The Eighteenth-Century Hockey Stick

Francis Fukuyama

Gregory Clark’s book, A Farewell to Alms, described on the jacket by the New York Times as “the next blockbuster in economics,” makes three startling assertions. The first is that living standards for the average human being showed virtually no increase between hunter-gatherer times and the year 1800, and turned sharply upwards thereafter, leading to a historical growth curve that looks like a hockey stick. The second is that the enormous rate of economic growth since then is due to the spread of certain bourgeois virtues like hard work, savings, and reliability. Third, Clark attacks the currently fashionable notion among development economists that the growth of property rights and rule of law were the necessary conditions for economic takeoff.

Clark, an economic historian at the University of California, Davis, has filled his volume with charts, tables, and statistics on a wide range of economic data, including unusual items like daily calorie intakes of hunter-gatherers and implicit interest rates for societies without a money economy. However, despite this wealth of data, Clark’s first thesis on flat living standards through 1800 is less remarkable than it first seems, while the evidence provided for the second thesis on the origins of the middle class and third on the unimportance of institutions is extremely limited.

The assertion that there was no increase in average living standards from hunter-gatherer times to 1800 is not technically correct. Clark uses the word “average” not to denote per capita income, as most economists would, but rather the income of the average lower class person, which admittedly in most agricultural societies meant upwards of 80–90 percent of the whole population. The fact that the average poor person in Europe in the year 1800 was poorer than their ancestors in 1300, or not much better off than poor people in Paleolithic times, simply reflects the inequitable income distribution of most agricultural societies. But per capita income was increasing steadily all this time, measured by the achievements we usually associate with the progress of civilization like the Great Pyramid or the Palace of Versailles.

The reason why the income of the poor moved upward so quickly after 1800, Clark argues, is that virtually all earlier societies were caught in a Malthusian trap. Any increase in incomes would lead to an increase in birth rates;
since the marginal productivity of each additional worker was zero, more people had to divide the same amount of resources and incomes would fall. The only way to increase incomes was to increase death rates. Clark does in fact show that wages in England increased after the plague years beginning in the 15th century. But the biggest Malthusian trap of all was China, with its huge population and periodic famines, that induced writers like Malthus and Ricardo to come to their gloomy conclusions that there was no way to raise the living standards of the poor.

Clark fails to demonstrate that the world was in fact caught in a Malthusian trap before 1800. The logic of the Malthusian model is ironclad, but is only as good as its going-in assumptions. For the trap to apply, all available land must be in use, and there must be a linear relationship between incomes and birth rates, with peasants deciding to have more children rather than buying a new roof or plough after a good harvest. Clark’s own evidence suggests that as late as the 1700s when Malthus was writing, neither China nor Japan were caught in Malthusian traps. China was still a frontier society with unsettled land, and therefore could sustain population growth without falling living standards. Japan’s population could grow substantially before the Meiji Restoration without impoverishment because it achieved remarkable increases in agricultural productivity. Clark has data showing a correlation between income and fertility for some groups, but also cites cases where societies could deliberately restrict fertility, meaning that the Malthusian logic would not necessarily apply to them. And so on.

Projecting incomes back into hunter-gather times is even more difficult to do with any degree of accuracy. Most of the data Clark cites on Paleolithic incomes are estimates based on calorie intakes of surviving contemporary hunter-gatherer groups, or are extrapolations of diets based on human height data. He strangely asserts that all human racial groups would have the same height if fed the same diet, and deduces from the height of Paleolithic skeletons the fact that they must have eaten as well as peasants from the seventeenth century.

Clark’s proof that institutions did not promote post-1800 growth is based on a claim that good institutions—including low taxes, secure property rights, security of person, and low public debt and inflation—all existed in England for several hundred years prior to that date, and yet did not incentivize rapid economic growth. He even asserts that there was a high degree of social mobility in the England of the Middle Ages.

All of this will come, of course, as a great surprise to the countless historians who have documented the protracted struggles in English social history to bring about liberal rule of law, inclusion of new social actors, limitations of the arbitrary rights of kings, the enclosure movement, repeal of the Corn Laws and other mercantilist measures, and the like. Adam Smith himself, writing in *The Wealth of Nations* in 1776, denounces the high rates of taxation and land tenure arrangements in Britain that destroyed peasant incentives to invest in their own property. Clark bases his assertions about good institutions on a few selected economic facts that amount to anecdotes, in historical periods for which there is simply no reliable aggregate data on phenomena like social mobility.
Clark’s view that the take-off in economic growth after 1800 was a matter of the spread of bourgeois values harkens back to the culturalist arguments made by Max Weber and a host of other social theorists a century ago. But Clark is not a culturalist. For him, cultural factors are simply intermediate variables that are themselves dependent on prior economic conditions—in particular, England’s protracted period of stability prior to 1800. He cannot conceive of cultural phenomena like the Protestant Reformation as ever being exogenous factors that themselves drive economic change. He does not directly engage any of the rich literature on value change in early modern Europe, like the legacy of Hobbes’ and Locke’s arguments with the Schoolmen, or even more recent works like Albert O. Hirschman’s *The Passions and the Interests* that trace the complex arguments by which aristocratic values were replaced by bourgeois ones. He simply asserts that all cultural facts must be driven by prior economic conditions. Clark’s Lamarckian idea that bourgeois values became genetically embedded in the English population seems to stem simply from the high fertility rates of economically successful individuals, and the downward mobility of their offspring. He spends a chapter explaining why similar periods of stability did not produce the same explosive takeoff in Japan and China. But if the source of economic change is genetically coded values, why did Japan subsequently take off economically shortly after 1868, and China only after 1978?

While Clark goes out of his way to criticize fellow economists for staying within the neoclassical model and believing that institutions and incentive are sufficient to produce modern growth, he remains fundamentally trapped by the bad habits of that discipline. He asserts the existence of a simple Malthusian model for premodern times, and an equally simple economic determinism to explain complex cultural change in the transition to industrialization. While he adduces a wealth of fascinating quantitative historical data to prove his case, it is in the end insufficient to actually demonstrate that historical reality conformed to these simple models.

Social theorists from Hume and Smith through contemporary growth economists have been trying to explain human historical progress, and in particular the miracle of industrialization, for two centuries now. *A Farewell to Alms*, like Jared Diamond’s *Guns, Germs, and Steel*, presents a great deal of archaeological and anthropological evidence, and supplements this with historical economic data that has been painstakingly reconstructed in recent years. This in itself is useful, since many of the earlier theorists did not have enough data to try to push their accounts further back in time. A general reader will probably be surprised at how much is now known about incomes and diets, heights and diseases, sanitary habits and living conditions of periods long past, and how utterly different the modern world has become. Unfortunately, the quality of this data, and the complexity of the underlying historical processes involved, make novel theorizing on this subject a risky business.

**Notes**

1 This hockey stick would be what is ultimately responsible for the much-discussed hockey stick of global mean temperatures associated with global warming.