

It also highlights his lasting engagement with practical questions. What Marx contributed to the French critique was the argument that paying labor a competitive wage produced a surplus value that powered the laws of motion of a capitalist economy. He had that vision of an economy driven to ruination by its internal dynamic in the late 1840s, and spent the rest of his life trying analytically to demonstrate it, obsessively reading everything he could lay his hands on, writing and rewriting the argument, always circling back on the original insight. As Tribe observes, he failed because as Marx himself must have suspected, it was analytically incoherent. What Marx did achieve was a brilliant, possibly the best and certainly the most original analytical description of the European economy of his age—an economic history.

The final substantive chapter deals with the origins of Walras's "Pure Economics," which Tribe situates in economic writings of his father Auguste, from whom the son took the idea that value, wealth, and property originate in scarcity and that market exchange is necessarily a mathematical relation. The crucial event triggering the invention of general equilibrium was a comment by a friend that no political economist had as yet demonstrated that prices and quantities under pure competition are optimal and unique. The motivation behind the "Pure Economics" was thus to prove a point, not as Marx, and subsequently Alfred Marshall aimed at doing, to analytically to describe a real economy. To make that point Walras applied the machinery of simultaneous linear equations. In this regard, it is useful to recall that Walras was an indifferent mathematician who failed the competitive entry examinations to *École Polytechnique* and *École des Mines*. By contrast, Marshall, whose economics is frequently dismissed as non-rigorous, was Second Wrangler in the Cambridge Math Tripos (a rank shared by Clerk Maxwell and William Thompson). Walras's "Pure Economics" presupposed private property, competitive markets, and utility-maximizing individuals as its sole institutional and behavioral inputs. He modeled a simple exchange economy as a general auction; to circumvent the fact that production takes time, he postulated a complete market in contingent contracts. Why that particular idealization should come to dominate a field ostensibly dedicated to understanding how economic outcomes actually happen is not the least paradox in the history of economic language.

GEORGE GRANTHAM, *McGill University*

Political Order and Inequality: Their Foundations and Their Consequences for Human Welfare. By Carles Boix. New York: Cambridge University Press, 2015. Pp. xiv, 311. \$22.99, paper.
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Of late, economists and historians have become increasingly focused on the political economy of the state and identifying what explains why some nations are rich and some are poor. To name just two of the most prominent recent contributions, Douglass North, John Wallis, and Barry Weingast in *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History* (Cambridge: Cambridge University Press, 2009), and Daron Acemoglu and James Robinson in *Why Nations Fail* (New York: Crown Business, 2012) have tried to explain why extractive/oligopolistic elites have tended to predominate and have been replaced with great difficulty by more productive orders in only a minority of the world's nations. But as Carles Boix in this current work notes, there has been insufficient attention to developing a theory of how

and why these elites formed in the first place and what forces tend to promote institutional reform. In addition, there has been little work trying to integrate these issues with the broader problem of the sources of inequality and inequality's relationship to the institutions that do or do not foster development.

In a talk originally written for a North festschrift (see John Nye, "Thinking About the State." In *Frontiers in the New Institutional Economics*, edited by John Drobak and J. Nye. San Diego: Academic Press, 1997), I argued that a persistent problem for the work of Doug North and Mancur Olson was their arbitrary assumption of a pre-existing ruler without a positive theory that integrated the economics of production with the technology of control to generate a theory of state organization that would account for long-run changes in political and economic institutions. Using an analogy with the Coase theorem, I asked why a similar theorem that allowed for transformation and exchange even in a world with violent coercion was not forthcoming? I believe that Boix's book is an important step in this direction.

Boix combines the literature on developed state economies with the anthropological literature on hunter-gatherer societies to develop a theory of the interaction between the capacity for unequal production and the need for hierarchy. Using a simple game theoretic model, he shows how relatively equal societies can be stable without anything resembling modern hierarchy or even a powerful leader. However, the possibility of unequal productivity or access to resources changes the game and destabilizes primitive societies. A transition to a more productive system based on cooperation or differential access to resources produces unequal outcomes, and thus means a shift to hierarchy for preserving stability, since inequality would otherwise lead to unsustainable conflict. But this new system's final form is heavily determined by the nature of coercive control technology and its interactions or tradeoffs with economically productive technology. In this way, it can be seen as complementary to the work of North, Wallis, and Weingast, who stress the necessity of elite coalitions providing rents to themselves as a condition of a stable bargain that limits conflict between ruling groups and allows for greater productivity.

Boix however, has more of a focus on the links between technological conditions of both production and warfare and the way that these coevolve with the form of the state. He draws on the vast historical literature on political forms around the world, especially in the shifts from the classical period to the medieval period to the modern state. He is particularly good in his use of the historical literature on how the instruments of war shaped the possibilities available for political and economic coalitions that are implicit in the existing economic theory based explanations but which are not spelled out. However, it is also the case that the importance of these changes is not explicitly derived from his particular theory.

It is not a knock on this excellent and insightful book if he has left out a number of issues that still need to be fleshed out in future research—whether by Boix or other scholars.

For one thing, his models and his discussion do little to integrate the problems of coordination and conflict with the forms of hierarchy that are observed or that are sustainable. There is no citation in the book to the work of Ronald Coase or Oliver Williamson and no awareness that the problems of cooperation unique to organizational bureaucracies might have something to say about which kinds of states emerge and why states adapted to one type of productive technology might not be simultaneously capable of making use of the latest military technology. A deep consideration of the role of internal organization and how its choices affect the quality of both a nation's

productivity and military effectiveness might go some way to explaining why it is so rare to have societies that are good at optimizing on both fronts.

I also think there is potentially interesting work to be done in exploring the interaction between biological, cultural, and genetic conditions and how these affect societal equilibria. As Garrett Jones notes in his recent book *Hive Mind* (2015), low health, low IQ societies are liable to have low discount rates and have greater difficulty supporting complex institutions of cooperation that promote high productivity. Boix notes that primitive stateless societies are noted for their high degree of familiarity and jovialness punctuated by seemingly random acts of lethal violence that are often simply ignored and not dealt with as systematic crimes (p. 52). While his discussion of the underlying conditions of cooperation and equality go some way to explaining why this might persist, he says nothing about the psychological and biological conditions that would make such outbursts more or less common or how greater cognitive ability and changing patience might allow for greater cooperation and less random violence, while having rarer but more destructive wars.

Nonetheless, these are just footnotes to what is a profoundly interesting and insightful work that should be of special interest to economic historians and to specialists in the new institutional economics.

JOHN V.C. NYE, *George Mason University*

Natural Resources and Economic Growth: Learning from History. Edited by Marc Badia-Miro, Vicente Pinilla, and Henry Willebald. London: Routledge, 2015. Pp. xix, 374. \$160.00, cloth.
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This is a valuable book that tries to answer a question of considerable importance to many economists: What precisely is the role of exhaustible natural resources in contributing to economic growth and well-being? This is one of the great unanswered questions in the natural resource literature, one which is made more intriguing by the well-known empirical finding that rich natural resource bases are no guarantee of, and may well detract from, good economic performance. This somewhat counterintuitive finding, of which there are various versions, including *Dutch disease*, *resource trap*, or *resource curse*, has sparked a considerable effort by economists to try to better understand the conditions under which it will be true. The stakes are high: we are talking about the difference between judicious development of natural resources that could significantly raise a country's living standards, or wasting golden opportunities to benefit from nature's bounty, to the detriment of many.

The thesis of this book is one that will appeal to economic historians: that there are lessons to be learned from the historical experiences of different countries as they have developed their resource bases. Toward this end, the book has assembled a series of historical case studies for countries from six continents. Some of these are shining success stories, others are abject failures. The cases are contextualized within a theoretical and historical framework that is laid out in the first three chapters. After that, it is off to the races, as the reader is confronted with instance after instance of country-level experiences, and cross-country comparisons, in developing natural resources and the impact on economic performance. The overall picture is a complex one, but a key bottom-line message is one that I suspect will resonate with many economists: that the quality of a