

**“Purchasing Power Disparity:
Who Could Consume More before 1914?”**

Peter Lindert (UC-Davis and NBER)

ABSTRACT

Economic historians’ Divergence debates since 2000 have asked a different question from that asked by Angus Maddison using the growth debates of the late twentieth century. The issue has become “when did countries’ contemporaneous purchasing powers diverge?”, not “when did countries’ productivity grow at different rates?” The two questions have answers that can differ greatly, especially before 1870. Using pre-1914 direct (contemporaneous) comparisons of real purchasing powers on five continents, this article sketches some historical geography of the departures of the indirect (back-casting) measures from the more relevant direct comparisons.

The underlying reason for the wide divergences between Angus Maddison’s measuring growth back from 1990 and direct historical comparisons from long ago is that before the great 1870-1914 wave of trade globalization, consumer staples were not traded over great distances, and regions specialized in narrow luxury trade. Inter-continental price ratios of non-traded goods thus departed much further from purchasing-power parity than has been true since 1870.

The new direct measures open up a new economic history of how international differences in purchasing power depended on one’s income class before 1914. Inter-continental divergences in purchasing power were very class-specific before the 1870-1914 globalization of trade in staple products. Between 1650 and 1870 other regions generally departed even more from Britain in their abilities to consume luxuries and capital goods than in their abilities to consume what the masses needed. This finding needs to be incorporated into the history of inequality, which still focuses on nominal, rather than real, income inequality.

Outline

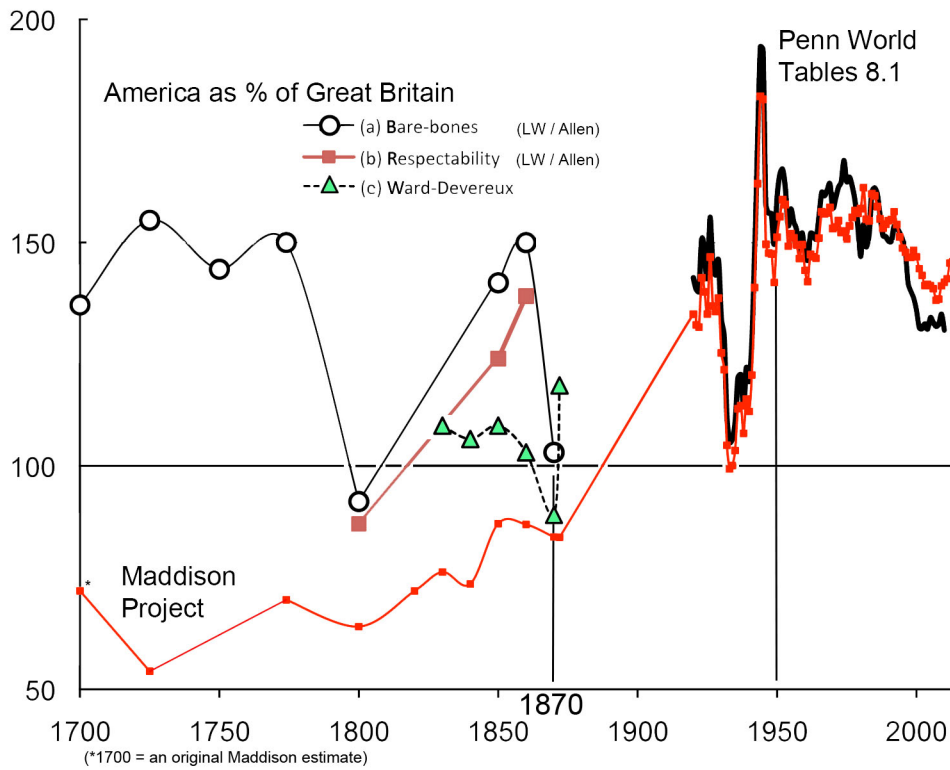
- I. What do we want to compare?
 - A. Growth vs. changes in purchasing power
 - Two growth questions that are not really the same
 - B. Competing measures of relative purchasing power
- II. A disturbing initial result: America versus Britain [Figure 1]
- III. Eurasian departures from Britain before 1914 [Figure 2]
 - A. Japan 1602 - 1912,
 - B. India 1595 and 1870
 - C. China 1840 and 1885
 - D. Western Europe 1525-1910
 - E. Elsewhere
- IV. The disparities are real, and not driven by differences in coverage
 - A. Adding non-staple prices magnifies the Eurasian disparities [Figures 3A, 3B]
 - B. The most likely explanations
- V. A take-away menu

Table 1. Direct vs. Maddison Comparisons of non-British with British Purchasing Power per Capita, 1525-1912

Nominal GDP per capita, in units of a one-man "bare-bones" bundle

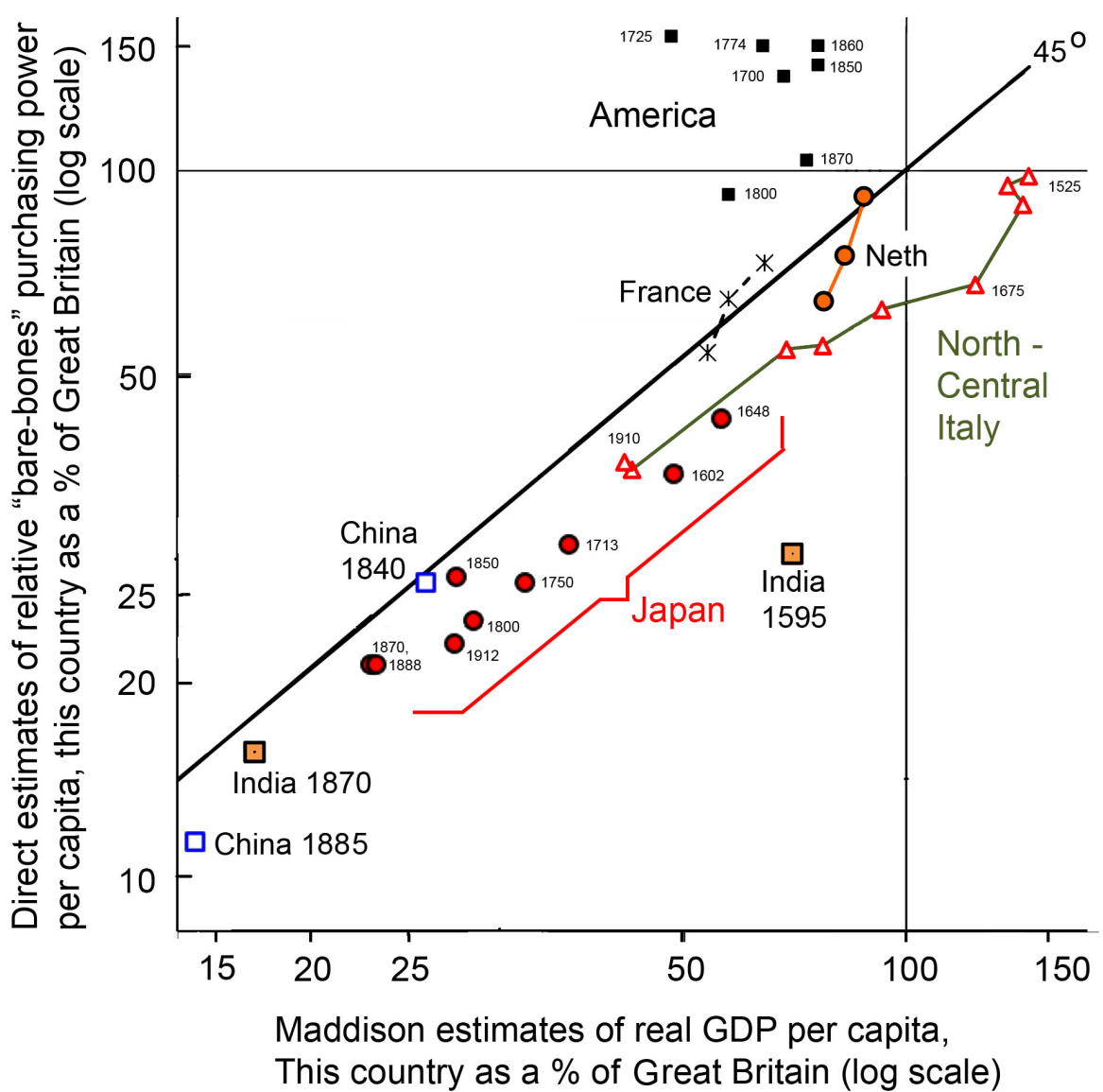
(1) Japan vs. Britain			(2) China vs. Britain		
	Japan	Britain		China	Britain
1602	1.7	4.6	1840	9.6	2.5
1648	1.8	4.0	1885	12.9	1.4
1713	1.6	5.3			
1750	1.7	6.9			
1800	2.0	8.8	(3) India vs. Britain		
1850	2.3	8.8		India	Britain
1870	2.5	12.5	1595	1.3	5.0
1888	3.3	16.9	1870	1.8	12.4
1912	4.3	20.6			
(4) America vs. Britain			(5) North-Central Italy vs. Britain		
	America	Britain		Italy	Britain
1700	10.0	7.3	1525	5.7	5.8
1725	9.7	6.3	1575	4.7	4.9
1750	9.8	6.6	1625	3.9	4.3
1774	8.4	6.6	1675	3.6	5.3
1800	6.5	7.1	1725	4.5	7.0
1850	13.6	9.7	1775	4.2	7.5
1860	14.5	9.7	1820	4.7	8.4
1870	11.9	11.5	1870	3.8	10.1
			1910	7.5	19.4
(6) France vs. Britain			(7) Netherlands vs. Britain		
	France	Britain		Netherlands	Britain
1820	4.7	8.4	1820	7.8	8.4
1870	6.6	10.1	1870	7.7	10.1
1910	14.4	19.4	1910	12.6	19.4
(8) Poland vs. Britain			(9) Peru vs. Britain		
	Poland	Britain		Peru	Britain
1578	2.9	4.2	1800	1.5	8.8
(10) Mexico vs. Britain			(11) Australia vs. Britain		
	Mexico	Britain		Australia	Britain
1800	3.9*	10.9*	1870	8.3*	6.9*
(*Food basket only)			(*Food basket only)		

Figure 1. American Real Income per Capita, Relative to Britain, 1700-2011



The sources and assumptions are described at length in Lindert and Williamson (2016, Chapters 2, 3, 10 and Appendix D).

Figure 2. Comparing the Direct Measures of Relative Purchasing Power per Capita with Maddison's GDP per capita, Several Countries Relative to Britain, 1525 – 1912



Figures 3. The Wheat Price of Lesser Luxuries, 1215-1912

Figure 3A. The Wheat Price of Paper, England and Elsewhere, 1355-1912

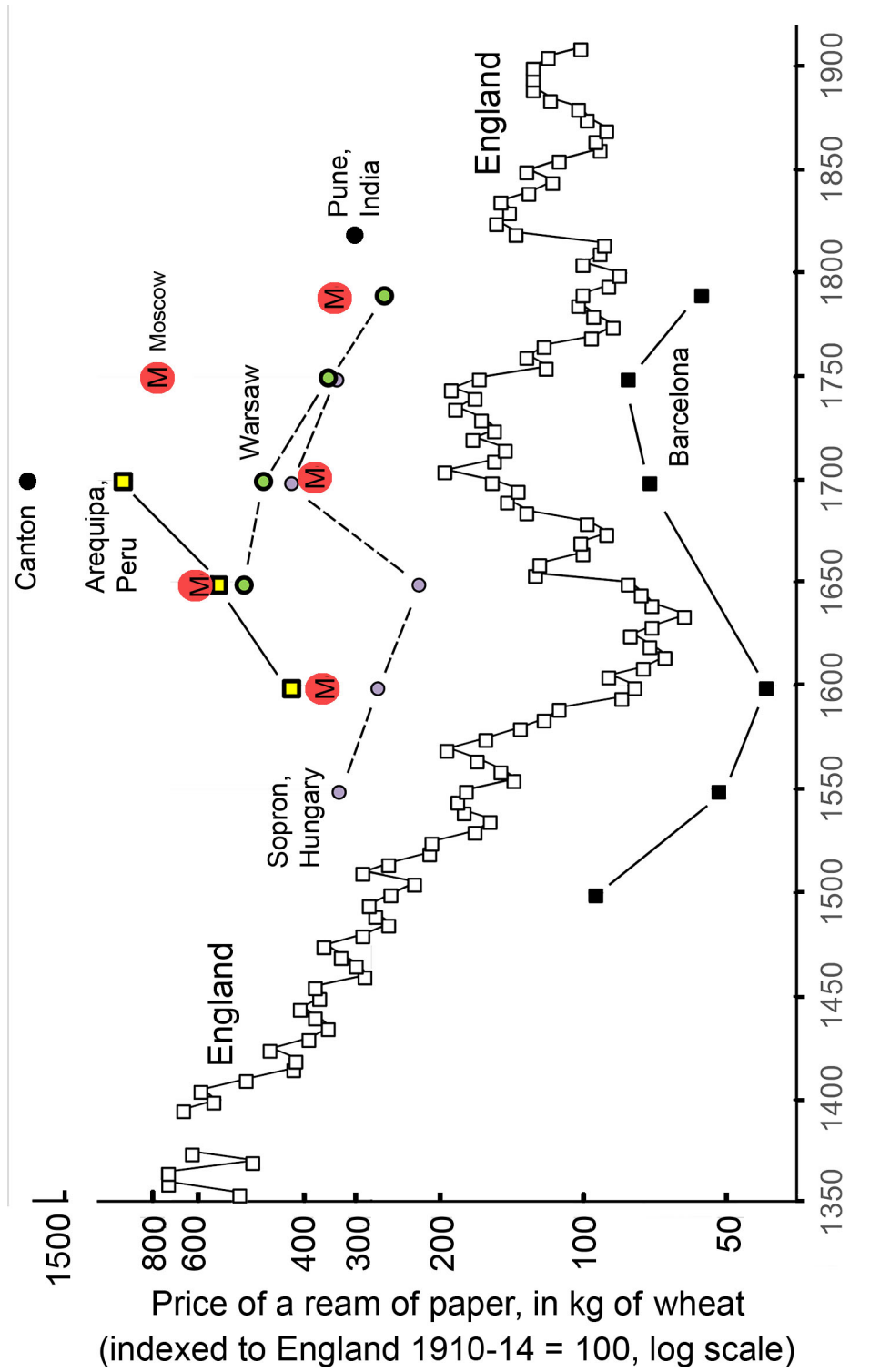
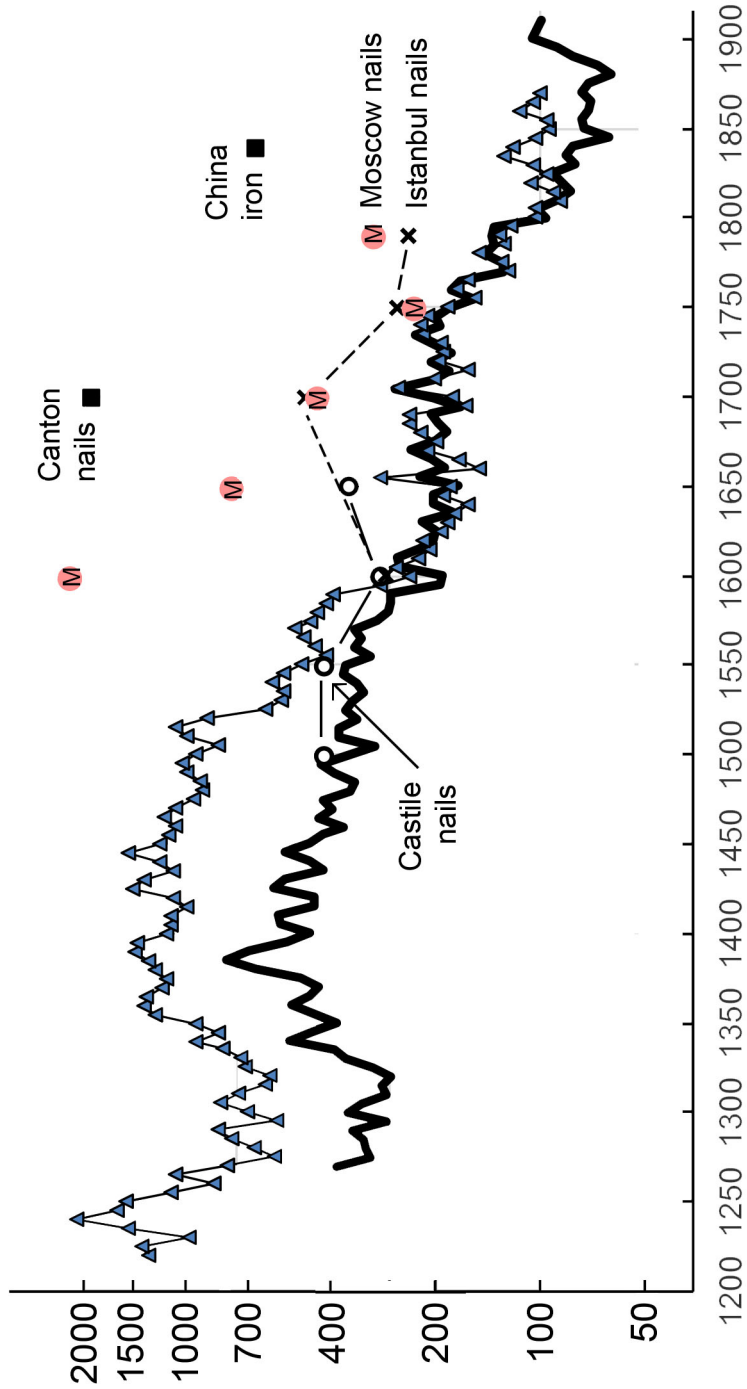


Figure 3B. The Wheat Price of Nails and Iron, England and Elsewhere, 1220-1912



The wheat-prices of nails and iron, indexed to England 1910-14 = 100 (log scale)