History 170E
The “Great Divergence”
Debate
Estimates of Population Change in China, 1600-1940
The Classical Economists

- Adam Smith (1723-90), *The Wealth of Nations* (1776):
  --“Smithian Growth”: specialization of labor & expansion of the market
  --But also envisioned finite limits to growth, leading eventually to a “stationary state”
  --Population growth inevitably outruns food supply, resulting in demographic catastrophe
Nicknamed “The Miner’s Friend” by its inventor, Thomas Savery, this early (1699) steam engine prototype was designed specifically for pumping water out of coal mines.
James Watt’s (1736-1819) engine, shown here in a design of 1788, paved the way for the steam power revolution of the 19th century.

This engine also was designed for pumping water from coal mines.
Estimates of Per Capita GDP in Late Imperial China

Estimate of China’s GDP
980-1840

Estimate of Per Capita GDP in Lower Yangzi and Europe, 1300-1840

Estimates of per capita GDP in 1820: Netherlands, Jiangnan, and China (1990 US$)

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<tr>
<th></th>
<th>Netherlands</th>
<th>Jiangnan</th>
<th>China</th>
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<tbody>
<tr>
<td>Li &amp; Van Zanden 2012</td>
<td>$1883</td>
<td>$988</td>
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<td>Shi Zhihong et al. 2014</td>
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<td>$567</td>
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<td>Broadberry et al. 2018</td>
<td>$1974</td>
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<td>$654</td>
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<td>(for 1800)</td>
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<td>Maddison 2007</td>
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<td>$600</td>
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Welfare Ratios in Asia and Britain
1738-1906

From Allen et al., “Wages, Prices, and Living Standards in China, 1738-1925” (2011)
Market Co-integration in China, the Yangzi Delta, and Europe, 1742-1795

Wage-Rice Price Ratio

There was no significant decrease of real wage rate in the long run, especially during the great population growth.

Real wage rate decreased after the great population growth, but it can be explained by shocks, i.e. war, which decreased both wage rate and population growth.
In the long-run from 10\textsuperscript{th} to 18\textsuperscript{th} century there was no declining trend in life span.

Decline in 19\textsuperscript{th} century (high mortality from massive civil wars like the Taiping Rebellion); but already began in late 18\textsuperscript{th} century.
Providential State

- Characteristic of Ming-Qing empires (15th-19th centuries)
- Agrarian paternalism: commitment to welfare of the family farm
- Minimal taxation, principally derived from land tax
- Qing dynasty froze land tax in perpetuity in 1713
- Low level of public investment
- Laissez-faire commercial policies encouraged Smithian dynamics