"Purchasing Power Disparity:
Who Could Consume More before 1914?"

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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 widening divergence 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 regions generally differed even more 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

	Japan	Britain
1602	1.7	4.6
1648	1.8	4.0
1713	1.6	5.3
1750	1.7	6.9
1800	2.0	8.8
1850	2.3	8.8
1870	2.5	12.5
1888	3.3	16.9
1912	4.3	20.6

(2) China vs. Britain

	China	Britain
1840	9.6	2.5
1885	12.9	1.4

(3) India vs. Britain

	India	Britain
1595	1.3	5.0
1870	1.8	12.4

(4) America vs. Britain

	America	Britain
1700	10.0	7.3
1725	9.7	6.3
1750	9.8	6.6
1774	8.4	6.6
1800	6.5	7.1
1850	13.6	9.7
1860	14.5	9.7
1870	11.9	11.5

(5) North-Central Italy vs. Britain

	Italy	Britain
1525	5.7	5.8
1575	4.7	4.9
1625	3.9	4.3
1675	3.6	5.3
1725	4.5	7.0
1775	4.2	7.5
1820	4.7	8.4
1870	3.8	10.1
1910	7.5	19.4

(6) France vs. Britain

	France	Britain
1820	4.7	8.4
1870	6.6	10.1
1910	14.4	19.4

(7) Netherlands vs. Britain

	Netherlands	Britain
1820	7.8	8.4
1870	7.7	10.1
1910	12.6	19.4

(8) Poland vs. Britain

	Poland	Britain
1578	2.9	4.2

(9) Peru vs. Britain

	Peru	Britain
1800	1.5	8.8

(10) Mexico vs. Britain

	Mexico	Britain
1800	3.9*	10.9*

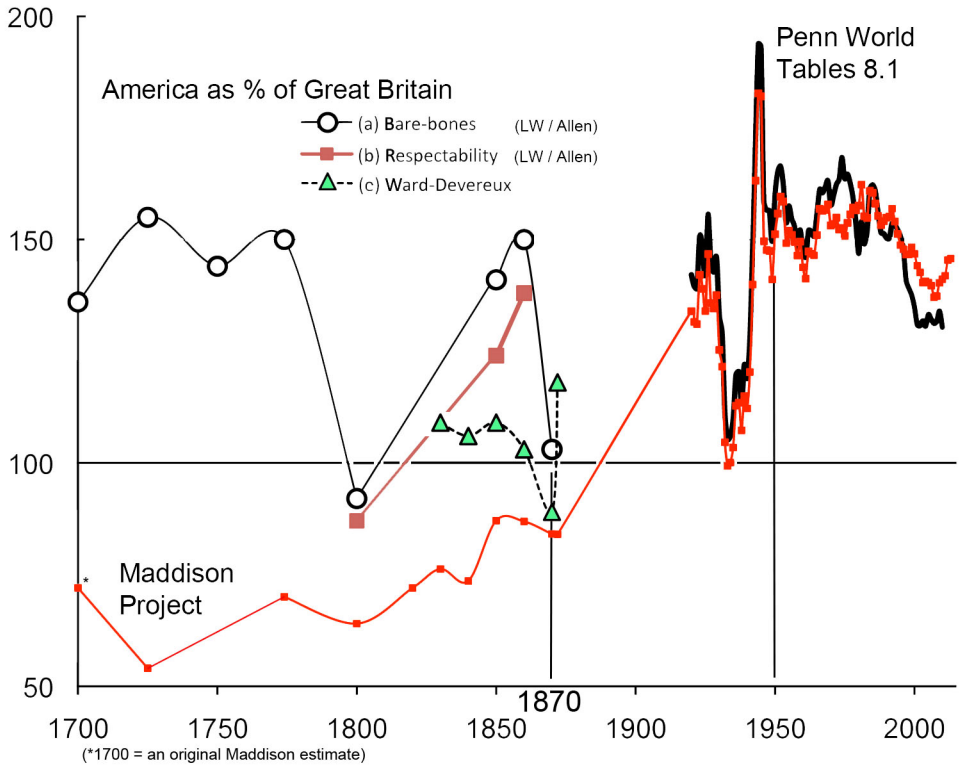
(*Food basket only)

(11) Australia vs. Britain

	Australia	Britain
1870	8.3*	6.9*

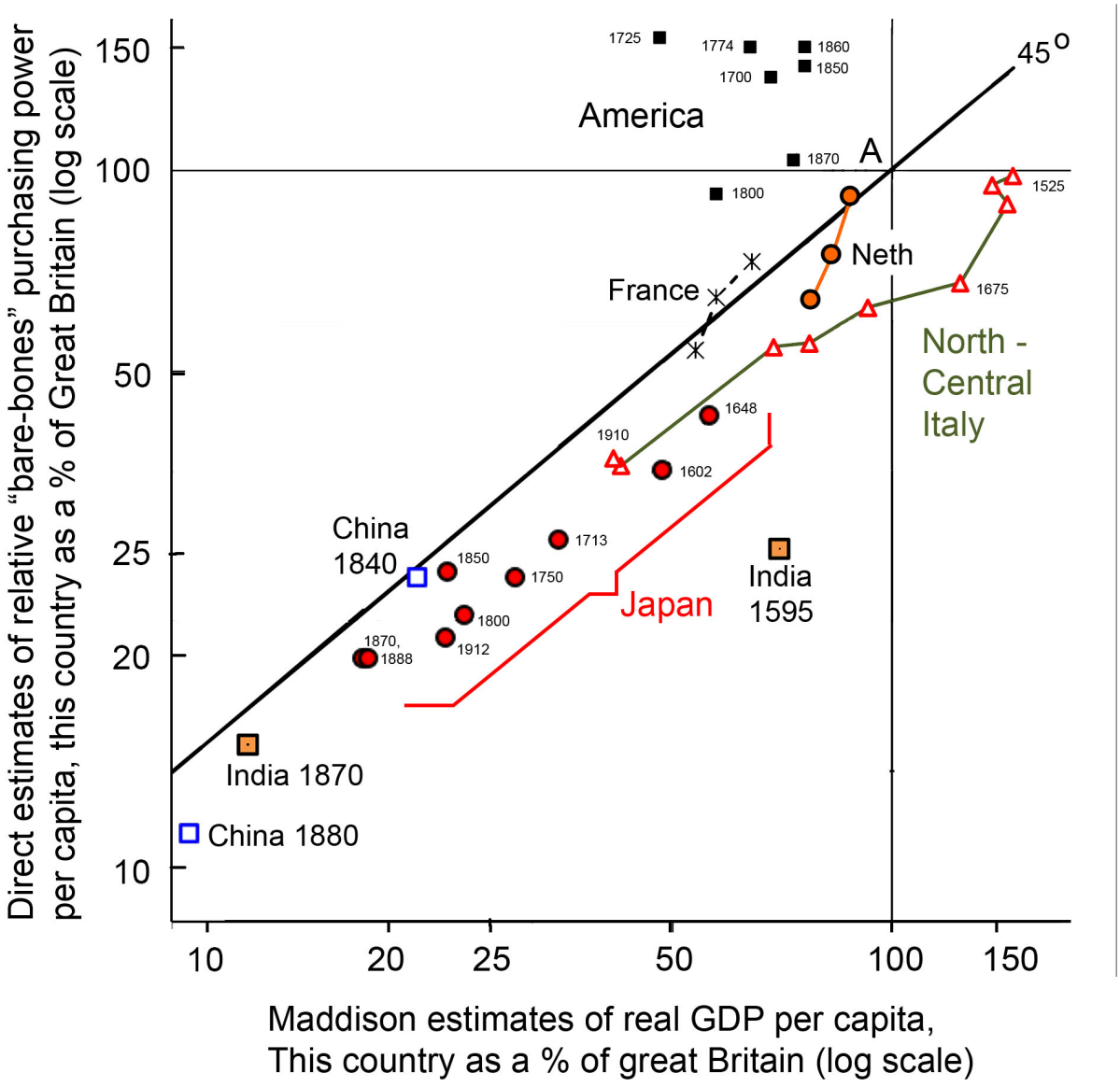
(*Food basket only)

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

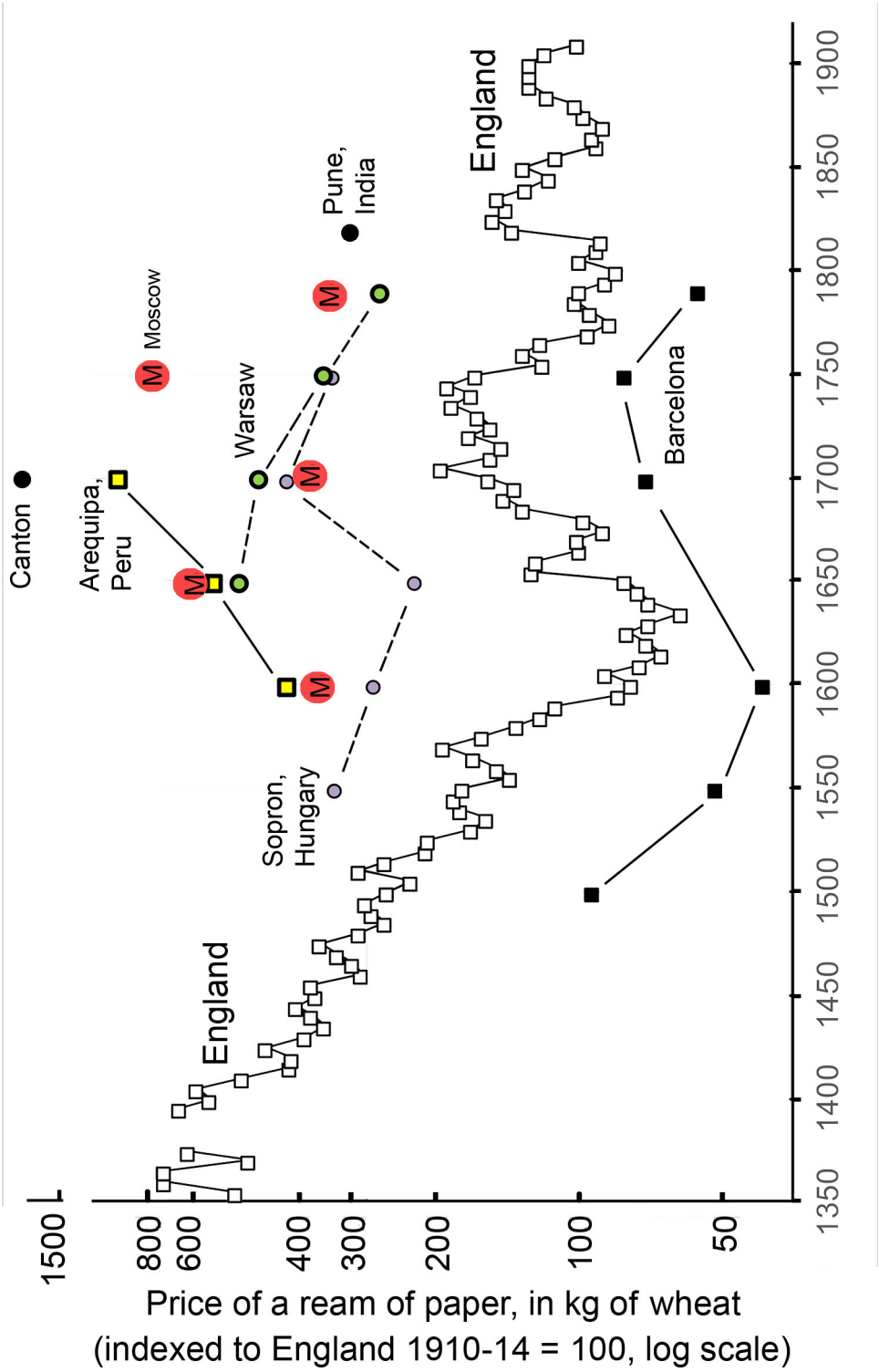
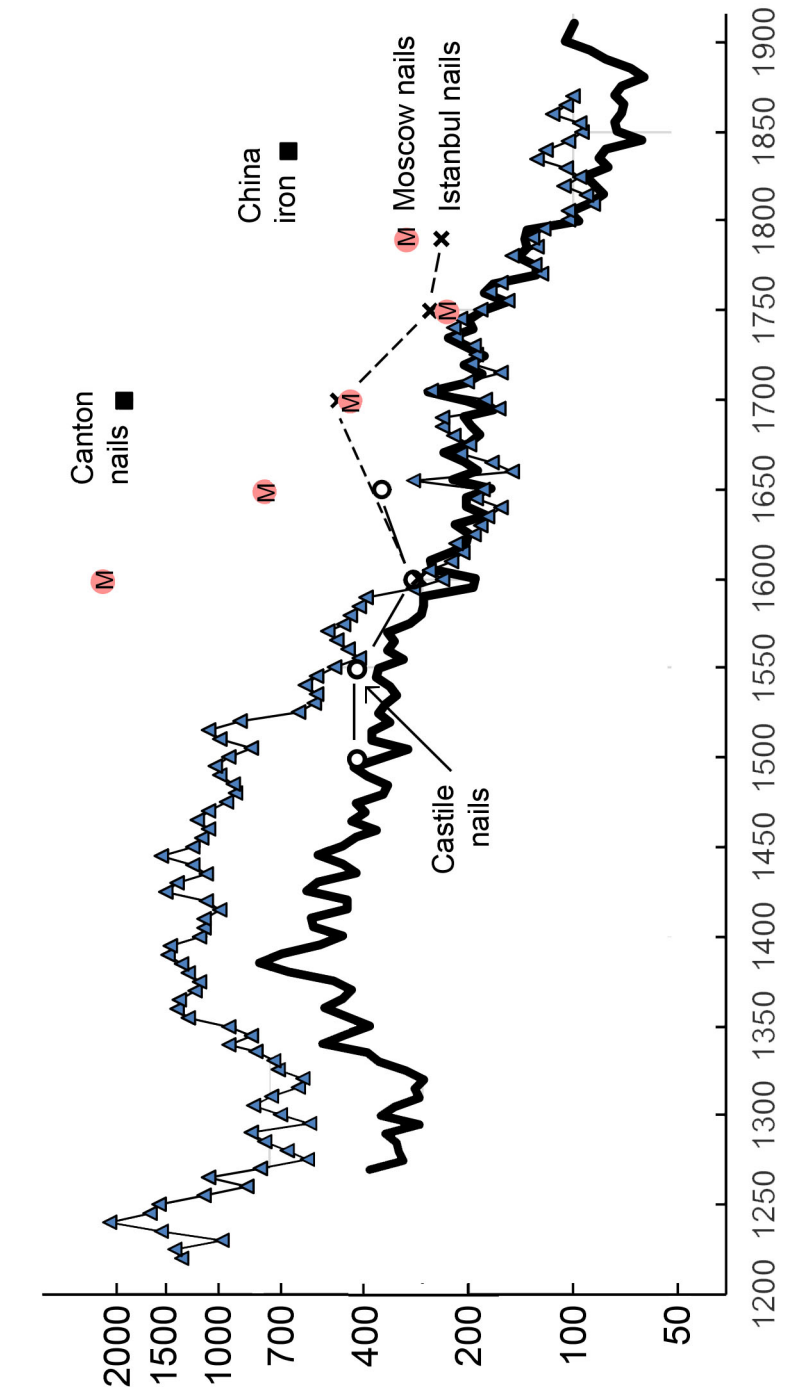


Figure 3B. The Wheat Price of Nails and Iron, England and Elsewhere, 1220-1912



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