus is that the contemporary African political map was largely determined by the nineteenth-century "scramble for Africa." However, it is noteworthy that the same fragmentation occurred in Latin America after independence, suggesting that an endogenous explanation would be more appropriate.

Second, why did the British and Spanish often use indirect governance in their African, Asian, and Latin American colonies? High indigenous population density, the explanation suggested by Acemoglu, Johnson, and Robinson, does not seem to fit the case of sub-Saharan Africa.

Third, a move toward authoritarian regimes took place in the Latin American, African, and Asian ex-colonies after a democratic start immediately after independence. Was it because of the necessity for strong leadership when institutions are initially weak and latent conflicts strong?

## ASSESSING THE CONSEQUENCES OF INDEPENDENCE: REMOVING THE COLONIAL BURDEN AND OPENING UP TO THE INTERNATIONAL ECONOMY

Most of the grand theories discussed earlier treat either institutions or factor endowments as exogenous. Moreover, they lack a time dimension and implicitly present a closed economic model. So, if static comparison between Latin America and the United States is discarded, a dynamic

[48] Coatsworth, "Economic and Institutional Trajectories," 23–4.

[49] Paul Collier and Jan Willem Gunning, "Explaining African Economic Performance," *Journal of Economic Literature* 37, 1 (1999): 65–75.

framework is needed that captures the impact of the breakdown of the colonial regime and the new republics' gradual incorporation into an increasingly integrated international economy. Moreover, the path to independence was quite different between regions. The way independence was achieved and the previous degree of commitment to colonial mercantilism conditioned the new republics' performance. Independence did not level off regional disparities.

In the historical literature the fiscal and trade burden of the empire has been emphasized, particularly for the case of New Spain (Mexico). The fiscal burden consisted of the taxes levied on the indigenous population to maintain the colonial system and the Indies' remittances (that is, revenue surpluses from the colonial administration that were sent to Spain). John Coatsworth estimated the fiscal burden at 4.2 percent of Mexican GDP (to my knowledge, no estimate is available for other parts of Spanish empire).[50] In the 1790s, 5 million pesos, on average, were sent annually to the metropolis.[51] This represented, perhaps, more than half of all the sums sent to Spain from the Latin American colonies.[52] Herbert Klein claimed that by 1800 residents in Bourbon Mexico paid 70 percent more taxes than Spaniards in the metropolis, whereas Carlos Marichal reduced the difference to 40 percent.[53] In any case, "the colonists were making a striking contribution to imperial administration."[54]

Removing colonial rule got rid of the fiscal burden and *ceteris paribus* increased Latin American GDP. However, to get an idea of the net gain for Latin America, we should compare it against the increase in administrative costs derived from the multiplication of political units after independence. Reallocating resources from a big, closed economy, the colonial empire, to small, open economies surely implied a significant cost.

A fragmentation of the initial national divisions took place soon after independence. Central America separated from Mexico by 1823, but the

[50] For a figure significantly higher than that for the thirteen North American colonies on the eve of independence, see John H. Coatsworth, "Obstacles to Economic Growth in Nineteenth-Century Mexico," *American Historical Review* 83, 1 (1978): 84–5.

[51] Carlos Marichal, "Beneficios y costes fiscales del colonialismo: las remesas americanas a España, 1760–1814," *Revista de Historia Económica* 15, 3 (1997): 483.

[52] If "Indies remittances" are estimated, on average, at 178 million reales de vellón (8.9 million pesos), cf. Leandro Prados de la Escosura, "La pérdida del imperio y sus consecuencias económicas," in *La independencia americana: Consecuencias económicas*, 256–9, 269–70.

[53] Herbert Klein, "La economía de la Nueva España, 1680–1809: Un análisis a partir de las cajas reales," *Historia Mexicana* 34, 136 (1985): 561–609; Carlos Marichal, *La bancarrota del virreinato. Nueva España y las finanzas del imperio español, 1780–1810* (Mexico, 1999): 92.

[54] Carlos Marichal and Marcello Carmagnani, "From Colonial Fiscal Regime to Liberal Financial Order, 1750–1912," in *Transferring Wealth and Power*, 287.

Central American Federation only survived until 1838 and led to the creation of five new countries in 1839 (El Salvador, Costa Rica, Honduras, Nicaragua, and Guatemala). By 1830, Gran Colombia, comprising Venezuela, Colombia, Panama, and Ecuador, broke up into three countries: Venezuela, New Granada (present-day Colombia and Panama), and Ecuador. The Peru–Bolivia union (new republics in 1824 and 1825, respectively) was created in 1836 and collapsed in 1839. Mexico had lost half its territory to the United States by 1848. The Viceroyalty of the Rio de la Plata became four separate countries: Uruguay, Paraguay, Bolivia, and Argentina. And in Argentina the search for a political solution to conflicts between Buenos Aires and the provinces had to wait until 1861.

Despite its inefficiency, colonial administration took advantage of the increasing returns and the economies of scale that all large organizations enjoy. Separation brought with it clearly negative effects in terms of economic efficiency. Commercial links among regions, however weak in colonial times, were no longer guaranteed, costs in defense and law enforcement had to be duplicated, and coordination in the provision of public goods became more difficult.[55]

Independence implied the demise of the largest monetary union and *ancien régime* fiscal structure in existence.[56] A single fiscal system within a monetary and customs union represented a significant savings compared to multiple national fiscal and monetary units. Monetary disintegration contributed to political fragmentation, reflected in weak national administrations and increasing transaction costs.

For each new republic the challenge was to create a new fiscal and monetary system and a domestic financial market. Attempts were made at superimposing the United States' federalist tax model upon colonial Spanish administrations but the outcome was a rigid and inefficient system. Customs duties became the backbone of the new fiscal systems, as had been the case in the postindependence United States. The result was that most Latin American governments suffered chronic deficits over the first half of the nineteenth century as tax revenues stagnated and military expenses rose. On top of this, there was an increasing subordination of fiscal policies to military and political caudillos at the cost of weakening tax systems.

The fragmentation of monetary regimes and chronic public deficits constituted an obstacle to the emergence of modern financial markets

[55] See the theoretical discussion in Patrick Bolton and Gérard Roland, "The Breakup of Nations: A Political Economy Analysis," *Quarterly Journal of Economics* 113 (1997): 1057–90.

[56] Marichal and Carmagnani, "From Colonial Fiscal Regime to Liberal Financial Order," 296. I am drawing on Marichal's part of this paper over the next paragraph.

throughout Latin America up to 1850. A vicious cycle emerged in which fiscal weakness led to weak governments, which led, in turn, to frequent challenges to the elite in power. Civil strife proliferated.

North, Summerhill, and Weingast provide a highly theoretical and persuasive, though untested, explanation for the fiscal and administrative problems faced by the newly independent republics. In the colonial era, the political order did not provide incentives for long-term economic growth but did set limits on groups that might have tried to expropriate or attack each other. After independence, third-party enforcement of rights vanished and no single group's aggression was costly enough to be avoided, with widespread turmoil, violence, and political instability as a result. The lack of stabilizing institutions in place meant that it was impossible to achieve efficient economic organization. Hence, a scramble to preserve colonial protections and privileges or to secure new powers occurred.[57] The break with the metropolis, North and his collaborators argue, destroyed many of the institutions that provided credible commitments to rights and property within the Spanish empire. Creoles gaining political power after independence inherited a centralized political system without inheriting critical elements of the formal and informal constraints protecting corporate groups and other elites. As a result, "state-building" failed in the new republics.

This kind of reasoning has been objected to by Stephen Haber and Armando Razo, who claim that in post-1910 revolutionary Mexico there was no necessary connection between political instability and the security of property rights.[58] Stable institutions can be impediments to growth when risk-taking is constrained and property rights are not enforced.[59]

A detailed and overall assessment for the new independent republics is missing, but available national studies provide some tentative answers. In Mexico, a profound fiscal crisis took place in the 1810s during the independence wars. Destruction of the colonial treasury system occurred due to the extraordinary rise in internal military expenditures, a growing tendency to rely heavily on forced loans, and the trend toward increasing fiscal autonomy of local treasuries. This had an impact on the monetary system and led

[57] North, Summerhill, and Weingast, "Order, Disorder and Economic Change," 54–5.

[58] Stephen Haber and Armando Razo, "Industrial Prosperity under Political Instability: An Analysis of Revolutionary Mexico," in Bruce Bueno de Mesquita and Hilton L. Root, eds., *Governing for Prosperity* (New Haven, CT, 2000), 106–52. Spain's historical experience provides additional support: fast growth took place before institutional stability was achieved under the Restauraci6n (1874–1923), and especially during the revolutionary years (1868–74).

[59] Bruce Bueno de Mesquita and Hilton L. Root, "When Bad Economics is Good Politics," in *Governing for Prosperity*, 7.

to the disintegration of local credit markets. Meanwhile, the public internal debt grew by nearly 40 percent between 1823 and 1848, as a result of growing public deficits, which reached 40 percent of total government expenditure. This situation was totally new, as there had been no deficits under colonial rule. On the contrary, Marichal has shown that there were transfers of surplus from Mexico to other colonies (*situados*).[60] Independence led to the abolition of two major sources of income of the colonial administration: the Indian tribute tax (levied on all heads of households in Indian towns) and mining taxes (10% duty levied on all silver produced). This implied a nominal reduction of potential income of the state by almost 30 percent, at the levels current in the late colonial period.[61] Instability paralleled public debt growth, leading arguably to crowding out private investment.[62]

In an assessment of the macroeconomic consequences of Mexican independence, Richard and Linda Salvucci proposed to distinguish between the short- and long-run effects of independence. In the short run, the civil war of the 1810s subverted trade, destroyed property and productive assets, and absorbed labor, causing output to decline by 50 percent. In the long run, militarism and political turmoil altered both government spending and the composition of expenditures during the 1830s–40s, and though output did not necessarily fall, growth was negatively affected through lower investment.[63]

The case of the other main center of the Spanish empire, Peru, points in a similar direction. Independence took place, however, under different circumstances: foreign, republican armies defeated royalist elites. Alfonso Quiroz posits that, as in Mexico, the republican state, under a chronic fiscal deficit, increased taxation on mining, making its recovery difficult. Wartime destruction of fixed capital, fiscal mismanagement (foreign debt, public expenditure), and default, together with political turmoil, had a negative impact on the economy. Independence, in the end, did not deliver the conditions for sustained economic growth.[64] Quiroz poses the counterfactual proposition that had independence been delayed until 1850, Peru might have suffered much lower transition costs.[65]

[60] Marichal, *La bancarrota del virreinato*, 48–52.

[61] Marichal and Carmagnani, "From Colonial Fiscal Regime to Liberal Financial Order," 298.

[62] Richard J. Salvucci and Linda K. Salvucci, "Las consecuencias económicas de la independencia mexicana," in *La independencia americana: Consecuencias económicas*, 30–53.

[63] Salvucci and Salvucci, "Las consecuencias económicas," 45–7.

[64] Alfonso W. Quiroz, "Consecuencias económicas y financieras del proceso de la independencia en el Perú, 1800–1850," in *La independencia americana: Consecuencias económicas*, 124–46.

[65] Quiroz, "Consecuencias económicas y financieras," 146.

In another area of large indigenous population, Central America, political instability and war affected the economy, including the destruction of capital, obstacles to trade and transport, and increasing uncertainty for investors, whereas the government extracted forced loans from merchants.[66] The prolonged transition to private property in areas of indigenous communal landholding surely introduced uncertainty that delayed investment in land improvement and increased transaction costs.[67]

Chile and Brazil behaved differently, because these countries managed to create institutions that protected groups from aggression and expropriation, though they did not achieve these results through the promotion of political competition and cooperation among subnational administrative entities.[68] Colombia, in turn, was successful in improving the colonial tax regime and, by 1850, had a much more fair, efficient, and neutral fiscal system. Colombia eliminated the unfair head tax on Indians, taxes on public employees, and *alcabalas* (a tax on all sales of domestic production) and came to rely mainly on customs taxes on imports.[69] As Jaramillo, Meisel, and Urrutia put it, "the absence of pre-Columbian structures of long-standing... plus a very rugged topography... resulted in an inability of the state to control the economy."[70]

The experience in areas of low indigenous populations such as the Rio de la Plata was somewhat different. Samuel Amaral shows how the economy Buenos Aires profited from the disappearance of a fiscal system that created disincentives for productive activities. Stable political institutions that allowed contract enforcement were introduced.[71] The colonial empire provided protection (security and justice) at moderate cost to the different parts of the Viceroyalty of Rio de la Plata. With independence, new providers of protection emerged, but with lower capacity than the metropolis. After 1810, local powers provided local protection within their limited resources,

[66] Héctor Lindo-Fuentes, "Consecuencias económicas de la independencia en Centroamérica," in *La independencia americana: Consecuencias económicas*, 54–79.

[67] The complexity of land institutions inherited from the colonial period should be taken into account, in particular haciendas, ejidos, and communal lands with ill-defined borders, and Indian communities that linked communal ownership and group identity.

[68] Marcelo de Paiva Abreu and Luiz A. Corrêa do Lago, "Property Rights and Fiscal Systems in Brazil. Colonial Heritage and the Imperial Period," in *Transferring Wealth and Power*, 327–77; North, Summerhill, and Weingast, "Order, Disorder and Economic Change," 40.

[69] Jaime Jaramillo Uribe, Adolfo Meisel, and Miguel Urrutia, "Continuities and Discontinuities in the Fiscal and Monetary Institutions of New Granada, 1783–1850," in *Transferring Wealth and Power*, 414–50.

[70] Jaramillo, Meisel, and Uribe, "Continuities and Discontinuities," 417.

[71] Amaral, "Del mercantilismo a la libertad," 204. I draw on Amaral in the following paragraph.

though the disappearance of the army limited the provision of protection services in remote areas. The Rosas dictatorship restricted property and free trade, but the lack of political freedom did not imply total suppression of economic freedom. In the interior provinces the principles of economic freedom were not easily accepted. Only in the 1853 constitution did Argentina adopt a national organization based on economic freedom, but its implementation took another thirty years.

As the separation of Uruguay and Paraguay underscored, the provinces of the Viceroyalty of Rio de la Plata failed to devise an incentive structure that could keep them voluntarily united under a single government and allow them to take advantage of economies of scale in the provision of defense and justice, thus reducing transaction costs and encouraging economic development. Military threats and trade blockades had long-lasting economic and political consequences for Paraguay. They led, according to Mario Pastore, to the collapse of public finances and to economic contraction. This caused the political demise of proponents of more representative government and freer trade and gave rise to political absolutism and redistribution of property to the state.[72] Economic activity in the three decades following independence fell below the levels reached in the late colonial period.

Buenos Aires profited more than the interior provinces from independence, with new financial institutions, a new currency, expansion into the interior, and increased livestock production, whereas in the interior stagnation and political instability continued until 1861.

To sum up, the qualitative evidence provided here is far from conclusive and its results vary from country to country. Transaction costs increased after independence as political and economic institutions went through a period of turmoil and redefinition. On the whole, it seems that only by the mid-nineteenth century did the gains derived from escaping the colonial fiscal burden overcome the costs of increased governmental (including military) expenses that paralleled poor definition and enforcement of property rights. The promising line of research initiated on Colombia by Jaramillo, Meisel, and Urrutia may render, if extended to other Latin American countries, a more optimistic assessment of the welfare consequences of establishing new fiscal institutions after independence.

[72] Mario H. Pastore, "Crisis de la Hacienda pública, regresión institucional y contracción económica: Consecuencias de la independencia en Paraguay, 1810–1840," in *La independencia americana: Consecuencias económicas*, 164–200.

Freedom from the trade burden imposed by the colonial system allowed the new Latin American countries to have access to expanding world commodity and factor markets. Coatsworth reckoned that the trade burden represented up to 3 percent of GDP in New Spain, again a significantly higher figure than the one estimated for the thirteen British North American colonies, but no similar guesstimate is available for other parts of the Spanish empire.[73] Independence permitted direct trade between the new Latin American republics and Europe and North America and thus represented a reduction in transportation and commercialization costs that, *ceteris paribus*, should have increased the volumes traded. However, in the decades following independence, warfare and political instability made adjustment to the new international trade regime difficult. Bulmer-Thomas stresses that, over the nineteenth century, the export sector was not large enough to pull along domestic economies in which nontradables represented a large proportion of output at low levels of productivity.[74]

The role of trade in Latin America's economic performance has been revisited by each new school of thought. Neoclassical trade theory predicts that trade liberalization after independence would allow Latin American countries to specialize along the lines of comparative advantage. In land-abundant countries, as most of the nations in Latin America were at the time, specialization in primary products would be expected. Paraphrasing Ronald Findlay, one of the consequences of getting rid of the trade burden for Latin America would be to open up "a new 'frontier' where land could be extended . . at a rising cost in terms of other real resources."[75] The Heckscher–Ohlin model predicts that natural resources, as the abundant factor, would be intensively used and, as a result, their price would increase relative to the price of labor. This implies, in the Stolper–Samuelson extension of the Heckscher–Ohlin model, that in so far as land, the abundant factor, is more unequally distributed than labor, inequality should rise within national borders.

Dependency School theorists, in turn, also saw trade as a cause of increasing inequality across and within countries. The well-known works of Raúl Prebisch stressed the role of declining terms of trade in the persistent

[73] Coatsworth, "Obstacles to Economic Growth," 84.

[74] Bulmer-Thomas, *Economic History of Latin America*, chap. 5.

[75] Ronald Findlay, "International Trade and Factor Mobility with an Endogenous Land Frontier. Some General Equilibrium Implications of Christopher Colombus," in Elhanan Helpman and J. Peter Neary, eds., *Theory, Policy and Dynamics in International Trade* (Cambridge, 1993), 47.

retardation of Latin America.[76] Hans Singer, on the other hand, saw negative implications in a hypothetical improvement in the terms of trade, because it would lead countries to commit resources to primary production, with the implicit opportunity cost of not allocating them to the domestic sector, where factor returns were higher as a consequence of increasing returns and economies of scale.[77] The new economic geography provides another hypothesis about the role of trade in Latin American development. Paul Krugman and Anthony Venables posit that gradually falling transportation costs, as was the case during the period 1820–70, period, would cause growing inequality: "when transport costs fall below a critical value, a core–periphery pattern spontaneously forms, and nations that find themselves in the periphery suffer a decline in real income."[78] Then, they argue, as transport costs continue to decline, a second stage of convergence in real incomes eventually arrives, and peripheral countries gain against the core.

To sum up, on the basis of trade theories, a series of testable hypotheses can be suggested for early nineteenth-century Latin America. We should expect an expansion of trade and, through better resource allocation, an increase in output (and, if underemployment of resources existed, trade would provide a vent for surplus). Terms of trade, according to the Prebisch School, might decline, but the opposite would occur according to classical economists, as Latin America exported primary goods and imported manufactured products.[79] At the same time, changes in income distribution should take place, with a tendency for within-countries inequality to rise as the reward to land, the abundant and less equally distributed factor, improved relative to labor. Last, a worsening of the Latin American position in the world economy is predicted.

Location and economies of scale are stressed by the new economic geography. Location mattered in the nineteenth century, because the tyranny of distance was a determining factor in trade despite the sharp reduction

[76] Raúl Prebisch, *The Economic Development of Latin America and Its Principal Problems* (New York, 1950).

[77] Hans W. Singer, "The Distribution of Gains between Investing and Borrowing Countries," *American Economic Review. Papers and Proceedings* 11, 2 (1950): 473–85.

[78] Paul Krugman and Anthony J. Venables, "Globalization and the Inequality of Nations," *Quarterly Journal of Economics* 110, 4 (1995): 859.

[79] Leandro Prados de la Escosura, "Terms of Trade and Backwardness: Testing the Prebisch Doctrine for Spain and Britain during Industrialization" (Universidad Carlos III Working Papers Series 94/46, 1994).

in ocean freight and insurance rates, particularly prior to the construction of railways, which occurred on a large scale after 1870. Relative rather than absolute transport costs from alternative locations were what really mattered. Freight rates from Antwerp to Rio de Janeiro in 1850 were only 40 percent of those prevailing in 1820, but freight rates from Antwerp to New York fell even more, to one-fourth. Meanwhile, insurance rates were cut to one-half and to one-third for trips from Rio de Janeiro and Buenos Aires, respectively, to Antwerp.[80] Transport costs from Antwerp to Buenos Aires and Rio de Janeiro remained relatively stable over 1850–70 but those to Valparaiso, on the Pacific rim, fell by 40 percent, as a consequence of the convergence of transport costs to the Pacific with those to the Atlantic coast of Latin America's Southern Cone.[81]

Geographic constraints would imply different outcomes for international trade across regions. Coastal regions, densely populated, and with temperate climates, would be at an advantage over hinterlands in tropical areas, especially if landlocked, because migration and infrastructure development become more difficult and incentives exist for coastal economies to impose costs on them.[82] Landlocked economies such as those of Bolivia and Paraguay, the interior regions of Mexico, Colombia, Brazil, and Argentina, and Andean countries such Ecuador and Peru were clearly at a disadvantage against coastal regions such as those of the Southern Cone and the Caribbean prior to railway expansion. In addition, countries on the Pacific rim had a transport cost disadvantage over those on the Atlantic. Table 13.4 provides some insights into the overall transport costs that emphasize the importance of internal costs of transportation.

Thus, we should expect wide regional discrepancies in Latin American integration into the international economy. In Mexico, independence brought an increase in openness and an end to laws restricting immigration and capital inflows. Trade grew from 8.1 percent of GDP in 1800 to 12.3 percent by 1845, according to Coatsworth.[83] Meanwhile, in Peru,

[80] Paul Schöller, "L'evolution séculaire des taux de fret et d'assurance maritimes 1819–1940," *Bulletin de l'Institute de Recherches Économiques et Sociales* 17, 5 (1951): 523, 540.

[81] Schöller, "L'evolution séculaire des taux de fret," 543. Freights to Buenos Aires and Valparaiso became equal by 1868 when, by 1850, transports costs to Chile were at least one-third higher than those to Buenos Aires.

[82] John Luke Gallup, Jeffrey D. Sachs, and Andrew D. Mellinger, "Geography and Economic Development," *International Regional Science Review*, 22, 2 (1999), 179–232.

[83] John H. Coatsworth, "The Decline of the Mexican Economy, 1800–1860," in Reinhard Liehr, ed., *América Latina en la época de Simón Bolívar. La formación de las economías nacionales y los intereses económicos europeos, 1800–1850* (Berlin, 1989), 38.

Table 13.4. *Transport costs in Latin America, c. 1842*

| | Average freight from England (Sterling per ton) | Internal transport cost from port to the capital (shilling per 200 lb.) |
|---|---|---|
| Peru | 4 | 2 |
| Mexico | 2.5 | 27.5 |
| Uruguay | 2 | 0 |
| New Granada | 2.5 | 90 |
| Bolivia | 4.5 | 38.5 |
| Ecuador | 4.5 | 30 |
| Chile | 3.75 | 4.75 |
| Argentina | 2 | 0 |
| Venezuela | 3 | 8.5 |

*Source:* Celia W. Brading, "Un análisis comparativo del costo de la vida en diversas capitales de Hispanoamérica (1842)," *Boletín Histórico de la Fundación John Boulton* 20 (1969): 229–66.

mercantilist policies remained in place. After an episode of trade expansion up to the mid-1820s, fixed prices, taxation, and protectionism remained as obstacles to economic activity. Only three decades later did the stimulus of international demand (the guano boom) open the country up.[84] Qualitative evidence on Central America suggests stagnation, but current imports from Britain almost doubled (while import prices were practically halving) between two peaks (1826 and 1839), to decline afterward.[85] There were few incentives to trade, because physical barriers implied high transport costs. Independence brought with it the breakup of colonial commercial networks and procedures. Links between regions of the Central American Federation weakened as export orientation increased. Together with political instability, this led to the creation of five new countries in 1839. An exogenous shock occurred as a consequence of the U.S. assimilation of California: new maritime routes through the Panama isthmus, together with the Panama railroad (1855), led to a sharp decline in transport costs, increasing trade and finance.[86] The economy of Buenos Aires profited from the disappearance of colonial regulations that forced it to trade through the metropolis. From reexporting silver from Alto Peru, Buenos Aires became an economy

[84] Quiroz, "Consecuencias económicas y financieras," 134–6.
[85] Lindo-Fuentes, "Consecuencias económicas de la independencia," 60.
[86] Lindo-Fuentes, "Consecuencias económicas de la independencia," 65–6.

Table 13.5. *Per capita exports and per capita British investment (U.S. dollars at current prices)*

| | Per capita exports | | | Per capita British investment | | |
|---|---|---|---|---|---|---|
| | 1830 | 1850 | 1870 | 1825 | 1865 | 1875 |
| Argentina | 2.0 | 10.3 | 16.5 | 9.2 | 8.4 | 51.6 |
| Bolivia | | 5.5 | 8.6 | | 0.0 | 5.4 |
| Brazil | 4.4 | 5.0 | 8.6 | 4.9 | 10.9 | 14.1 |
| Chile | 4.5 | 7.8 | 14.2 | 4.9 | 8.6 | 23.4 |
| Colombia | 2.5 | 1.9 | 6.6 | 28.5 | 13.4 | 6.9 |
| Costa Rica | | 11.4 | 21.2 | | 0.0 | 117.3 |
| Cuba | 17.7 | 22.2 | 45.9 | 0.0 | 10.4 | 5.1 |
| Dominican Republic | | 3.4 | 5.0 | | 0.0 | 18.7 |
| Ecuador | | 2.0 | 4.1 | | 8.8 | 8.8 |
| El Salvador | | 3.2 | 7.3 | | 0.0 | 0.0 |
| Guatemala | | 1.7 | 2.5 | | 0.4 | 2.4 |
| Honduras | | 4.9 | 3.6 | | 0.0 | 99.1 |
| Mexico | 1.8 | 3.2 | 2.3 | 6.2 | 14.1 | 15.0 |
| Nicaragua | | 3.7 | 3.5 | | 0.6 | 1.8 |
| Paraguay | | 1.3 | 7.2 | | 0.0 | 33.7 |
| Peru | 0.7 | 3.7 | 10.1 | 7.4 | 7.6 | 65.2 |
| Uruguay | | 54.9 | 46.6 | | 24.0 | 106.1 |
| Venezuela | 3.0 | 3.3 | 5.2 | 0.0 | 13.5 | 20.2 |
| Total | 6.4 | 5.2 | 8.9 | 5.8 | 9.5 | 20.4 |

*Sources:* Exports: Paul Bairoch and Bouda Etemad, *Structure par produits des exportations du Tiers-Monde 1830–1937* (Genevo, 1985); for 1830: Victor Bulmer-Thomas, *The Economic History of Latin America since Independence*, 2nd ed. (Cambridge, 2003); for 1850 and 1870: Irving Stone, "British Direct and Portfolio Investment in Latin America before 1914," *Journal of Economic History* 37, 3 (1977): 690–722.

exporting livestock products. The main consequence of independence was the opening to foreign trade and the desire to add new lands for cultivation and livestock.[87] In contrast to Spanish America, independence in Brazil did not involve a shift in the direction of trade.[88]

Table 13.5 provides current values of exports normalized by population. Though figures expressed at current prices preclude over-time comparisons,

[87] Amaral, "Del mercantilismo a la libertad," 208.

[88] Stephen H. Haber and Herbert S. Klein, "Consecuencias económicas de la independencia brasileña," in *La independencia americana: Consecuencias económicas*, 153–8.

they allow us to test the hypothesis of an uneven distribution of postindependence trade in Latin America for different points in time. As predicted, location conditioned the importance of trade, with the Southern Cone and the Caribbean being ahead of the rest of Latin American countries in terms of openness. The relative dispersion of per capita exports declined, however, over the entire period under consideration.[89] Evidence on capital inflow per head from Britain, the main country investing in Latin America, though exhibiting a different country pattern,[90] confirms the uneven integration of Latin American countries in international commodity and factor markets.[91]

To ascertain the extent to which Latin American integration into the international economy took place, we would need to deflate the nominal values presented in Table 13.5. British investment in real terms can be obtained by deflating it with the price index of the United Kingdom's exports, because those investments were used, at least in part, to purchase capital goods from Britain. Again, deflating current exports by the price of British exports provides a measure of the purchasing power of Latin American exports, because the United Kingdom was the main trading partner of the new republics (Table 13.6). Over forty years, the purchasing power of both exports (1830–70) and British investment (1825–65) per Latin American inhabitant increased noticeably, at an average annual rate of growth of 1.5 and 2.1 percent, respectively. Exports accelerated after 1850 and their per capita rate of growth moved up from 1.2 in 1830–50 to 1.8 over 1850–70, but British investment per head only took off after 1865, reaching a yearly growth rate of 9.1 percent between 1865 and 1875, a phenomenon linked to government loans and, to a lesser extent, associated with the shift of foreign investment toward railroad construction and public utilities.[92] On average, deflated British investment per head grew at 3.5 percent over the period 1825–75.

National estimates of the purchasing power of exports in terms of imports, also known as the income terms of trade, confirm our findings.

[89] As measured by the coefficient of variation of the relevant set of countries for each pair of adjacent time observations.

[90] The correlation coefficient between per capita exports and British investment is 0.38 in 1870–5.

[91] British investments amounted to more than three times French investments and more than four times U.S. investments in Latin America by 1913. Computed from figures in Carlos Marichal, ed., *Las inversiones extranjeras en América Latina, 1850–1930. Nuevos debates y problemas en historia económica comparada* (México, 1995), Appendix. The importance of British investment relative to those from other countries was even higher in earlier decades.

[92] Irving Stone, "British Direct and Portfolio Investment in Latin America before 1914," *Journal of Economic History* 37, 3 (1977): 694.

Table 13.6. *Per capita purchasing power of total exports and British investment (U.S. dollars at constant prices)*

| | Per capita purchasing power of exports | | | Per capita British investment | | |
|---|---|---|---|---|---|---|
| | 1830 | 1850 | 1870 | 1825 | 1865 | 1875 |
| Argentina | 2.0 | 15.9 | 21.5 | 9.2 | 12.0 | 84.9 |
| Bolivia | | 8.4 | 11.2 | | 0.0 | 8.9 |
| Brazil | 4.4 | 7.7 | 11.1 | 4.9 | 15.5 | 23.1 |
| Chile | 4.5 | 12.1 | 18.4 | 4.9 | 12.2 | 38.6 |
| Colombia | 2.5 | 2.9 | 8.6 | 28.5 | 19.0 | 11.4 |
| Costa Rica | | 17.6 | 27.5 | | 0.0 | 193.1 |
| Cuba | 17.7 | 34.3 | 59.6 | 0.0 | 14.8 | 8.4 |
| Dominican Republic | | 5.3 | 6.4 | | 0.0 | 30.7 |
| Ecuador | | 3.0 | 5.3 | | 12.4 | 14.4 |
| El Salvador | | 5.0 | 9.4 | | 0.0 | 0.0 |
| Guatemala | | 2.6 | 3.2 | | 0.6 | 4.0 |
| Honduras | | 7.6 | 4.7 | | 0.0 | 163.1 |
| Mexico | 1.8 | 4.9 | 3.0 | 6.2 | 20.1 | 24.7 |
| Nicaragua | | 5.7 | 4.5 | | 0.9 | 2.9 |
| Paraguay | | 2.0 | 9.3 | | 0.0 | 55.4 |
| Peru | 0.7 | 5.8 | 13.1 | 7.4 | 10.8 | 107.4 |
| Uruguay | | 84.8 | 60.5 | | 34.1 | 174.7 |
| Venezuela | 3.0 | 5.0 | 6.7 | 0.0 | 19.1 | 33.2 |
| Total | 6.4 | 8.1 | 11.6 | 5.8 | 13.5 | 33.6 |

*Notes:* Current values deflated with British export price index. Exports and investment at 1830 prices and 1825 prices, respectively.
*Sources:* See Table 13.5 and Brian R. Mitchell, *British Historical Statistics* (Cambridge, 1988).

Cuba's income terms of trade improved substantially (277 by 1867, 1826 = 100) because of supply increases in sugar exports.[93] In Mexico, no trend was exhibited over 1828–51, but then a sharp improvement took place up to the 1880s.[94] In Colombia, real exports per capita doubled between the late 1830s and 1880, but probably did not recover the 1800 level until 1870, whereas income terms of trade trebled between the 1830s and the 1860s.[95] In Brazil,

[93] Linda K. Salvucci and Richard J. Salvucci, "Cuba and the Latin American Terms of Trade: Old Theories, New Evidence," *Journal of Interdisciplinary History* 31, 2 (2000): 197–222.
[94] Richard J. Salvucci, "Origins and Progress of U.S.–Mexican Trade, 1825–1884: 'Hoc opus, hic labor est,'" *Hispanic American Historical Review* 71, 4 (November 1991): 697–735.
[95] José Antonio Ocampo, *Colombia y la economía mundial, 1830–1910* (Bogotá, 1984), 89, 98.

real exports per capita were multiplied by three between the 1820s and the 1850s and by four between the 1820s and the 1870s. Leff shows a substantial improvement in Brazilian income terms of trade at an annual trend rate of 4.2 percent over 1822–49 (2.8% in per capita terms).[96] Argentina also experienced a remarkable increase in the quantity and the purchasing power of its exports.[97] Chilean real per capita exports, in turn, were multiplied by seven between independence and 1870.[98] Preliminary computations for Latin American income terms of trade with Britain suggest that they were multiplied by more than five over the three decades after independence, and up to twelve times if the whole period 1825–75 is considered (Table 13.7).

In the trade literature, the net barter terms of trade, that is, the ratio of export to import prices, which provides a measure of the purchasing power per unit of exports, have been depicted as a "productivity index" of trade. Recent research provides estimates of net barter terms of trade for the major Latin American countries (Table 13.8). In Mexico the net barter terms of trade experienced moderate improvement between 1828 and 1881 (at 1.4% per year) and probably added 3 percent to GDP by 1860.[99] Brazilian purchasing power per unit of exports improved by three-fourths between 1826–30 and 1876–80.[100] José Antonio Ocampo shows that Colombia's net barter terms of trade improved as much as Brazil's between the late 1830s and 1880.[101] Linda and Richard Salvucci, on the basis of Gootenberg's data, were able to establish that Peru's net barter terms of trade were 47 percent higher in the early 1850s than in the 1830s.[102] For Argentina, Carlos Newland shows an improvement that peaked in the late 1850s.[103] Demand for exports increased due to international trade expansion and European industrialization. The growth of inputs used by the pastoral economy and productivity increases were behind the supply expansion. Newland suggests that the domestic terms of trade, that is, those perceived by the Argentine

[96] Leff, *Underdevelopment and Development*, 83.

[97] Carlos Newland, "Exports and Terms of Trade in Argentina, 1811–1870," *Bulletin of Latin American Research* 17, 3 (1998): 409–16.

[98] José, Díaz, Rolf Lüders, and Gert Wagner, "Economía chilena 1810–1995: Evolución cuantitativa del producto total y sectorial" (Pontificia Universidad Católica de Chile, Instituto de Economía, Documento de Trabajo no. 186, 1998).

[99] Salvucci, "The Mexican Terms of Trade."

[100] Leff, *Underdevelopment and Development*, 82.

[101] Ocampo, *Colombia y la economía mundial*, 93.

[102] Linda Salvucci and Richard Salvucci, "Cuba and the Latin American Terms of Trade," 216. Paul Gootenberg, *Between Silver and Guano. Commercial Policy and the State in Postindependence Peru* (Princeton, NJ, 1989).

[103] Newland, "Exports and Terms of Trade in Argentina," 412.

Table 13.7. *Purchasing power of Latin American exports to Britain, 1794/6–1874/6 [1824/6 = 100]*

| | Latin American exports to | | | | Latin American income terms of trade | |
|---|---|---|---|---|---|---|
| | Britain (c.i.f.) (sterling) [I] | Current value index [II] | Implicit price of U.K. exports [III] | Imlah's price of U.K. exports [IV] | [V] [II/III] | [VI] [II/IV] |
| 1794/6 | 275 | 8.8 | 166.7 | 164.7 | 5.3 | 5.4 |
| 1804/6 | 1270 | 40.8 | 197.2 | 189.5 | 20.7 | 21.6 |
| 1814/6 | 6227 | 200.3 | 149.6 | 154.9 | 133.9 | 129.3 |
| 1824/6 | 3109 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1834/6 | 3380 | 108.7 | 71.6 | 77.9 | 151.8 | 139.6 |
| 1844/6 | 4905 | 157.8 | 53.6 | 59.3 | 294.3 | 266.1 |
| 1854/6 | 9698 | 311.9 | 53.5 | 54.8 | 583.1 | 569.1 |
| 1864/6 | 22933 | 737.6 | | 70.4 | | 1048.0 |
| 1874/6 | 24133 | 776.2 | | 60.8 | | 1277.5 |

*Sources:* Ralph Davis, *The Industrial Revolution and British Overseas Trade* (Leicester, 1979), col.(I), 1794/6–1854/6, col (III); Mitchell, *British Historical Statistics*, col. (I), 1864/6–1874/6, col. (IV).

Table 13.8. *Net barter terms of trade of Latin American countries, 1811/15–1876/80 [1836/40 = 100]*

| | Cuba | Mexico | Colombia | Brazil | Argentina |
|---|---|---|---|---|---|
| 1811/15 | | | | | 61 |
| 1816/20 | | | | | 76 |
| 1821/25 | | | | | 115 |
| 1826/30 | 108 | 84 | | 94 | 127 |
| 1831/35 | 100 | 95 | | 107 | 125 |
| 1836/40 | 100 | 100 | 100 | 100 | 100 |
| 1841/45 | 102 | 98 | 124 | 97 | 108 |
| 1846/50 | 86 | 101 | | 109 | 104 |
| 1851/55 | 69 | 106 | | 120 | 123 |
| 1856/60 | 62 | 100 | 157 | 115 | 165 |
| 1861/65 | 53 | 79 | | 120 | 127 |
| 1866/70 | 56 | 94 | 127 | 89 | 105 |
| 1871/75 | 57 | 104 | 139 | 147 | |
| 1876/80 | 57 | 116 | 178 | 173 | |

*Sources:* Cuba: Linda K. Salvucci and Richard J. Salvucci, "Cuba and the Latin American Terms of Trade: Old Theories, New Evidence," *Journal of Interdisciplinary History* 31, 2 (2000): 197–222; Mexico: Richard J. Salvucci, "Origins and Progress of U.S.–Mexican Trade, 1825–1884: 'Hoc opus, hic labor est,'" *Hispanic American Historical Review* 71, 4 (Nov. 1991): 697–735; Colombia: José Antonio Ocampo, *Colombia y la economía mundial, 1830–1910* (Bogotá, 1984); Brazil: Nathaniel H. Leff, *Underdevelopment and Development in Brazil* (London, 1982); Carlos Newland, "Exports and Terms of Trade in Argentina, 1811–1870," *Bulletin of Latin American Research* 17, 3 (1998): 409–16.

population, should have improved more dramatically than the international terms of trade as independence allowed Argentina to trade directly in world markets, colonial tariffs were repealed, and the new 1820s tariffs were lower. Last, lower transport costs and the increase in the scale of trade helped reduce margins in international trade. Only Cuba provides an exception, as its net terms of trade deteriorated between 1826 and 1866 by 50 percent. When adjusted for productivity changes in the export sector (the so-called single-factorial terms of trade), no trend appears between 1826 and 1846 and then a decline by 61 percent up to 1862.[104]

Evidence tends, therefore, to reject the old view of deteriorating terms of trade that hindered Latin American growth precisely at the time

[104] Linda Salvucci and Richard Salvucci, "Cuba and the Latin American Terms of Trade," 204–7.

(1820s–70s) when large international disparities in income began to emerge. On the combined evidence provided by the evolution of the relative price of exports (Table 13.8) and the purchasing power of total exports (Tables 13.6 and 13.7), the idea of immiserizing growth can be rejected for most of Spanish America and for Brazil.[105]

On the whole, it seems warranted to say that release from the colonial trade burden yielded net gains for the economies of Latin America, as the evolution of the quantities and prices of exported goods suggests. Although trade did not have the strength to pull up the economy as a whole, it can be argued that, when not hindered by geographic and institutional barriers, trade facilitated export-led economic growth. Trade in nineteenth-century Latin America, especially after 1850, seems to have been, in most national cases, a handmaiden of growth.[106]

The opening up to the international economy has been associated with a widening of income differences within and between countries. No evidence is available on the former for the pre-1870 period, with the exception of Argentina, for which Carlos Newland and Javier Ortiz have shown that the expansion in the pastoral sector resulting from improved terms of trade increased the reward of capital and land, the most intensively used factors, whereas the farming sector contracted and the returns of its intensive factor, labor, declined, as confirmed by the drop in nominal wages.[107] A redistribution of income in favor of owners of capital and land (*estancieros*) at the expense of workers took place. Williamson's findings for 1870–1914 also suggest an increase in inequality within countries in Latin America, which confirms empirically the Stolper–Samuelson theoretical predictions.[108] The argument follows that, because natural resources were the abundant

[105] That is, when an increase in production depresses the price of exports relative to imports so much that the gains in output are swamped by the loss of purchasing power for imports. For a theoretical discussion of the concept, see Jadish Bahgwati, "Immiserizing Growth: A Geometric Note," *Review of Economic Studies* 25, 3 (1957–8): 201–5.

[106] See Irving B. Kravis, "Trade as a Handmaiden of Growth: Similarities between the Nineteenth and Twentieth Centuries," *Economic Journal* 80 (1970): 850–72. The export-led growth approach has been rejected by Leff and Catao for Brazil and Mexico. See Leff, *Development and Underdevelopment*, and Luis Catao, "The Failure of Export-Led Growth in Brazil and Mexico c. 1870–1930" (University of London Institute of Latin American Studies Research Papers No. 31, 1992). Bulmer-Thomas downplays the role of trade in promoting Latin American growth in *Economic History of Latin America*. Rafael Dobado and Gustavo Marrero, on the other hand, argue that there was export-led growth in colonial Mexico in "Minería, crecimiento y costes de la independencia en México," *Revista de Historia Económica* 19, 3 (2001): 573–611.

[107] Carlos Newland and Javier Ortiz, "The Economic Consequences of Argentine Independence," *Cuadernos de Economía* 115 (2001): 275–90.

[108] Jeffrey G. Williamson, "Real Wages, Inequality, and Globalization in Latin America before 1940," *Revista de Historia Económica* 17 (1999): 101–42.

productive factor in Latin America, they were more intensively used in the production of exportable commodities. As a result, returns to land grew relative to returns to labor. Because the ownership of natural resources is more concentrated than that of labor, income distribution tended to be skewed toward landowners and inequality rose over the decades prior to World War I.

## DID LATIN AMERICA FALL BEHIND?

Is the widespread perception of Latin America falling behind supported by the available evidence? And, more closely related to the topic of this chapter, can Latin American economic backwardness be related to the way in which independence occurred?

Evidence on aggregate economic performance across countries shows a wide variance. In the main centers of the former Spanish empire, Mexico and Peru, wartime destruction of fixed capital, capital flight, silver drain through trade deficits, and a mining depression, together with fiscal mismanagement and political turmoil, all contributed negatively to growth. Public debt, it has been suggested, crowded out investment.

A widely accepted perception is that the Mexican economic decline had already started before independence and lasted until the 1870s. According to Coatsworth's estimates, output fell by 2 percent and per capita income by 21 percent (−0.5% yearly) between 1800 and 1845 (and by −0.57% over 1800–60).[109] Maddison estimates are close to Coatsworth's figures for Mexico's real GDP per head.[110] Richard and Linda Salvucci suggested, alternatively, that, in real terms, output grew by 30 percent over 1800–40 while population rose by 9 percent, implying that output per head increased by 21 percent or 0.5 percent annually.[111] This revisionist picture has been rejected by Richard Salvucci, who now claims that prolonged stagnation or decline of per capita income is a better depiction of Mexican economic performance over 1800–40.[112]

[109] Coatsworth, "The Decline of Mexican Economy," 31, 41. This view is shared by Enrique Cárdenas, "A Macroeconomic Interpretation of Nineteenth-Century Mexico," in *How Latin America Fell Behind*, 65–92.

[110] Maddison, *Monitoring the World Economy 1820–1992* (Paris, 1995), 143.

[111] Richard and Linda Salvucci, "Las consecuencias económicas de la independencia mexicana," 41.

[112] Richard J. Salvucci, "Mexican National Income in the Era of Independence, 1800–1840," in *How Latin America Fell Behind*, 234–5.

The causes of the long depression of the Mexican economy are the subject of an intense historical debate.[113] Among the reasons adduced for sluggish growth, the main one is the decline in silver production, which did not recover until the 1860s. The fall in silver output led to a drop in employment and expenditure and to a contraction of the money supply. Abandonment and flooding of mines and the high price of mercury, used to refine silver, lie behind the collapse of mining. Rafael Dobado and Gustavo Marrero have argued that the slow recovery of silver output, a consequence both of the economic policies followed in postindependence Mexico and of the changes in the international market for mercury, severely hindered Mexican economic growth.[114] According to Dobado and Marrero, Spain, a major world supplier of mercury, no longer supplied the Mexican mines at prices below those prevailing internationally. Mexico had to purchase mercury in the international market, where prices kept rising during the early nineteenth century.

In Peru, as in Mexico, the republican state, laboring under chronic fiscal deficits, increased taxation on mining. Silver mining declined until the 1840s. High mercury prices and interest rates, obsolete technology, and taxes all contributed to impede recovery.[115] In short, independence at the core of the colonial empire did not deliver the conditions for sustained economic growth.

Slave economies offer a distinct pattern, because they did not undergo a deep political and institutional transformation. Cuba remained loyal to Spain and experienced sustained progress until the 1860s.[116] Brazil's economy was characterized by low rates of growth, free trade, and limited structural change, although remaining politically stable. According to Leff, per capita income rose at a moderate pace during the nineteenth century.[117] Economies in the Southern Cone showed, in turn, sustained economic progress after independence. Chilean GDP per head grew at 0.9 percent over 1810–60, while population grew at 1.6 percent annually, with most of the improvement in per capita income taking place after 1830.[118] In Argentina, all economic indicators suggest fast growth led by the Buenos

[113] Cárdenas, "A Macroeconomic Interpretation of Nineteenth-Century Mexico," and Coatsworth, "The Decline of the Mexican Economy." More recently, Dobado and Marrero, "Minería, crecimiento y costes de la independencia en México."

[114] Dobado and Marrero, "Minería, crecimiento y costes de la independencia en México," 598–607.

[115] Quiroz, "Consecuencias económicas y financieras," 129–33, 143.

[116] Pedro Fraile, Richard J. Salvucci, and Linda K. Salvucci, "El caso cubano: Exportaciones e independencia," in *La independencia americana: Consecuencias económicas*, 80–101.

[117] Leff, *Underdevelopment and Development*, 1:33.

[118] Díaz, Lüders, and Wagner, "Economía chilena 1810–1995."

Aires region. Increases in population and labor force, urbanization, and a significant rise in total factor productivity in livestock production are among the distinctive features of postindependence Rio de la Plata.[119]

How do Latin American countries compare to other countries? Did Latin America, as stressed in the literature, fall behind before 1870?

Maddison's international set of real GDP per head estimates provides the opportunity to place Latin America in a wider comparative framework.[120] A first glance at the evolution of per capita income levels throughout the nineteenth and twentieth centuries (Table 13.9) suggests that, relative to the United States, three distinctive phases appear: a first one of decline up to 1870 for the three countries for which estimates are available (Brazil, Chile, and Mexico), followed by relative stability from 1870 to 1950 for the six main Latin American countries for which information exists, and then a decline until the present, which would only begin in 1973 if Latin America as a whole is considered.[121] Thus, in the binary comparison with the United States, only the pre-1870 and the post-1950 periods can be deemed responsible for today's Latin American underdevelopment.

If a country-by-country analysis is preferred for the nineteenth century, then the scant estimates available suggests that Mexico and Brazil fell behind the United States over 1820–70, but that this was not the case for Chile (Table 13.9).[122] Between 1870 and 1913, Latin American national experiences varied widely, with Mexico and the Southern Cone economies catching up, whereas the economies of Brazil and Cuba were falling behind.[123]

[119] Carlos Newland, "Economic Development and Population Change: Argentina, 1810–1870," in John H. Coatsworth and Alan M. Taylor, eds., *Latin America and the World Economy since 1800* (Cambridge, MA, 1998), 207–22; Newland, "Exports and Terms of Trade"; Carlos Newland and Barry Poulson, "Purely Animal: Pastoral Production and Early Argentine Economic Growth 1825–1865," *Explorations in Economic History* 35, 3 (1998): 325–45.

[120] Alternative and more comprehensive estimates are provided for Latin America by Pablo Astorga and Valpy Fitzgerald, in Rosemary Thorp, *Progress, Poverty and Exclusion. An Economic History of Latin America in the 20th Century* (Washington, DC, 1998), Statistical Appendix. However, they do not include other parts of the world. Maddison's estimates have a wider country coverage and have been preferred here in spite of their conjectural nature for many developing countries in the past and the index number problem derived from using a fixed 1990 benchmark for space and time comparisons. Cf. Prados de la Escosura, "International Comparisons."

[121] A comparison between Latin America's position relative to the United States in Maddison's estimates (Table 13.9) and Astorga and Fitzgerald (Table 13.1) show discrepancies; in the latter the decline occurred after 1980 and the relative positions were similar in 1950 and 1995. Such discrepancies derive not only from the country coverage of each estimate but from the use of different single benchmarks – 1970 in the case of Astorga and Fitzgerald and 1990 in the case of Maddison.

[122] Estimates are based on guesses such as Angus Maddison's estimates for Brazil in *Monitoring the World Economy*, 143, or are obtained indirectly from export and fiscal data as in the case of Chile, in Díaz, Lüders, and Wagner, "Economía chilena 1810–1995."

[123] Fraile, Salvucci, and Salvucci, "El caso cubano," 83, 91, 101. The authors suggest that Cuban GDP per head stagnated in the late nineteenth century after experiencing growth over 1800–50.

Table 13.9. *Relative levels of GDP per head, 1820–1998 [U.S. = 100] (1990 international Geary–Khamis dollars)*

| | 1820 | 1870 | 1913 | 1950 | 1973 | 1998 |
|---|---|---|---|---|---|---|
| Argentina | | 43.4 | 72.7 | 52.2 | 47.8 | 33.7 |
| Brazil | 51.4 | 29.2 | 15.3 | 17.5 | 23.3 | 20.0 |
| Chile | 48.3 | 53.0 | 55.6 | 38.6 | 29.9 | 35.7 |
| Colombia | | | 23.3 | 22.5 | 21.0 | 19.5 |
| Cuba | | | 68.9 | 35.5 | 19.4 | 7.9 |
| Ecuador | | | 18.1 | 19.8 | 19.3 | 15.2 |
| Mexico | 60.4 | 27.6 | 32.7 | 24.7 | 29.0 | 24.3 |
| Peru | | | 19.6 | 23.7 | 23.7 | 13.4 |
| Uruguay | | 82.0 | 62.4 | 48.7 | 29.8 | 30.4 |
| Venezuela | | 23.3 | 20.8 | 78.0 | 63.7 | 32.8 |
| Latin America (6) | 53.4* | 43.1 | 43.2 | 43.3 | 37.2 | 29.5 |
| Latin America (10) | | | 38.9 | 36.1 | 30.7 | 23.3 |
| Latin America | | | | 26.7 | 27.1 | 21.2 |
| Africa | 33.3 | 18.2 | 11.0 | 8.9 | 8.2 | 5.0 |
| Northern Africa | | | 14.5 | 12.2 | 10.9 | 10.7 |
| Asia | 46.1 | 22.6 | 12.8 | 7.5 | 10.3 | 13.0 |
| Asia (excl Japan) | 45.7 | 22.2 | 12.1 | 6.6 | 7.4 | 10.7 |
| China | 47.7 | 21.7 | 10.4 | 4.6 | 5.0 | 11.4 |
| India | 42.4 | 21.8 | 12.7 | 6.5 | 5.1 | 6.4 |
| Rest of Asia | 44.9 | 24.7 | 15.0 | 9.7 | 12.4 | 13.7 |
| Eastern Europe | 50.6 | 35.6 | 28.8 | 22.2 | 29.9 | 20.0 |
| Former USSR | 54.8 | 38.6 | 28.1 | 29.6 | 36.3 | 14.2 |
| Western Europe | 98.0 | 80.7 | 65.5 | 48.0 | 69.1 | 65.6 |
| United States | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Per capita GDP level (*1990* $) | | | | | | |
| United States | 1257 | 2445 | 5301 | 9561 | 16689 | 27331 |

* Only Brazil, Chile, and Mexico are included in 1820.

*Sources:* Angus Maddison, *The World Economy, A Millennial View* (Paris, 2001) except for Cuba and Ecuador for 1913, derived from Astorga and Fitzgerald, "Statistical Appendix"; Chile, 1820–1990, from José Díaz, Rolf Lüders, and Gert Wagner, "Economía chilena, 1810–1995: Evolución cuantitativa del producto total y sectorial" (Pontificia Universidad Católica, Instituto de Economía, Documento de Trabajo no. 186, 1998); and Argentina prior to 1950, from Roberto Cortés Conde, *La economía argentina en el largo plazo* (Buenos Aires, 1997), which have been spliced to Maddison's levels.

The assessment of Latin American performance has been carried out, so far, using the United States as the relevant benchmark. The fact that, over the nineteenth century, most countries, including those of Western Europe, fell behind when measured by U.S. standards renders the U.S. yardstick questionable. When, instead, Latin America's performance is compared to that of other regions of the world, the picture changes dramatically.[124] First, over 1820–70, the decline relative to the United States for the three countries for which some reliable information exists (Brazil, Chile, and Mexico) is deeper than in Western Europe but similar to southern and Eastern Europe and the Russian empire and much milder than in Africa and Asia. So, even though Latin America's position worsened in relation to the United States and Western Europe it remained unaltered in comparison to Eastern Europe and improved in comparison to the rest of today's Third World. Second, during the phase of the first era of globalization, 1870–1913, Latin America was the single major world region that did not worsen its position relative to the United States, hence improving vis-à-vis the rest of the world. Third, in the early twentieth century Latin America was (along with the Soviet Union) the only world region that did not yield to the U.S. economic advance. Fourth, the half century since 1950 inverted the picture. In losing ground to the United States over the golden age (1950–73) Latin America was joined by only India and Africa, as most regions in the world experienced a process of catching up to the United States. Finally, the post-1973 era, allowing for substantial income differentials, placed Latin America alongside Eastern Europe, the USSR (and its former members), and sub-Saharan Africa, all of which worsened their position relative to the United States as the Asian countries improved.

To sum up, over the nineteenth century Latin America's performance was better than that of other regions of today's Third World and the European periphery. Conversely, the fact that Latin America's position relative to the United States remained mostly unaltered between 1950 and 1973 is at odds with the catching up experienced in large areas of the periphery (southern and Eastern Europe, Southeast Asia), where the gap with the United States in terms of income per head was significantly reduced. Latin America again underperformed relative to Asia after 1973. In other words, blaming Latin America's retardation on falling behind the United States over the

[124] Because Table 13.9 is constructed using the United States as 100 for each benchmark year, the comparison between Latin America and other world regions is made relative to the United States, but the use of Geary–Khamis dollars implies that a multilateral comparison is carried out regardless of the country used as reference.

nineteenth century is a shortsighted conclusion that tends to transpose the widely accepted view of today's Latin America as underachieving to the distant past.

## CONCLUDING REMARKS

Disorder after independence increased transaction costs as political and economic institutions were redefined through a lengthy and painful process. Though qualitative evidence varies from country to country, for Latin America as a whole in the first half of the nineteenth century it is far from clear that the gains from eliminating the fiscal burden offset the tax increases needed to cover the expanding governmental expenses that accompanied independence. The collapse of the Spanish empire showed that its institutions, though inefficient, had helped by reducing transaction costs.

Release from the colonial trade burden produced, in turn, net gains for the economies of Latin America, as the favorable evolution of quantities and the relative prices of goods exported suggests. Trade did not have the strength to pull the rest of the economy, as in the export-led growth model, but whenever geographic and institutional barriers did not impede it, trade represented a handmaiden of growth.

The opening up to the international economy was associated with a deepening of income differences within and across countries. No evidence is available on within-countries income distribution for the pre-1870 period, with the exception of Argentina, where the expansion of the pastoral sector resulting from improved terms of trade increased rewards to the intensively used factors (capital and land), whereas the farming sector contracted and the returns of its intensive factor (labor) declined. A redistribution of income in favor of owners of capital and land took place. Williamson's findings for the four decades prior to World War I confirm the increase of inequality within Latin American countries.

The growth of real income per capita in Latin America was nearly 1 percent per year between independence and the eve of World War I.[125] In comparative terms, Latin America's performance was often better than in other parts of today's Third World and the European periphery. In the half

[125] Computed from Table 13.9 for the unweighted average of the three countries, Brazil, Chile, and Mexico, for which estimates of real income per head are available.

century following independence (1820–70), real product per head grew less, probably not far below 0.5 percent per year, but the region's decline relative to the United States was similar to that of southern and Eastern Europe and the Russian empire, and much milder than in the cases of Africa and Asia. Later, in the first episode of globalization (1870–1913), Latin American GDP per head grew above 1.5 percent yearly and Latin America was the only world region that did not worsen its position relative to the United States and did improve noticeably with respect to the rest of the world.[126]

The inheritance of Spanish *ancien régime* institutions in Latin America as opposed to nonabsolutist (post-1688) institutions in British America does not seem to be a solid argument explaining different performances any longer, especially if the scope is widened to include the postindependence performance of the British and French ex-colonies in Africa and Asia. British North America appears as an exceptional example of success that cannot be used as a yardstick against which to measure Latin America's performance. No definitive answer has been provided here, but it seems clear that before jumping to the usually negative conclusion about Latin America's performance in the nineteenth century, a more rigorous examination is required to establish whether Latin America managed to exploit real growth potential after independence.

A series of questions that deserve further research emerge from this discussion. Had Latin America become independent later, at the time of the first wave of globalization, would economic growth have been more intense and widespread? A positive answer to this counterfactual would reinforce Christopher Platt's assertion that "domestic circumstances" shaped nineteenth-century Latin America.

Did independence cause deglobalization in the half century between 1820 and 1870? In another chapter, Luis Bértola and Jeffrey Williamson argue that the fiscal needs of the new republics, exacerbated by fighting wars, led to raising tariffs and, consequently, to isolating Latin American from world markets.[127] A more important effect of the way independence occurred was the destruction of the colonial customs and monetary union, which represented a serious blow to the economic integration of Latin America. Would an economically united Latin America have been more integrated into the world economy? How much higher, if any, would per capita GDP have been under a United States of Latin America?

[126] Computed from Table 13.9 for the unweighted average of the six Latin American countries for which estimates of real income per head are available.

[127] Jeffrey G. Williamson, "Real Wages, Inequality, and Globalization."

A systematic comparison to other postcolonial development experiences elsewhere may help in assessing Latin America's achievements and shortcomings after independence. Would such an exercise support John Coatsworth's idea that the long-run benefits of independence were far larger than its costs?

A final word deserves inclusion in the agenda for quantitative research on Latin America's economic performance over 1820–70. Trends in population, urbanization, literacy, and wages, together with trade and fiscal revenues and expenditures per head, are correlated with economic growth and could be reasonably reconstructed for Latin American countries. Gathering such data will allow us to assess economic performance across countries. Preliminary findings about literacy, urbanization, and life expectancy suggest that some advances, though unevenly distributed, took place in the half century after independence.[128]

[128] Cf. Paul Bairoch, *Cities and Economic Development. From the Dawn of History to the Present* (Chicago, 1988); and Carlos Newland, "La educación elemental en Hispanoamérica: Desde la independencia hasta la centralización de los sistemas educativos nacionales," *Hispanic American Historical Review* 71, 2 (1991): 335–64.