

This PDF is a selection from a published volume from the
National Bureau of Economic Research

Volume Title: Understanding Long-Run Economic Growth:
Geography, Institutions, and the Knowledge Economy

Volume Author/Editor: Dora L. Costa and Naomi R.
Lamoreaux

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-11634-4

Volume URL: <http://www.nber.org/books/cost10-1>

Conference Date: November 7-8, 2008

Publication Date: August 2011

Chapter Title: Kenneth Sokoloff on Inequality in the
Americas

Chapter Author: Peter H. Lindert

Chapter URL: <http://www.nber.org/chapters/c12005>

Chapter pages in book: (p. 363 - 372)

Kenneth Sokoloff on Inequality in the Americas

Peter H. Lindert

His forays into the comparative history of inequality amply demonstrate Ken Sokoloff's versatility. Ken and his collaborators amassed a novel comparative history with a clear pattern: the explanation of both inequality and slow growth in Latin American and the U.S. South before the middle of the twentieth century lies in the sources of institutional differences, sources that were themselves inegalitarian by design. The main culprit was the concentration of political voice, fostered by accidents of history. Its weapons featured policies toward land allocation, mass education, migration, and the tax structure.

The freshness of this departure would have been less obvious if his previous works had been marching in the same direction, offering previews of this later project. Yet only one of his previous projects adumbrated the exploration of inequality in the Americas that Ken undertook with Stan Engerman and others in his last dozen years of research. That one preview of strong interest in inequality took the form of a solid result rather than a theory or expression of personal preference. His work on patent history, both solo and in collaboration with Zorina Khan, supported a clearly egalitarian finding—relative to the patent systems of other countries, the patent system of early America gave much greater encouragement to technological advances by ordinary people, giving an egalitarian twist to American economic growth up to the late nineteenth century.

Revealing the hidden democracy in America's approach to patents may have encouraged Ken to think further about inequality between the regions of the United States, and between this nation and others. Those topical links

Peter H. Lindert is Distinguished Professor of Economics at the University of California, Davis, and a research associate of the National Bureau of Economic Research.

may have been forged as early as his doctoral thesis. By the end of the 1980s, at least, he was quite prepared to venture into the comparative history of inequality, and was discussing these issues with Stanley Engerman. When Steve Haber approached Ken about contributing to a 1992 conference on how Latin America fell behind, there was no need for Ken and Stan to start from square one, and the first in a cycle of widely cited papers was soon being revised and edited.¹

This essay describes the evolving project that tied inequality to just about every other major force in the economic and political history of the Americas. Thanks to the richness of their reading of history, Engerman, Sokoloff, and coauthors were pioneers in realizing the value of a cross-sectional analysis of all of the Americas for the purpose of explaining differences in growth and inequality. Like the team of Daron Acemoglu, Simon Johnson, and James Robinson,² they exploited exogenous international differences from centuries earlier. Yet they made (most of) their strong *prima facie* case without econometrics. Rather, they mined the vast expanse of the Western Hemisphere's comparative history for its nuggets of valid approximations to natural experiments. Relative to today's state-of-the-art econometric findings from randomized experiments, their technique traded away from statistical reliability of any one test, toward the stronger suggestive power of a broader historical database.³ While this strategy makes it harder to fashion short articles that satisfy journal editors and referees, it has the offsetting advantage of sparking a further wave of research.

12.1 The Vast Nexus: Daring to Link Inequality and Growth with Nearly Everything

Scholars who care deeply about the sources of economic development are immediately confronted with the daunting fact that there are so many possible causal links that need testing. At a minimum, scholars as a group must test all of the causal arrows pointing from relatively exogenous variables to endogenous variables in figure 12.1. In slightly greater detail, these are

Causal Arrow A: Accidents of political history shape institutions.⁴

Causal Arrow B: Factor endowments shape institutions (e.g., endowments of land, minerals, forests, sweat-crop geography, skilled labor, and unskilled labor all shape land policy, migration policy, ownership of labor, and tax laws).⁵

1. Engerman and Sokoloff (1997). I am indebted to Stan Engerman and Steve Haber for their recollections.

2. Acemoglu, Johnson, and Robinson (2001, 2002).

3. Students have reported that Ken often advised them at the onset of their thesis formation, "Just plot the data and see what they seem to show."

4. Engerman and Sokoloff (2005, 2008, chapter 1, this volume).

5. Engerman and Sokoloff (2008, chapter 1, this volume).

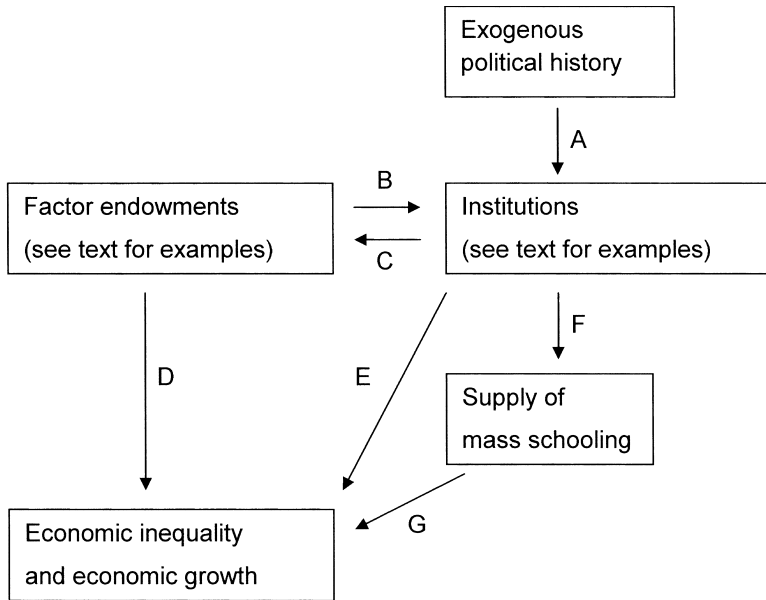


Fig. 12.1 A causal nexus shaping the history of inequality and growth

Causal Arrow C: Institutions shape factor endowments.⁶

Causal Arrow D: Factor endowments directly affect the inequality-growth mix.⁷

Causal Arrow E: Institutions directly affect the inequality-growth mix.⁸

Causal Arrow F: Institutions affect the supply of mass schooling.⁹

Causal Arrow G: The supply of mass schooling affects economic inequality and growth.¹⁰

6. Engerman and Sokoloff (chapter 1, this volume).

7. Engerman and Sokoloff (1997, 2002).

8. See Engerman and Sokoloff (1997, 2002, 2008) and Sokoloff and Zolt (2006). Their work is used by De Ferranti et al. (2004), Frankema (2009), Nugent and Robinson (forthcoming), and the special issue of *Revista de Historia Económica* (forthcoming), among others.

Here I omit any causal arrows running between economic inequality and economic growth. One should avoid trying to draw causal arrows between two endogenous variables that are driven by overlapping sets of exogenous forces. By analogy, one should not strain to decide whether price drives quantity or vice versa, when both are codetermined by exogenous influences on supply and demand. Engerman and Sokoloff and their coauthors also avoid this trap. While certain of their passages might seem to imply that “inequality” retarded economic growth in Latin America, they are careful to link that inequality to its inegalitarian exogenous sources.

9. Engerman, Mariscal, and Sokoloff (2002, 2009); Mariscal and Sokoloff (2000). Their lead has been followed by Latika Chaudhury’s (2009) comparative analysis of the institutional determinants of education finance across the regions of India, and also by Go and Lindert (2010), and Lindert (2010).

10. Engerman, Mariscal, and Sokoloff (2002, 2009); Mariscal and Sokoloff (2000); Frankema (2009).

Only the most energetic would succeed in advancing our collective knowledge about all of these. Engerman and Sokoloff have done so in their comparative history of the Americas, exploring all the causal arrows in figure 12.1. These collaborative writings are widely cited, and other authors have followed their lead.

12.2 Which Sources Make the Best Exogenous Instruments?

“Improving our knowledge of whether institutions are exogenous or endogenous, and of how flexible they are in adapting to changes in conditions, is crucial to gaining a good understanding of their role in economic development.”
—Engerman and Sokoloff, this volume

It is never easy to sort out such intertwining relationships, and like the human figures in the famous sculpture of Laocoön and his sons, Engerman and Sokoloff had their hands full. Still, it is fair to say that theirs is the best summary of the profession’s judgment of the sources of Latin American inequality. Here I offer only some guesses about which of the links they studied are strongest, and where future research efforts are most likely to concentrate.

It seems likely that the arrows on the right-hand side of figure 12.1 will be reaffirmed and reinforced more than those involving factor endowments. Their evidence on the role of political voice continues to stand up under further study, especially in its effects working through the denial of subsidies for mass schooling (arrows A, E, and F, plus the not-so-controversial G). In the next decade, I expect other scholars to reinforce these links with time-series natural experiments to supplement the heavily cross-sectional evidence they produced in such abundance. The enrichment of our knowledge of changes in Latin American inequality over time has already begun, prodded largely by the views of Engerman and Sokoloff.¹¹ Structural break analysis may soon follow, relating changes in education policies and tax structure to regime changes.

Such an emphasis on the exogenous sources of inegalitarian policies is likely to crowd out the emphasis on the role of factor endowments, featured on the left-hand side. Granted, the Engerman-Sokoloff contribution to this volume plausibly argues that factor endowments help to explain differences in American countries’ institutions regarding immigration.

Yet three other sets of comparative studies tend to favor emphasizing the

11. For example, Leticia Arroyo Abad (2008) is developing evidence of swings in the relationship of wages to land rents in five Latin American countries across the long nineteenth century. Jeffrey Williamson (2010, forthcoming) uses international regression evidence plus data on some income determinants to argue that Latin American inequalities have had pronounced falls and rises since independence. See also the income gini trends sketched in Baten et al. (forthcoming, figure 3).

role of exogenous institutions in shaping inequality. First, comparing Russia with Western Europe has suggested that political forces were much more important than factor endowments in shaping the institutions that produced inequality and slow growth. If land abundance and labor scarcity led to the attraction of immigrants with better offers to ordinary folk, how are we to explain the fact that the expansion of Russia kept leading to greater oppression and relative stagnation over the centuries up to 1861? As Niebohr, Blum, Domar, and others have emphasized, imperial Russia developed the political strength to fix serfs more tightly to their lords on the new lands. To slide Russian experience onto the same string as the Engerman-Sokoloff contrast among the Americas requires an emphasis on the exogenous-institutions side of their work rather than the factor-endowments side.

A second such comparison is the Central American natural experiment presented by Nugent and Robinson. Factor endowments were very similar in Colombia, Costa Rica, El Salvador, and Guatemala when they achieved independence. All four had land well-suited for coffee, and had broadly similar land areas per capita. Yet Costa Rica and Colombia developed much broader education, stronger urban development, relatively more independent free-holders, less income inequality, and higher gross domestic product (GDP) per capita than did El Salvador or Guatemala. Nugent and Robinson persuasively argue that it was exogenous accidents of political history that sent the two pairs of countries down very different paths, despite the similarities in their initial factor endowments.¹²

A third set of comparisons is emerging from my extending the empirical base for testing the Engerman-Sokoloff hypotheses about the Americas. To test the strength of arrows F and G on the right-hand side of figure 12.1, I have explored differences in public policy toward mass primary education within Latin America and between world regions.¹³ This institutional side of the Engerman-Sokoloff is well supported, albeit with a revised geographical emphasis. Throughout the twentieth century, Latin American governments have supplied less financial support for primary education than have governments in other continents. In many cases the Latin American country has had a higher GDP per capita, while spending less of mass education, than a somewhat poorer country on another continent. Figure 12.2 illustrates this point by highlighting the inegalitarian tendency in the region's support for education, starting from the earliest comparative data on primary-school expenditures. Clearly, back around 1900 the same amount of support per pupil was spread over a smaller share of the school-age population in Latin America than in other regions. Argentina, for example, spent relatively heavily per pupil, as one would expect from its prosperity in the belle époque, yet had low enrollments rela-

12. Nugent and Robinson, forthcoming.

13. This paragraph is based on the work summarized in Lindert (2010).

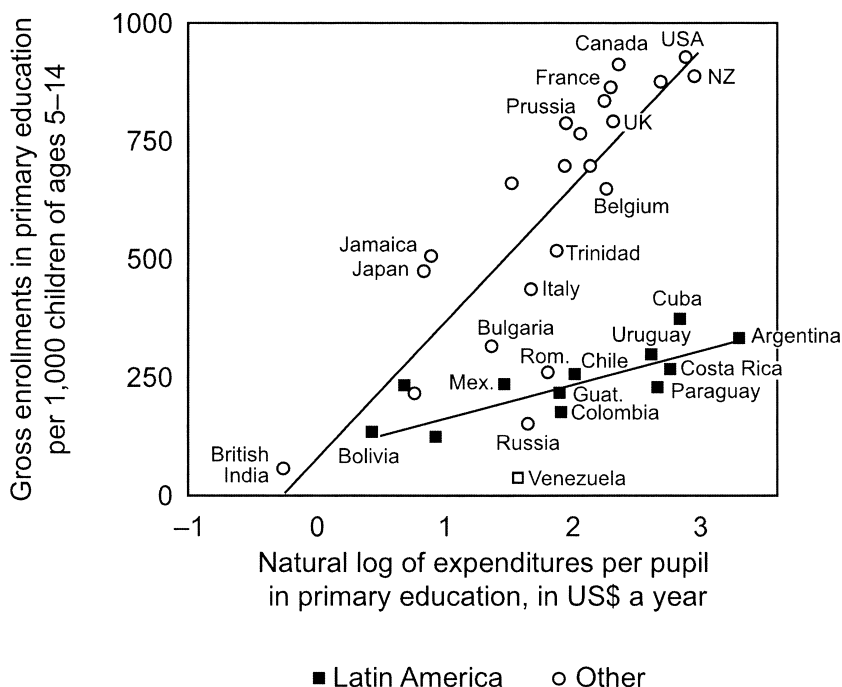


Fig. 12.2 Primary school enrollment outcomes versus expenditures per pupil, c. 1900

tive to many poorer countries, including Cuba, Jamaica, Japan, Trinidad, and much of Europe. The most likely explanation is not that Argentine parents had a peculiarly low demand for enrolling their children in school, but rather that those in control of local state and local governments concentrated the expenditures in Buenos Aires and in the richer neighborhoods, so that fewer children had good local schools. Over the whole twentieth century, Argentina continued to spend less on primary education than its high average income would have predicted. A more serious case is that of Venezuela, especially from the 1930s on, when *caudillismo* produced some of Latin America's lower enrollment levels despite the nation's oil wealth. The source of such low performances seems to have been the source that Engerman and Sokoloff emphasized: a lack of political will to devote tax money to mass education.

A natural experiment of sorts is now in progress for further testing the effects of inegalitarian politics on mass education. Between 1980 and 2000, several Latin American countries shifted toward democracy, with more constraints on executive power and more contestability of elections. Others, like Costa Rica, experienced no such change, since their democracy was already relatively full, while Venezuela retreated from democracy to "Boli-

varian democracy.”¹⁴ Meanwhile, the region has begun to administer internationally comparable tests of student learning in the middle grades and in secondary school. The test scores correlate with national average incomes, the clearest outliers being high-scoring Costa Rica and low-scoring Venezuela.¹⁵ Will the shift toward democracy deliver improvements in the quality of schooling in those countries where it occurs and is sustained?

12.3 Fiscal Structure

Another promising frontier effort is Ken’s unfinished work, with Eric Zolt, on how inequality of power has shaped the institutions of taxation. Here again the evidence is from the Americas. By bringing institutions and inequality to center stage, Sokoloff and Zolt revise the usual thinking about how tax structures are shaped in the long run. The usual thinking links the evolution of tax structures to the development of more progressive and more decentralized government revenue collection.¹⁶ Sokoloff and Holt see greater explanatory power in the concentration of political power. Right from the start, the Latin American countries had tax systems that were more regressive because they had greater concentration of political voice. Given the eternal difficulties of determining the net incidence of taxes (and expenditures) across income classes, Sokoloff and Zolt could only show that, relative to Latin America, the United States and Canada tended to rely more on direct taxes that are at least conventionally thought to be more progressive, such as the property tax.¹⁷

Sokoloff and Zolt also introduce some clear historical differences in the devolution of fiscal power from the central government to local governments. In the nineteenth century and early twentieth, this decentralization was much greater in Canada and the Northern United States than in the Southern United States, and more in the latter than anywhere in Latin

14. Lindert (2010, figure 8, using Polity data).

15. Hanushek and Woessmann (2009).

16. On the role of revenue-collecting capacities, see Harley Hinrichs (1966) and the many writings of Richard Bird on tax structure and economic development, including his writings specific to Latin America.

17. The Sokoloff-Zolt paper contained an unresolved tension regarding taxes on consumption. These are introduced as prominent distinguishing features of both the “more progressive” tax structures of rich countries and the more regressive systems of developing countries (e.g., on p. 3). Future researchers should be able to ease the tension by noting two basic points about the incidence of consumption taxes. First, a flat and permanent consumption tax is not really regressive in terms of its bite on shares of income tax, as long as the rate of return on savings just matches the rate of discount on future consumption. Second, progressivity and regressivity always need to be defined as effects of both the taxes and the expenditures they pay for. This simple but often-overlooked point allows us to recognize that the consumption taxes of modern welfare states are progressive in that they finance expenditures (e.g., universal public health) that are very progressive, whereas the consumption taxes of Latin American have not been spent in favor of the poor.

America.¹⁸ Similar issues of the evolution of fiscal structure are now being pursued over the breadth of European economic history, partly in response to Ken's work. A leading pioneer exploring this topic is another member of the UCLA family in economic history, Mark Dincecco.¹⁹

12.4 Conclusion: Political Inequality and the Lack of a Growth-Equality Trade-Off

The pathbreaking work by Engerman and Sokoloff has, in the end, shifted our attention toward political inequality and its institutional manifestations. Granted, some of their writings have invited the interpretation that it is economic inequality, especially inequality in land ownership, that has caused bad growth performance in Latin America. Yet implicit in their emphasis on the role of suffrage institutions is a strong exogenous component of political voice. In terms of figure 12.1, their contrasts within the Americas have effectively spotlighted the causal arrows cascading downward from arrow A, even though they also attempted to find a role for factor endowments. The egalitarian role has been played by the northern U.S. states and the provinces of Upper Canada, where political voice is more local and more equally shared than in the southern U.S. and in Latin America. Their tale of the Americas will probably be read as a story of how unequal political power led to economic inequality and slower growth.²⁰

The primacy of political inequality as an influence on both economic inequality and economic growth underlines a commonsense reason for discarding the belief that there is an unavoidable growth-equality trade-off. There could have been an unavoidable trade-off between these two goals only if the political process had already exhausted every opportunity to develop policies that fostered both of them. Yet human history seems devoid of such political perfection. At the egalitarian end of the historical spectrum, even the welfare states of Northern Europe have passed up the opportunity to promote both equity and efficiency by scrapping their agricultural policies that overwhelmingly benefit landowners. At the inegalitarian end, countries that have prioritized the growth goal have nonetheless passed up opportunities to make egalitarian pro-growth investments in the health and education of the masses. This end of the spectrum is well illuminated by the Engerman-Sokoloff tale of political failures in the history of Latin America and the southern United States.

18. Go and Lindert (2010) note a pattern in the locus of government budgetary power that fits well with the hypothesis of Sokoloff and Zolt. They note that power was decentralized more into town and city governments in the northern states than in the South, where state legislatures kept a firm grip on the budgetary and legislative reins.

19. See Dincecco (2009a, 2009b, 2010), and his current book project.

20. This emphasis on the causal role of political, rather than economic, inequality has already been presented in Lindert (2003, especially pages 323–25), and econometrically supported by historical Colombian data in Acemoglu et al. (2007).

References

- Acemoglu, Daron, María Angélica Bautista, Pablo Querubín, and James A. Robinson. 2007. "Economic and Political Inequality in Development: The Case of Cundinamarca, Colombia." NBER Working Paper no. 13208. Cambridge, MA: National Bureau of Economic Research, June.
- Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2001. "The Colonial Origins of Comparative Development." *American Economic Review* 91:1369–401.
- . 2002. "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution." *Quarterly Journal of Economics* 117:231–94.
- Arroyo Abad, A. Leticia. 2008. "Inequality in Republican Latin America: Assessing the Effects of Factor Endowments and Trade." Global Prices and Income History Group Working Papers, no. 12.
- Baten, Jorg, Peter Foldvari, Bas van Leeuwen, and Jan Luiten van Zanden. Forthcoming. "World Income Inequality 1820–2000." *Revista de Historia Económica*.
- Chaudhary, Latika. 2009. "Determinants of Primary Schooling in British India." *Journal of Economic History* 69:269–302.
- De Ferranti, David, Guillermo E. Perry, Francisco H. G. Ferreira, and Michael Walton. 2004. *Inequality in Latin America: Breaking with History?* Washington, DC: The World Bank.
- Dincecco, Mark. 2009a. "Fiscal Centralization, Limited Government, and Public Revenues in Europe, 1650–1913." *Journal of Economic History* 69:48–103.
- . 2009b. "Political Transformations and Public Finances: Europe, 1650–1913." Paper presented at the International Economic History Congress, Utrecht, The Netherlands, August 3–7.
- . 2010. "The Political Economy of Fiscal Prudence in Historical Perspective." *Economics and Politics* 22:1–36.
- Engerman, Stanley L., Elisa Mariscal, and Kenneth L. Sokoloff. 2002. "Schooling, Suffrage, and the Persistence of Inequality in the Americas, 1800–1945." Unpublished Manuscript.
- . 2009. "The Evolution of Schooling Institutions in the Americas, 1800–1925." In *Human Capital and Institutions: A Long Run View*, edited by David Eltis, Frank Lewis, and Kenneth Sokoloff, 93–142. New York: Cambridge University Press.
- Engerman, Stanley L., and Kenneth L. Sokoloff. 1997. "Factor Endowments, Institutions, and Differential Paths of Growth Among New World Economies: A View from Economic Historians of the United States." In *How Latin America Fell Behind*, edited by Stephen Haber, 260–304. Stanford: Stanford University Press.
- . 2002. "Factor Endowments, Inequality, and Paths of Development Among New World Economies." *Economía* 3:41–109.
- . 2005. "The Evolution of Suffrage Institutions in the New World." *Journal of Economic History* 65:891–921. Winning article, Arthur H. Cole Prize 2005–2006.
- . 2008. "Debating the Role of Institutions in Political and Economic Development: Theory, History, and Findings." *Annual Review of Political Science* 11: 119–35.
- Frankema, Ewout H. P. 2009. *Has Latin America Always Been Unequal? A Comparative Study of Asset and Income Inequality in the Long Twentieth Century*. Global Economic History Series. Leiden and Boston: Brill.
- Go, Sun, and Peter H. Lindert. 2010. "The Uneven Rise of American Public Schools to 1850." *Journal of Economic History* 70:1–26.

- Hanushek, Eric A., and Ludger Woessmann. 2009. "Schooling, Cognitive Skills, and the Latin American Growth Puzzle." NBER Working Paper no. 15066. Cambridge, MA: National Bureau of Economic Research, June.
- Hinrichs, Harley. 1966. *A General Theory of Tax Structure Change during Economic Development*. Cambridge, MA: Law School of Harvard University.
- Lindert, Peter H. 2003. "Voice and Growth: Was Churchill Right?" *Journal of Economic History* 63:315–50.
- . 2010. "The Unequal Lag in Latin American Schooling since 1900: Follow the Money." *Revista de Historia Económica* 28:375–405.
- Mariscal, Elisa, and Kenneth Sokoloff. 2000. "Schooling, Suffrage, and the Persistence of Inequality in the Americas, 1800–1945." In *Political Institutions and Economic Growth in Latin America*, edited by Stephen Haber, 159–217. Stanford: Hoover Institution Press.
- Nugent, Jeffrey B., and James A. Robinson. Forthcoming. "Are Endowments Fate?" *Revista de Historia Económica*.
- Sokoloff, Kenneth, and Eric Zolt. 2006. "Inequality and the Evolution of Institutions of Taxation: Evidence from the Economic History of the Americas." Unpublished Manuscript.
- Williamson, Jeffrey G. 2010. "Five Centuries of Latin American Inequality." Forthcoming in *Revista de Historia Económica*.