

- Incomes in South East Europe since 1500
- in Comparative Perspective
- Şevket Pamuk
- Bogaziçi University, Istanbul
- Center for Liberal-Democratic Studies
- Belgrade; June 14, 2017

- Introduction
- Econ Dev in SE Europe in the Long Run;
Big Picture View
- Less on Economic Organization and more on
Incomes per Capita
- Recent Literature
- Evidence: Mostly Wages before 1800 ; Mostly
GDP pc since 1800
- Hopefully, more work on the Region in the
future...

Before 1820 and Before the Industrial Revolution

Evidence based mostly on

Wages of (Unskilled and Skilled) Urban

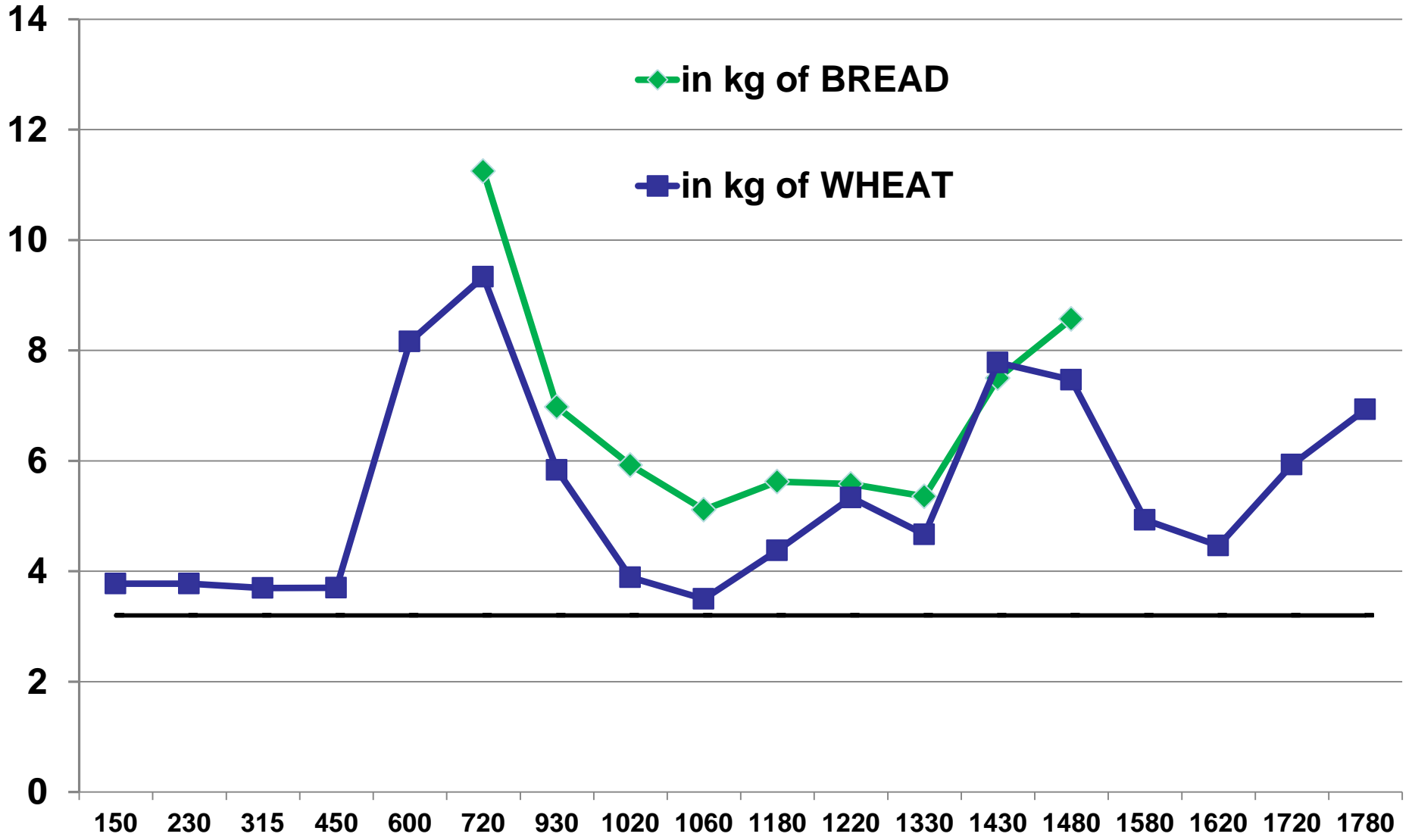
Construction Workers

Assumes urban and rural incomes are linked and

urban wages reflect productivity in agriculture

where majority of the population earn their living

Daily Wages of Unskilled Urban Workers in Egypt, 100-1800



**Figure 4: Daily Wages of Unskilled Urban Workers
in the Middle East, before 1800 ; in kg of wheat**

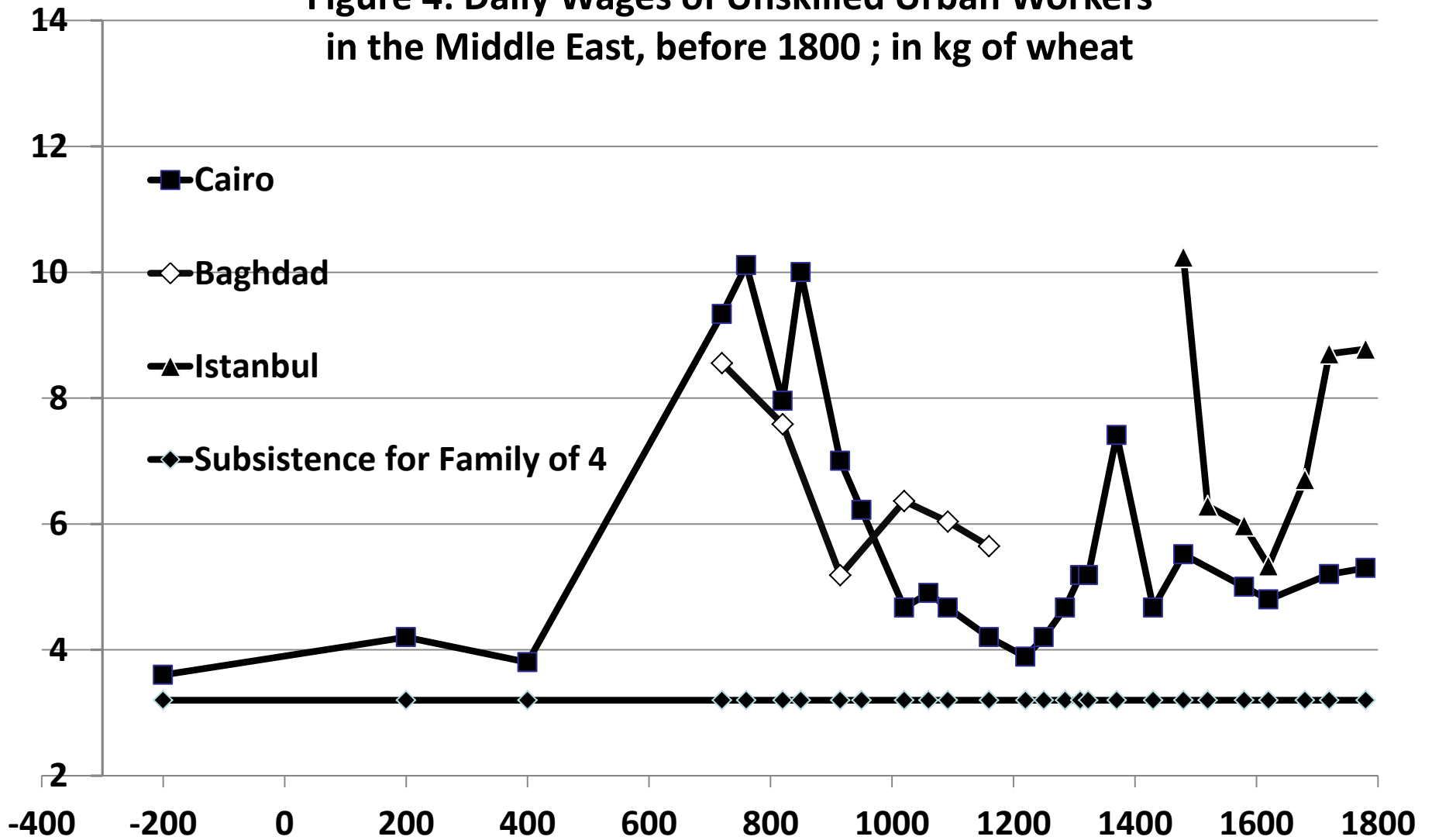
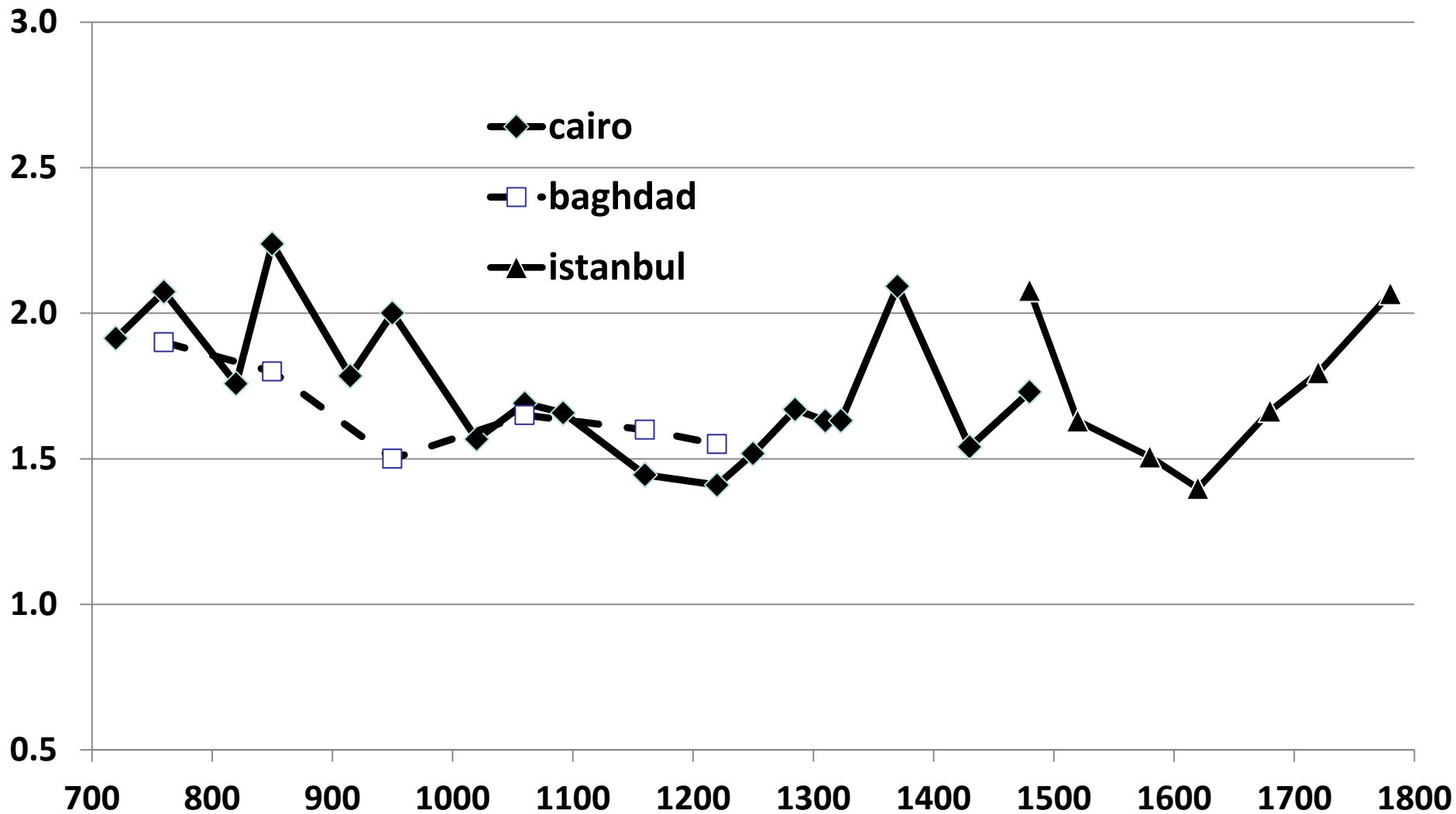
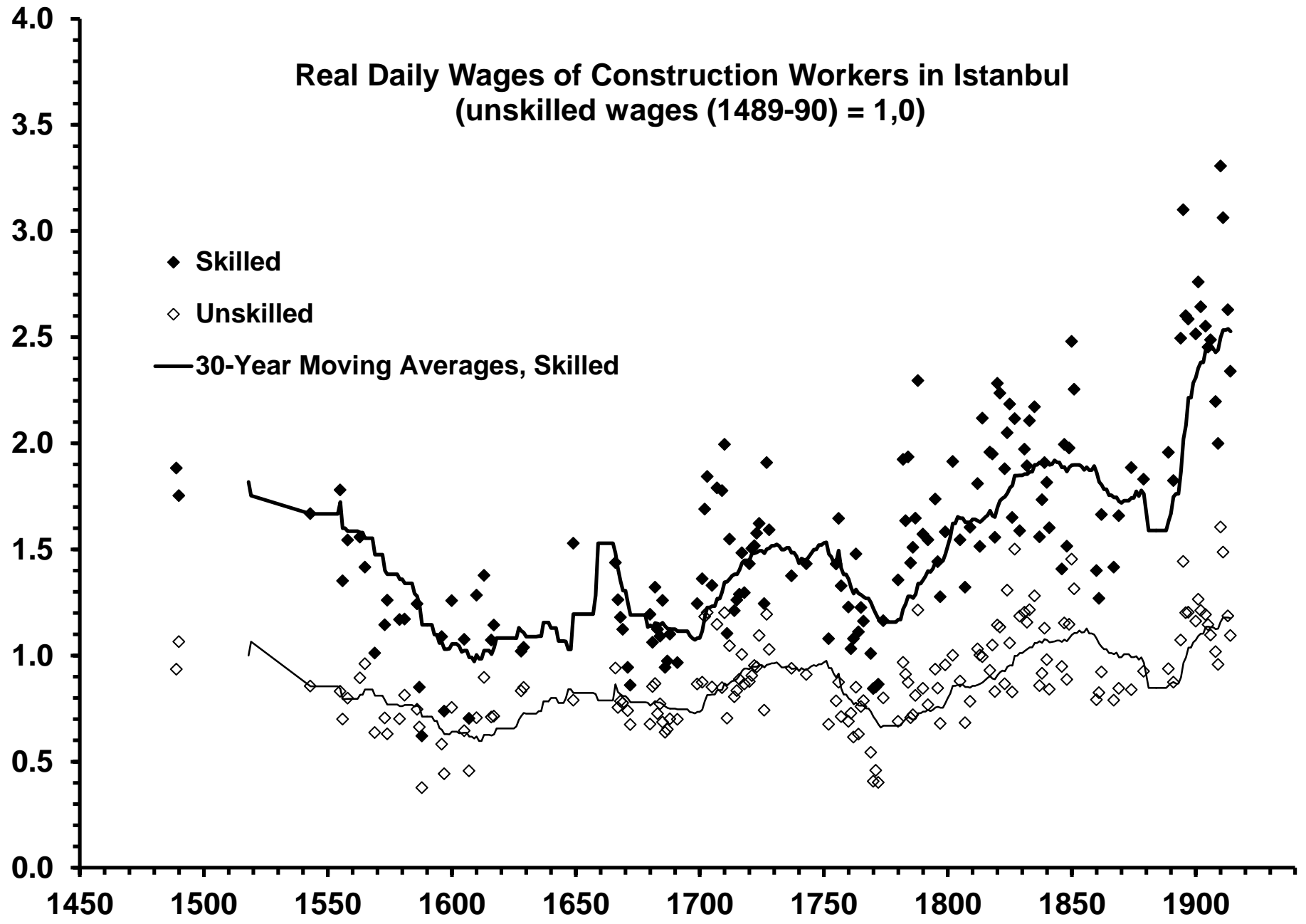


Figure 5: Purchasing Power of Unskilled Urban Wages in the Middle East; in Bare Bones Baskets, 700-1800



Real Daily Wages of Construction Workers in Istanbul (unskilled wages (1489-90) = 1,0)

- ◆ Skilled
- ◇ Unskilled
- 30-Year Moving Averages, Skilled



Economic Systems make a difference but also

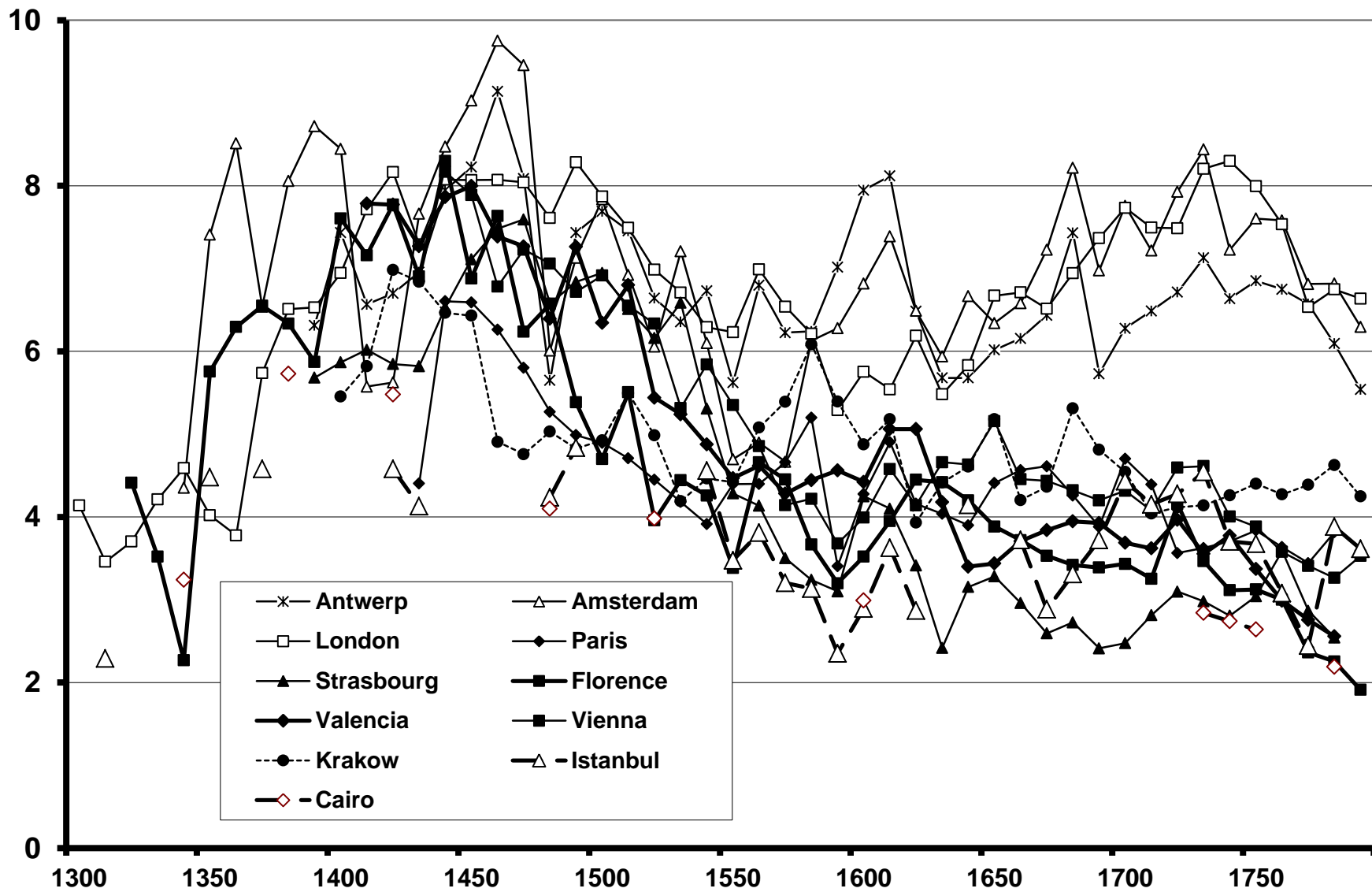
Two Major and Long-term Plagues

- Justinian Plague (541 - 800)
- Black Death (1347 - 1830)
- Labor shortages and higher per capita incomes for centuries

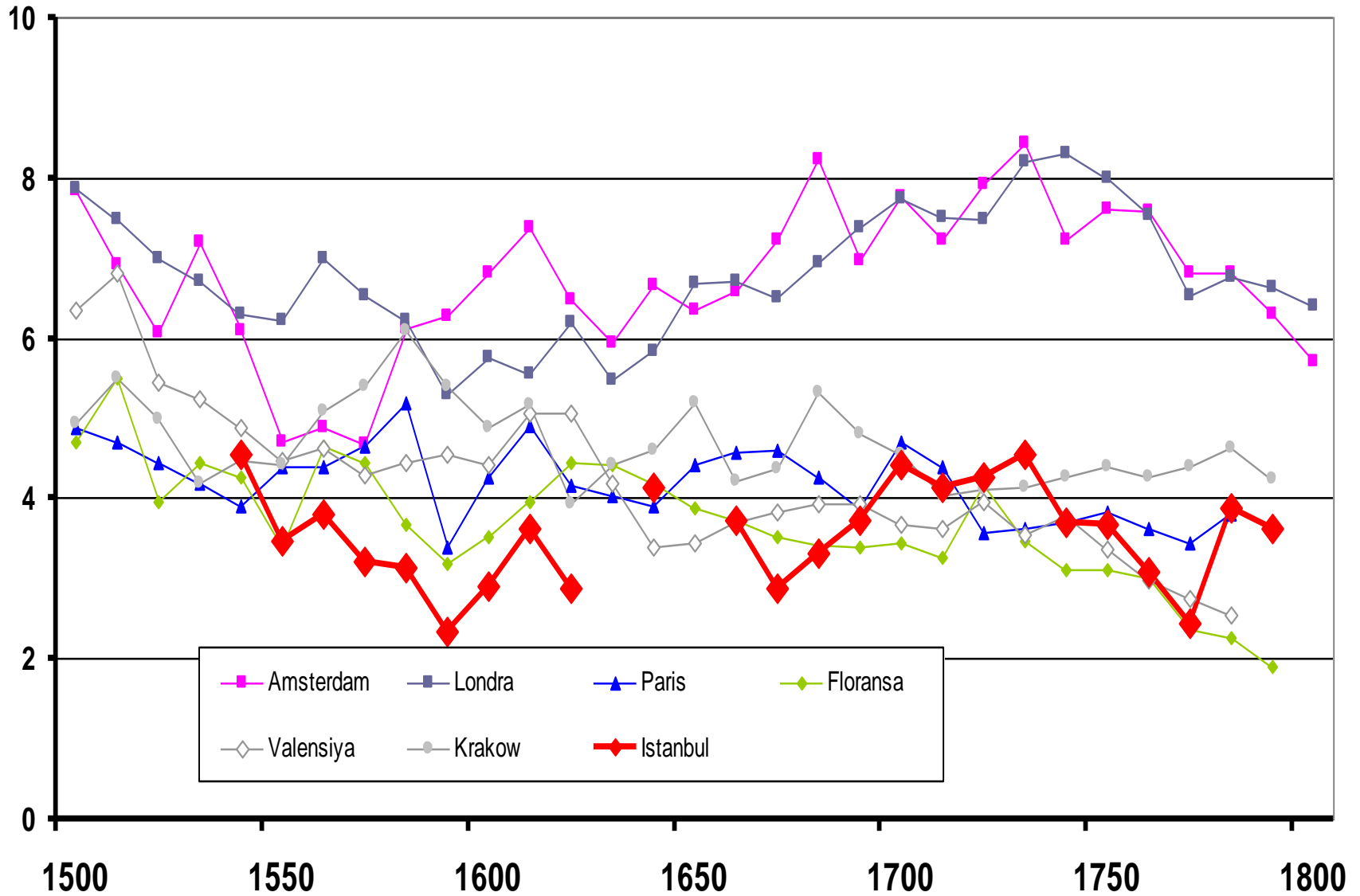
On the Black Death in the Ottoman Empire

- Daniel Panzac (1985), *La Peste dans l'empire Ottoman, 1700-1850*
- Nükhet Varlik (2016), *Plague and Empire, the Ottoman Experience 1347-1600*

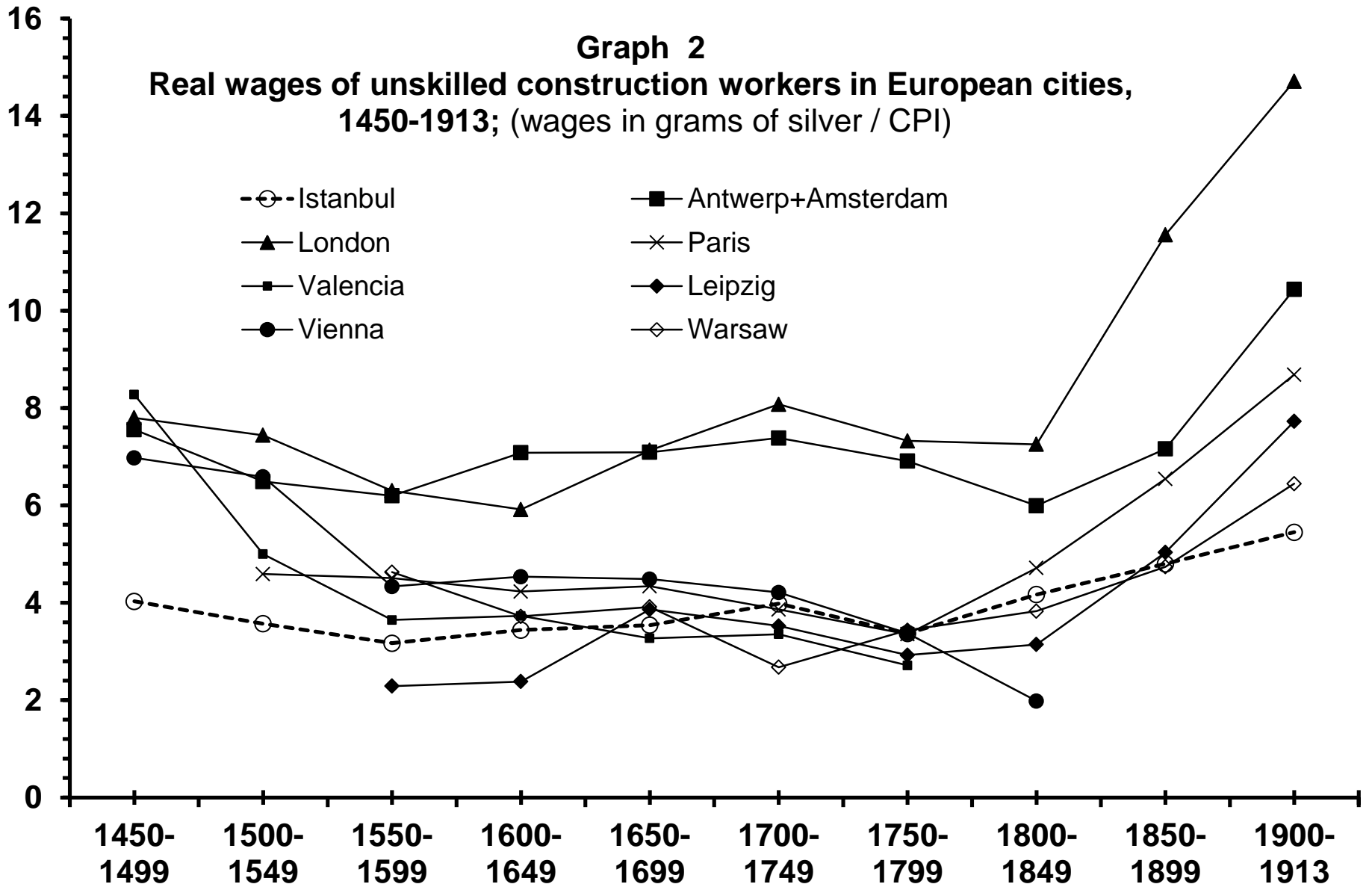
Real Wages of Unskilled Workers in Europe, 1300-1800



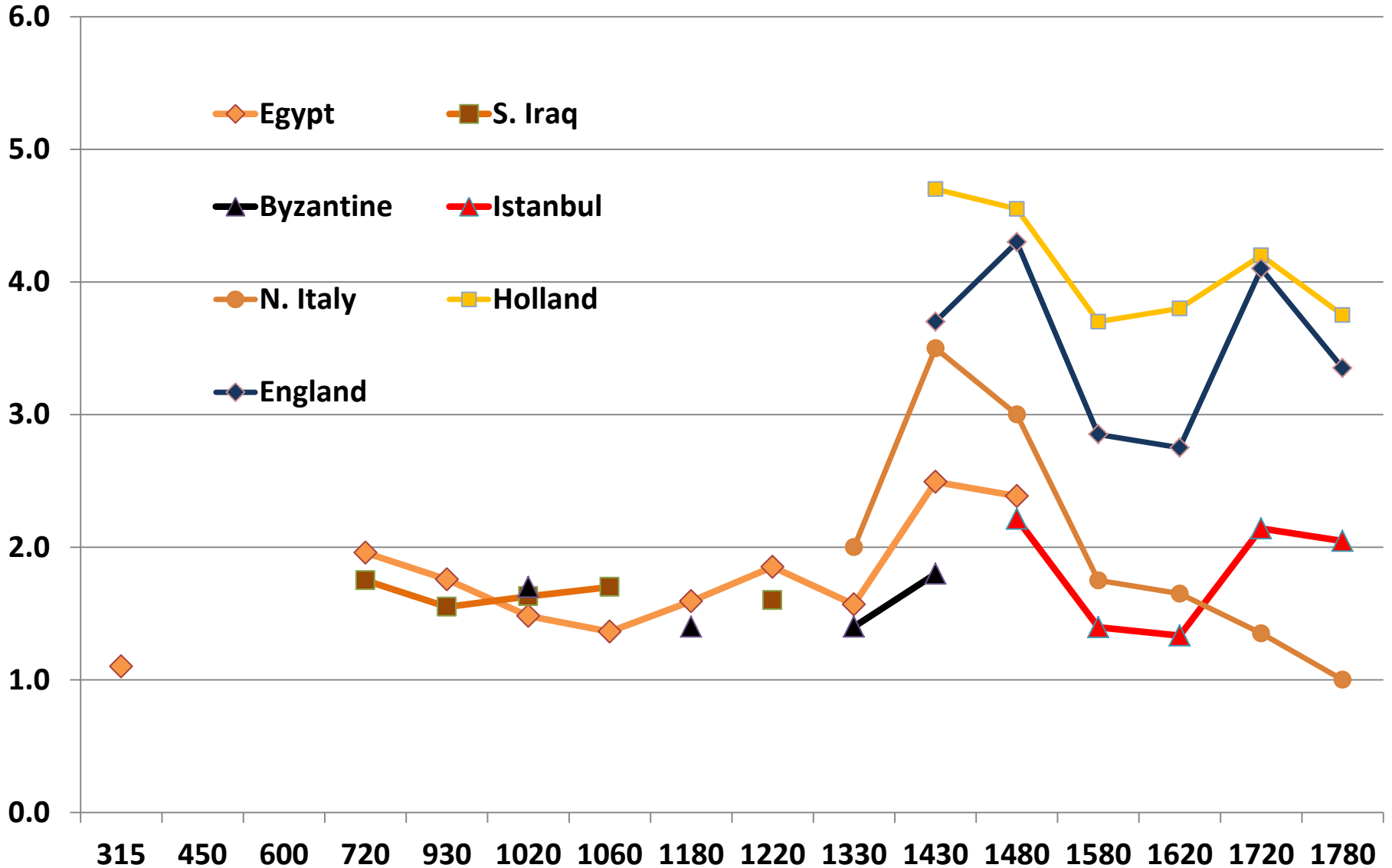
Graph 1: Real Wages of Unskilled Workers, 1500-1800
grams silver / CPI



Graph 2
Real wages of unskilled construction workers in European cities,
1450-1913; (wages in grams of silver / CPI)



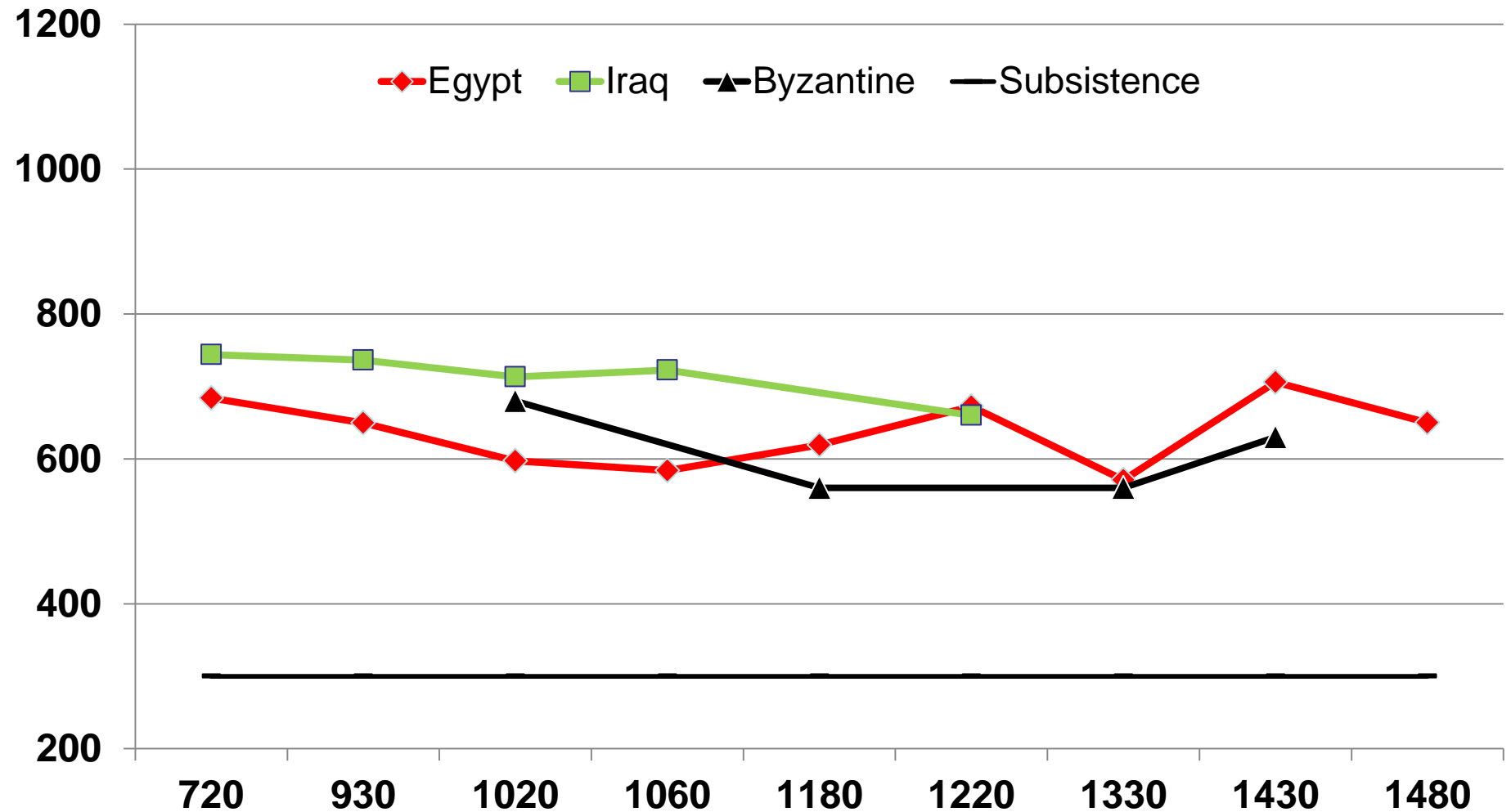
Purchasing Power of Unskilled Wages in Europe and the Middle East in Bare Bones Baskets, 300-1800



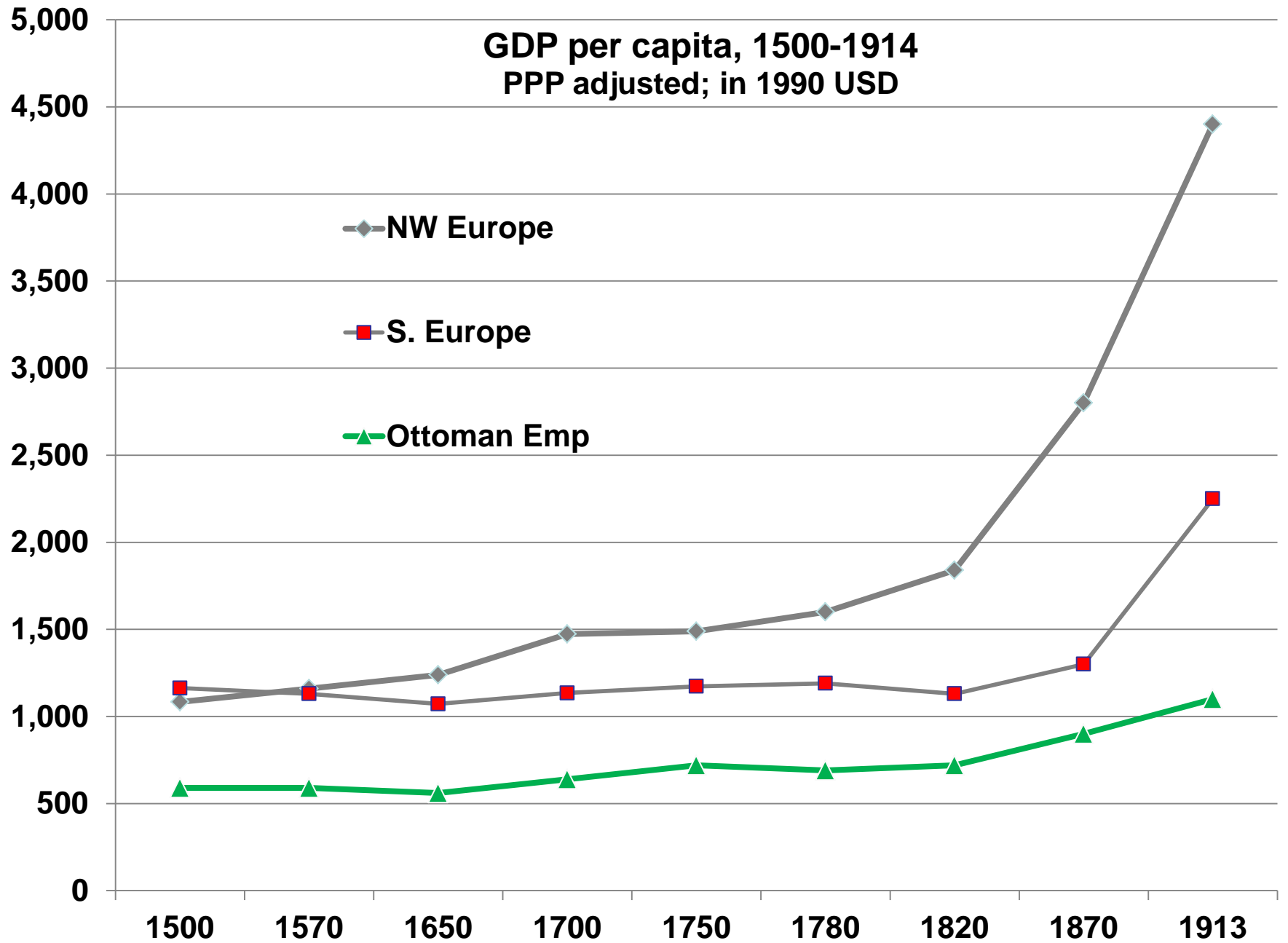
- **Some Conclusions for the Period before 1820**
- Wages were often well above subsistence
- Differences in Wages and Per Capita Incomes emerged before 1820 and even before 1500
- But these were limited in comparison to those after 1820

- Estimates of GDP per Capita
- for the Period Before 1820

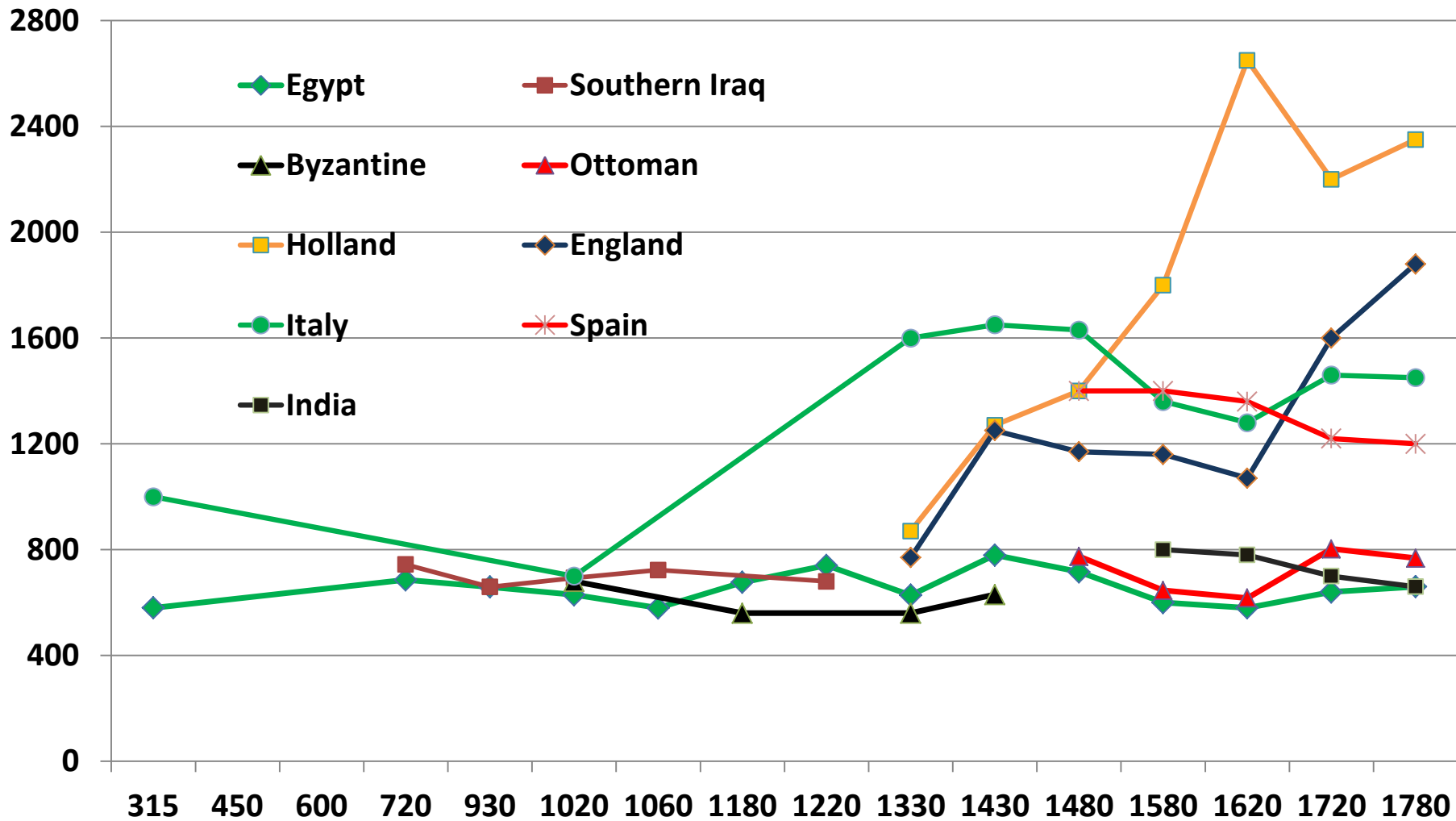
**Figure 3: GDP per capita in the Near East
in 1990 US Dollars**



GDP per capita, 1500-1914
PPP adjusted; in 1990 USD



GDP per capita in Europe, Asia and the Middle East, 300 to 1800 PPP Adjusted in 1990 US Dollars



Since 1820 and Since the Industrial Revolution

Evidence mostly based on

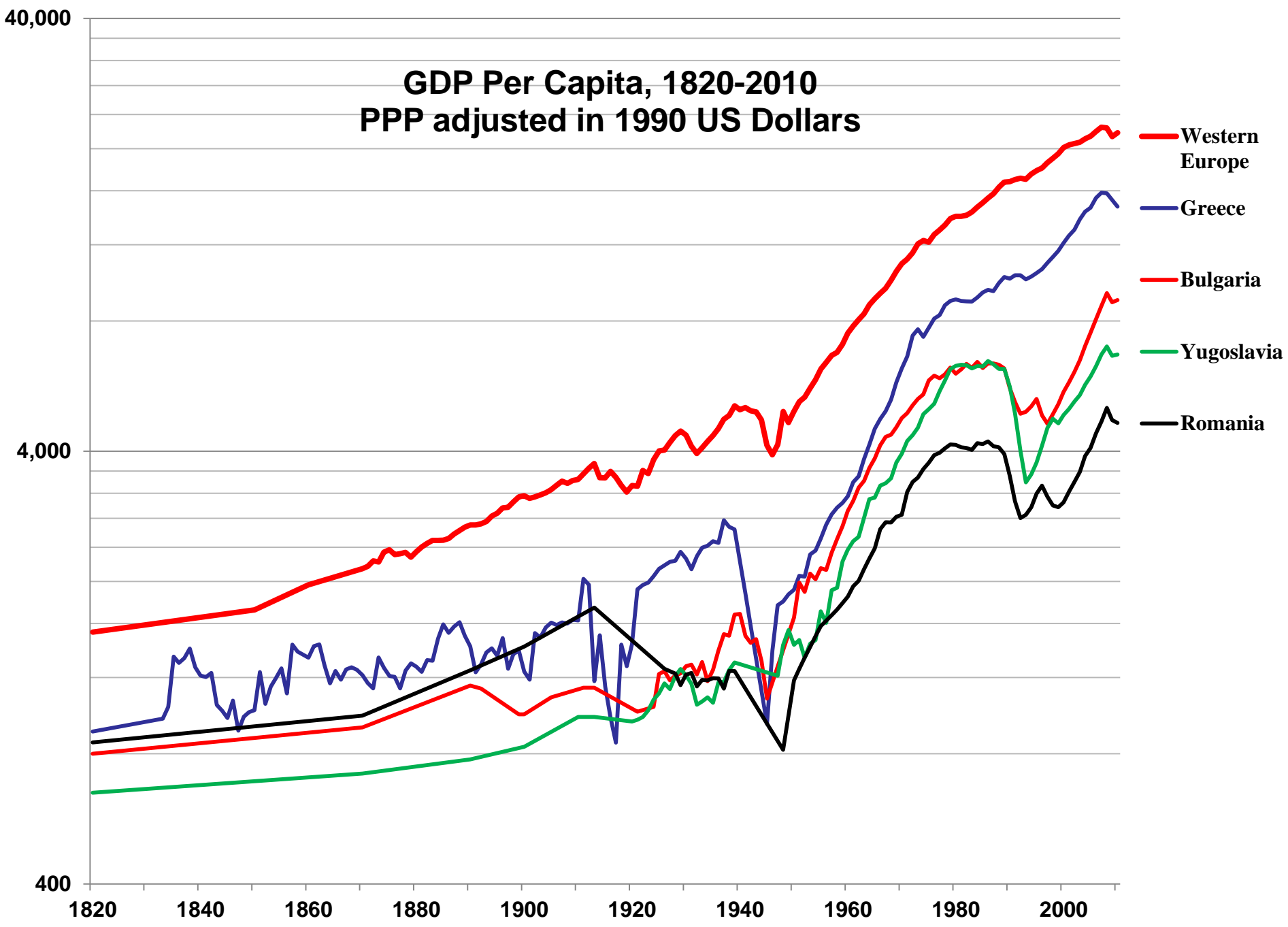
Estimates of GDP Per Capita

«Modern Economic Growth» : sustained increases in GDP per capita

Differences in GDP per capita reflect primarily differences in levels of industrialization

GDP Per Capita, 1820-2010

PPP adjusted in 1990 US Dollars



Recent Perspectives on Economic Growth in Southeastern Europe, 1820 to 1914 ... to 1950

- Convergence vs. Divergence
- Two Positions for the 19th Century
- Negative Growth (Palairret)
- Positive Growth but Divergence

(Kostelenos-Petmezas et al, Ivanov, Pamuk):

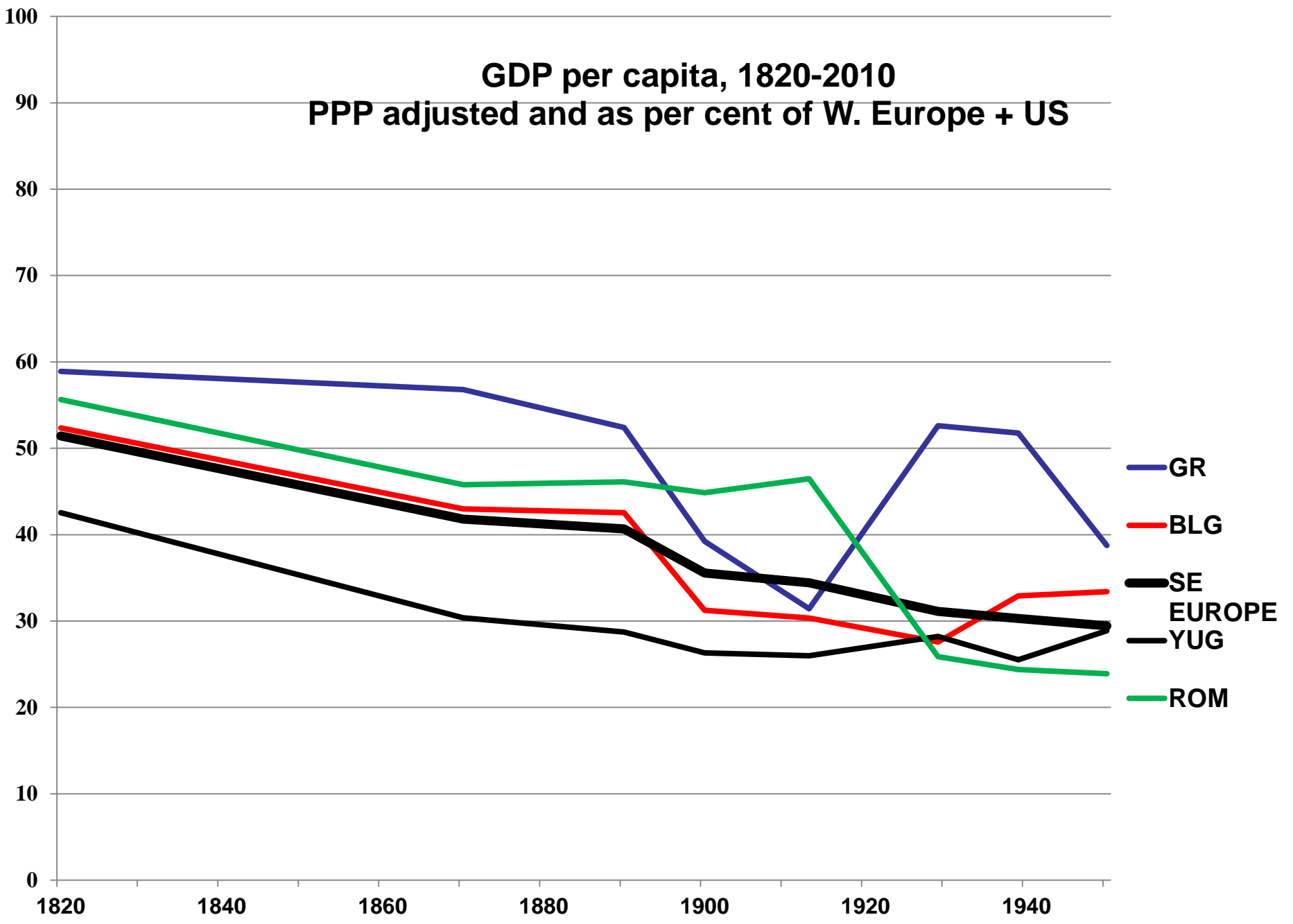
annual rates of increase in income per person less than 1 percent

Growth based less on Industrialization and more on Export oriented Agriculture

Some Industrialization but limited until 1950

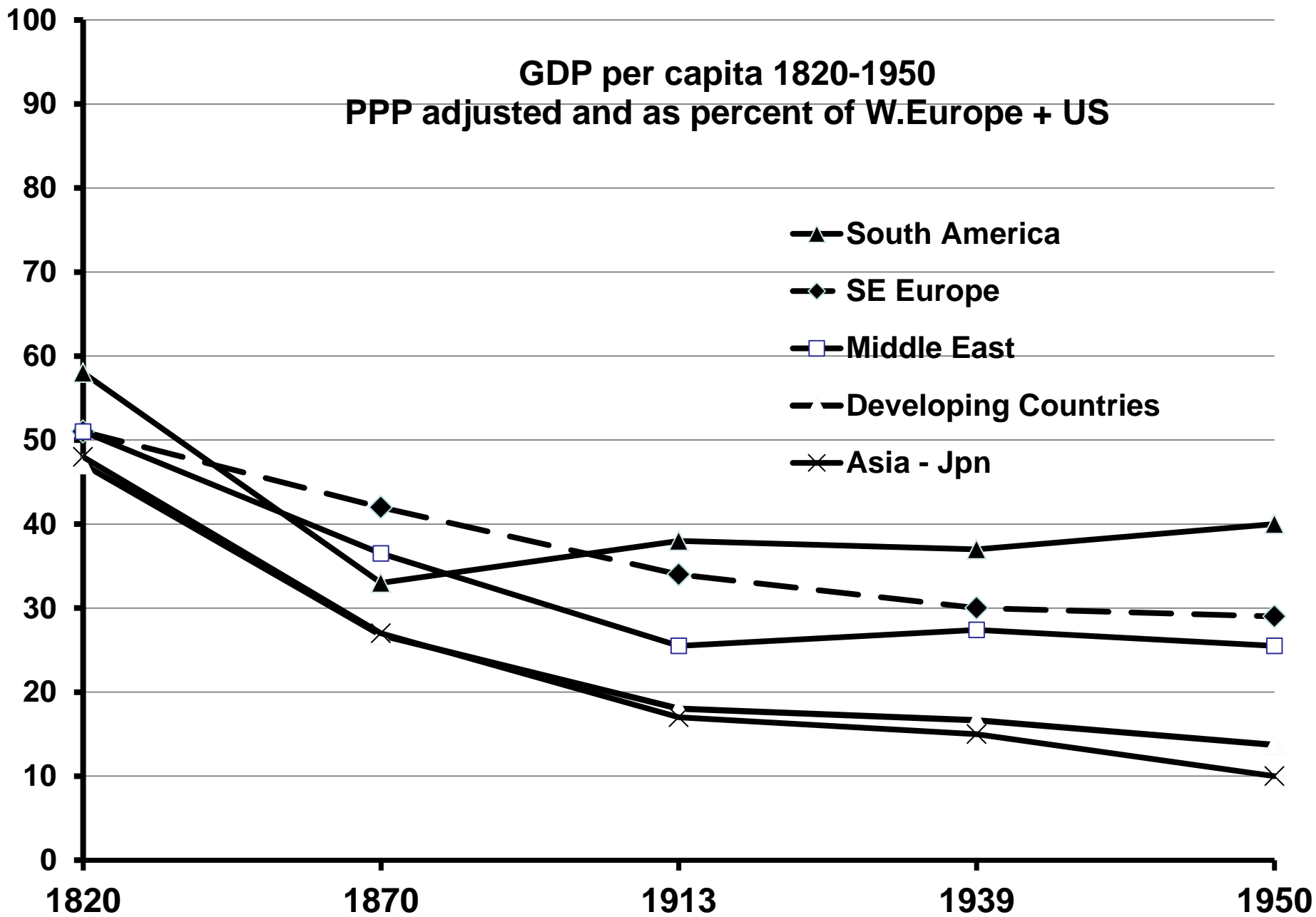
GDP per capita, 1820-2010

PPP adjusted and as per cent of W. Europe + US



GDP per capita 1820-1950

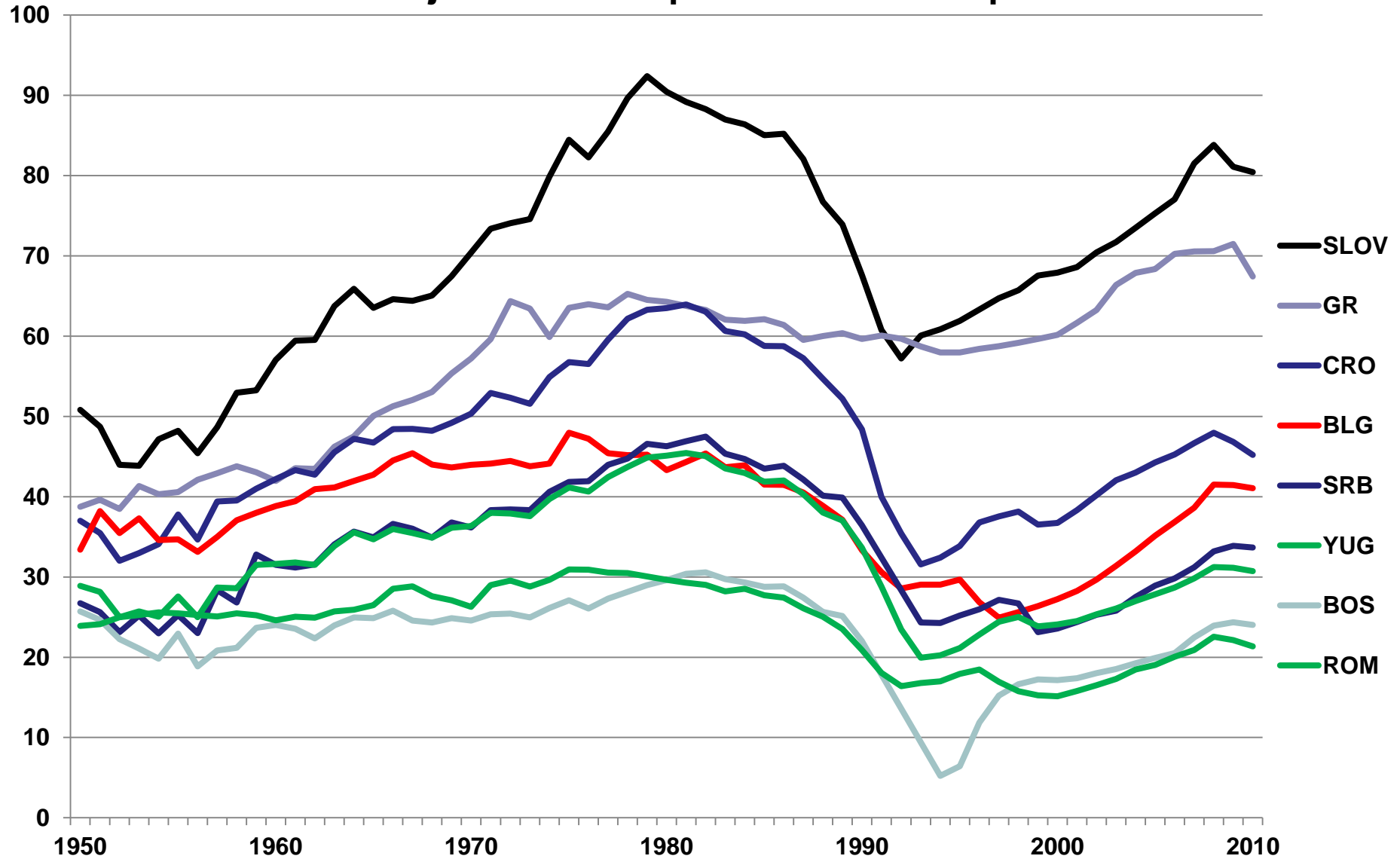
PPP adjusted and as percent of W.Europe + US



- Degree and Pace of **Industrialization**
- is the Key since the End of World War II

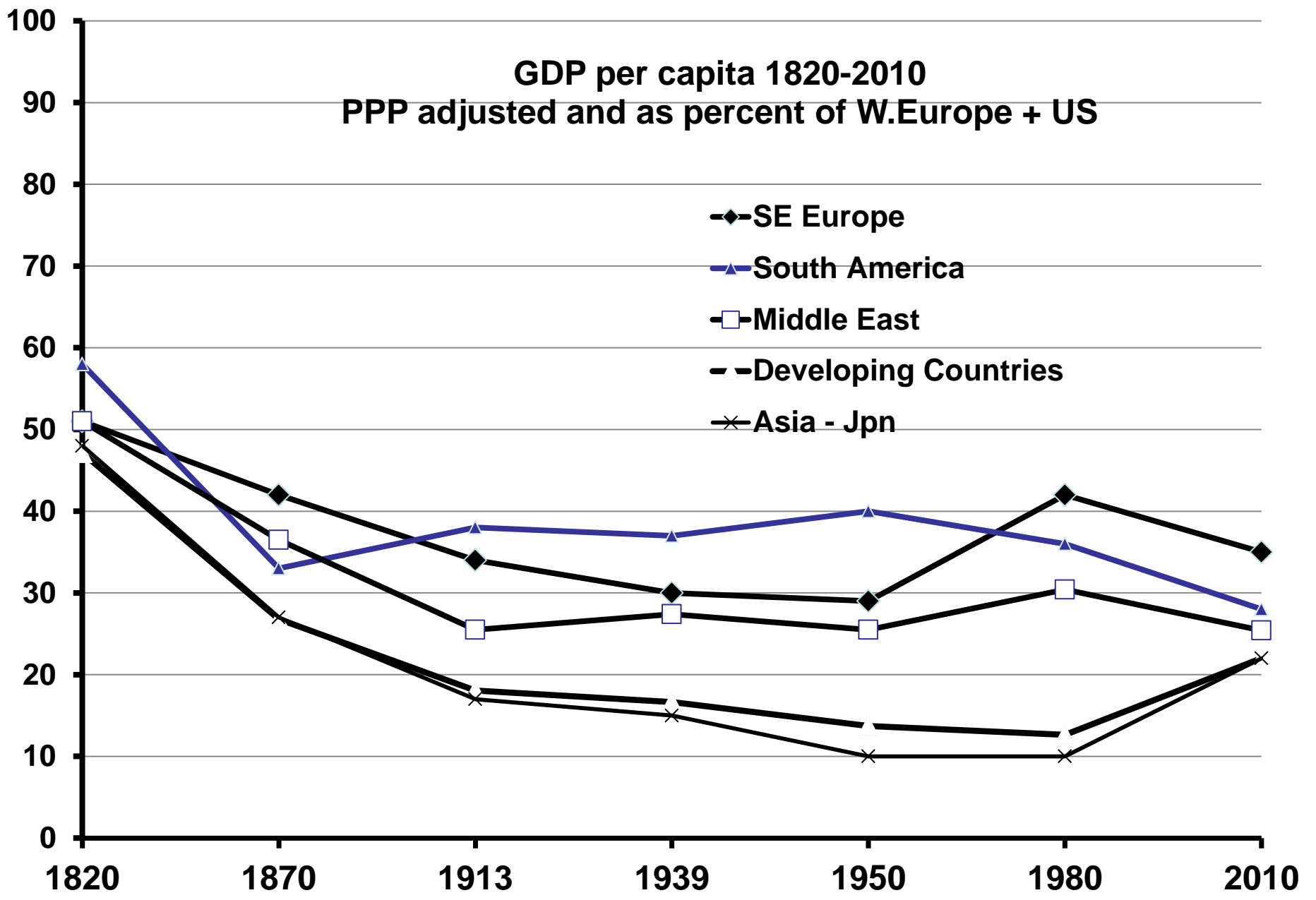
GDP per capita, 1950-2010

PPP adjusted and as percent of W. Europe + US

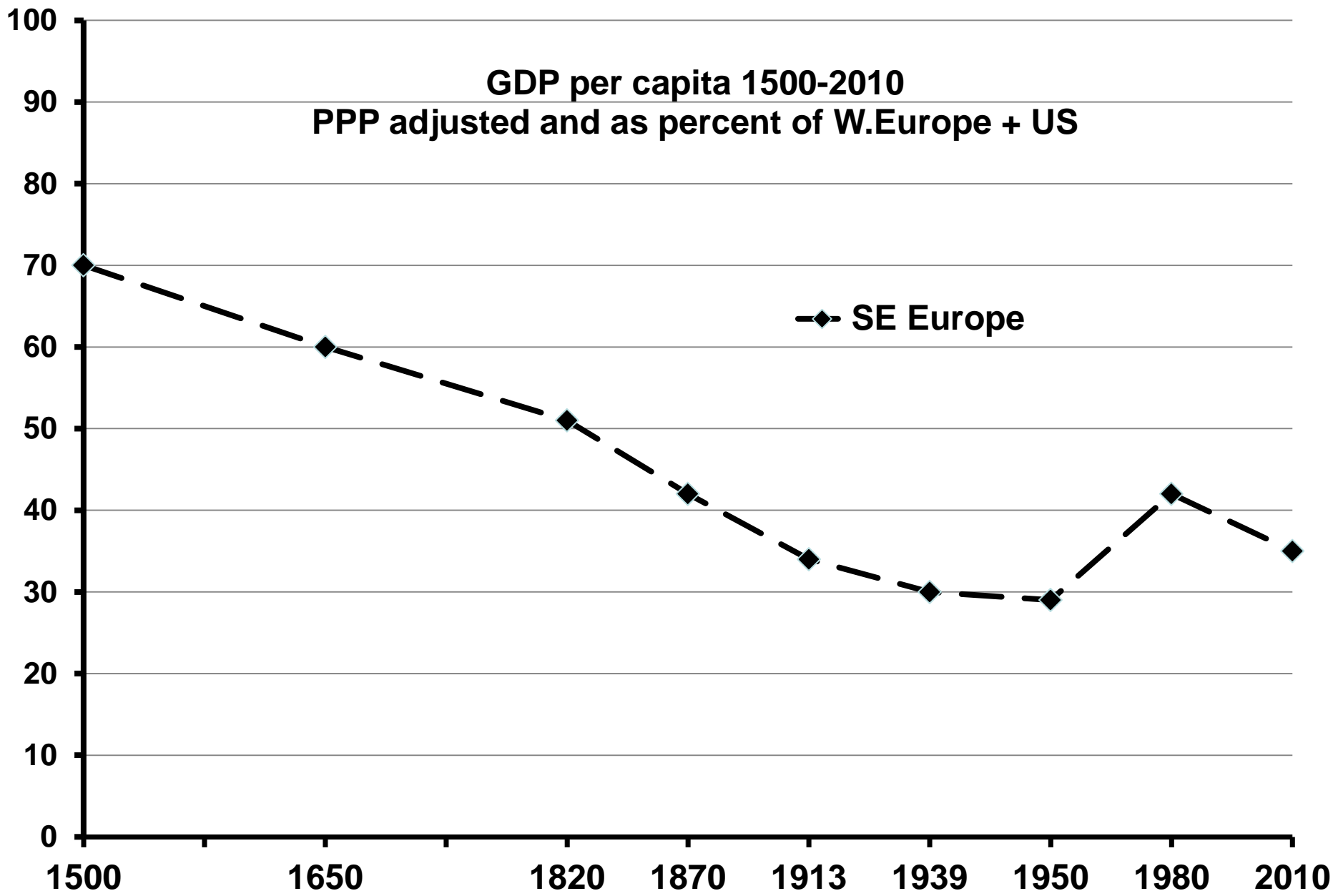


GDP per capita 1820-2010

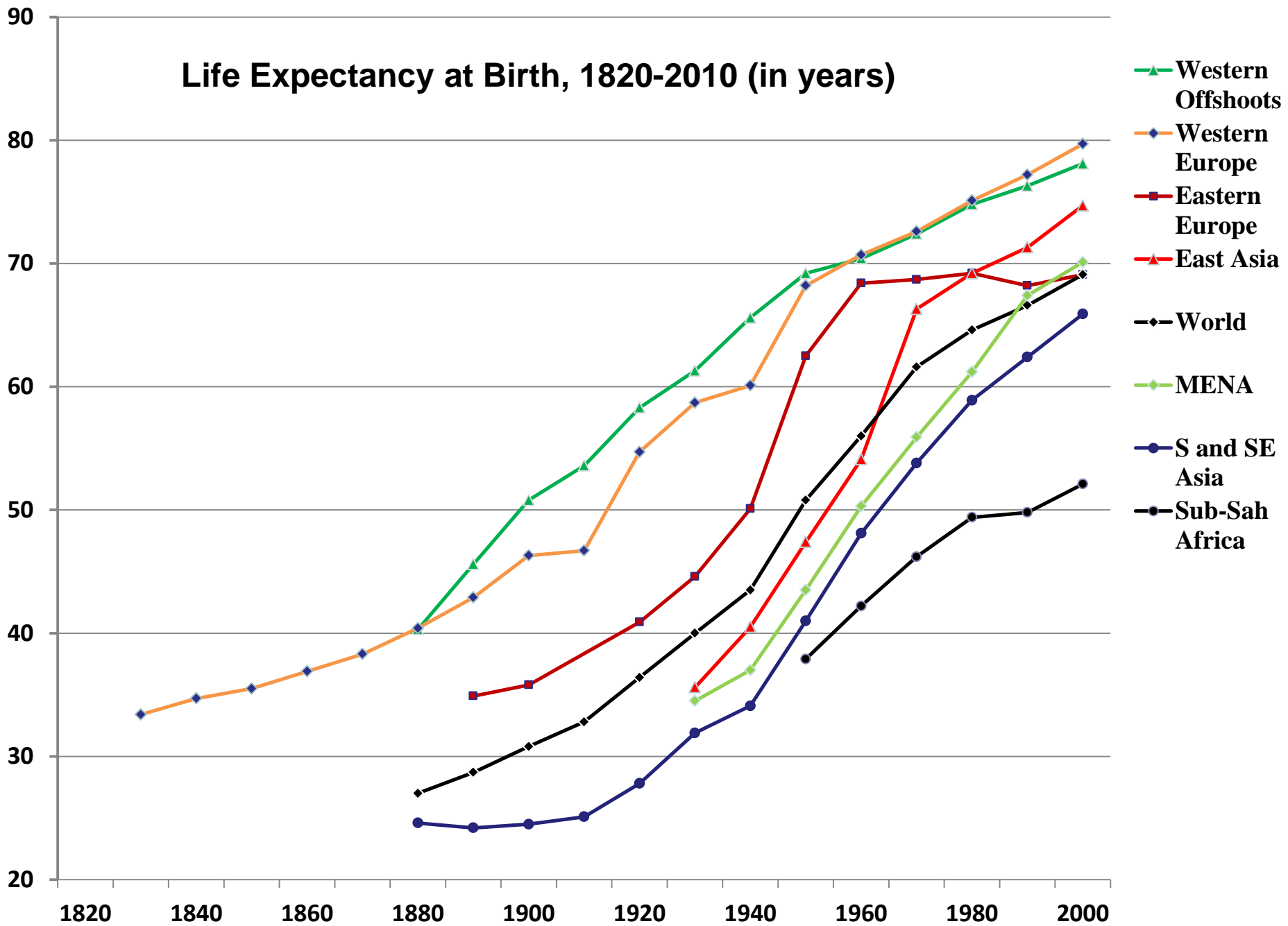
PPP adjusted and as percent of W.Europe + US



GDP per capita 1500-2010
PPP adjusted and as percent of W.Europe + US



Life Expectancy at Birth, 1820-2010 (in years)



Conclusions for the World and for SE Europe

Differences in Wages and Per Capita Incomes

- emerged before 1820 and even before 1500

Modern Era with Sustained Growth Since 1820

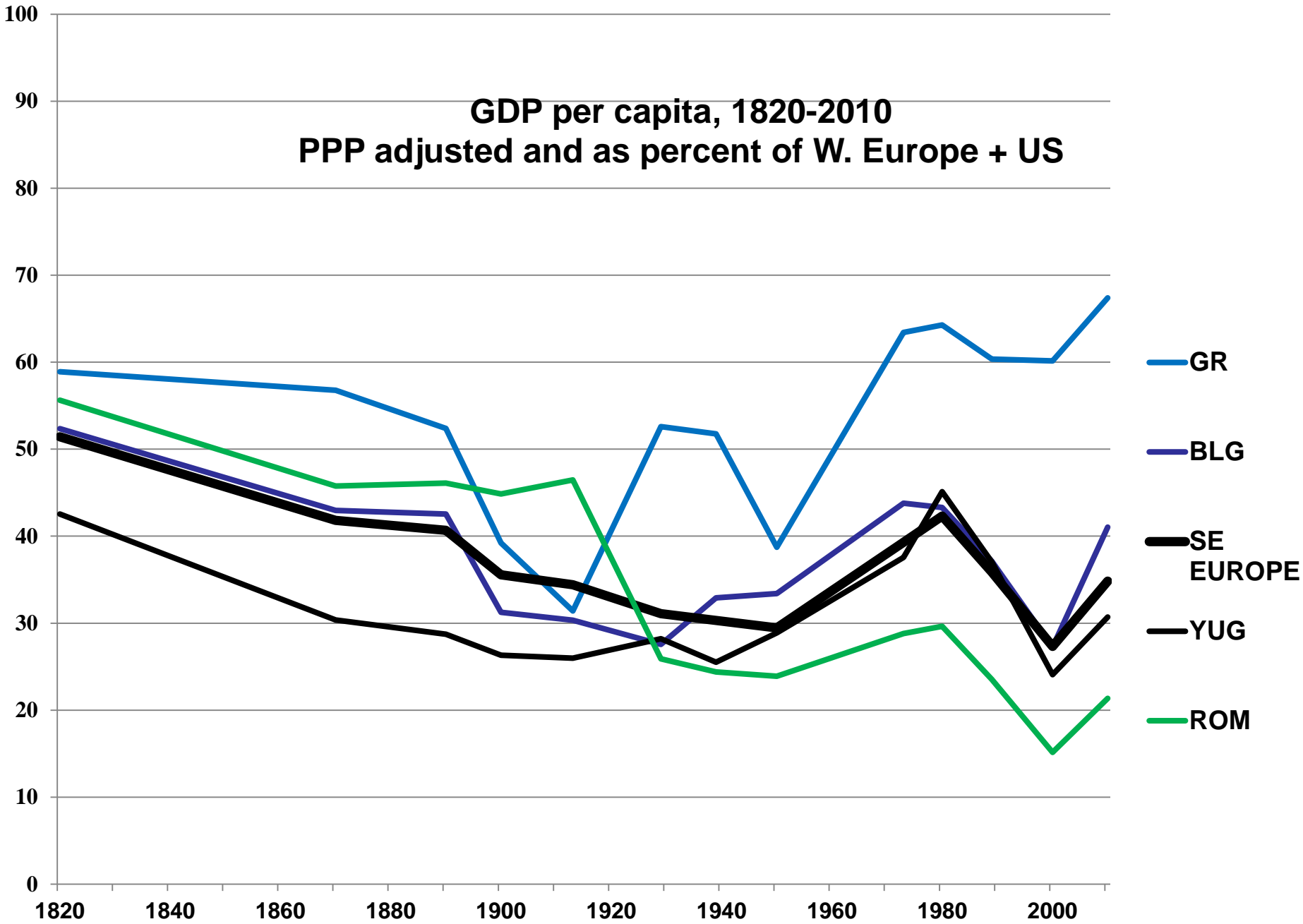
«Divergence» until 1913 or 1950

«Convergence» Weak or None since 1950

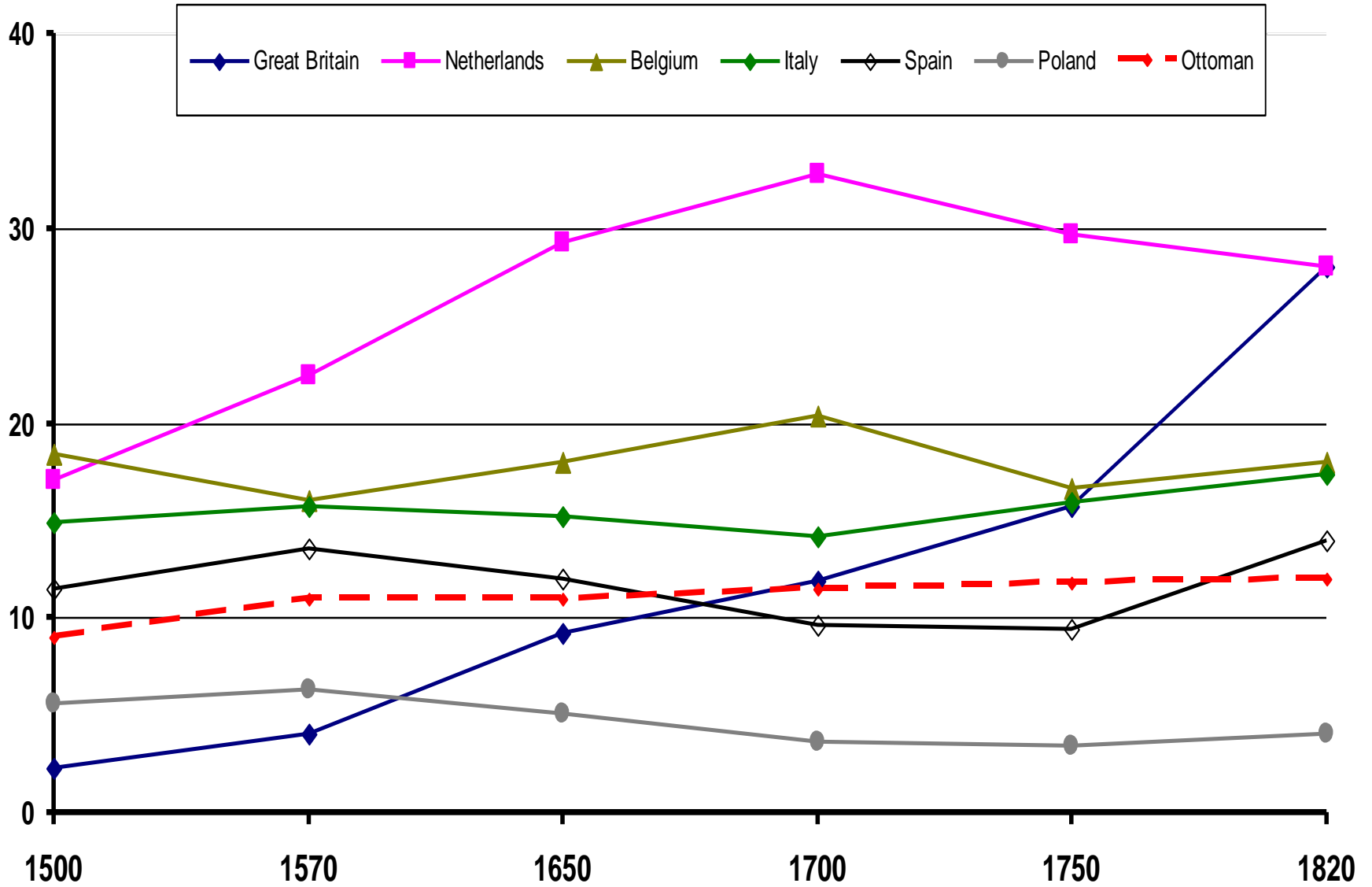
«Covergence» in Health much stronger

GDP per capita, 1820-2010

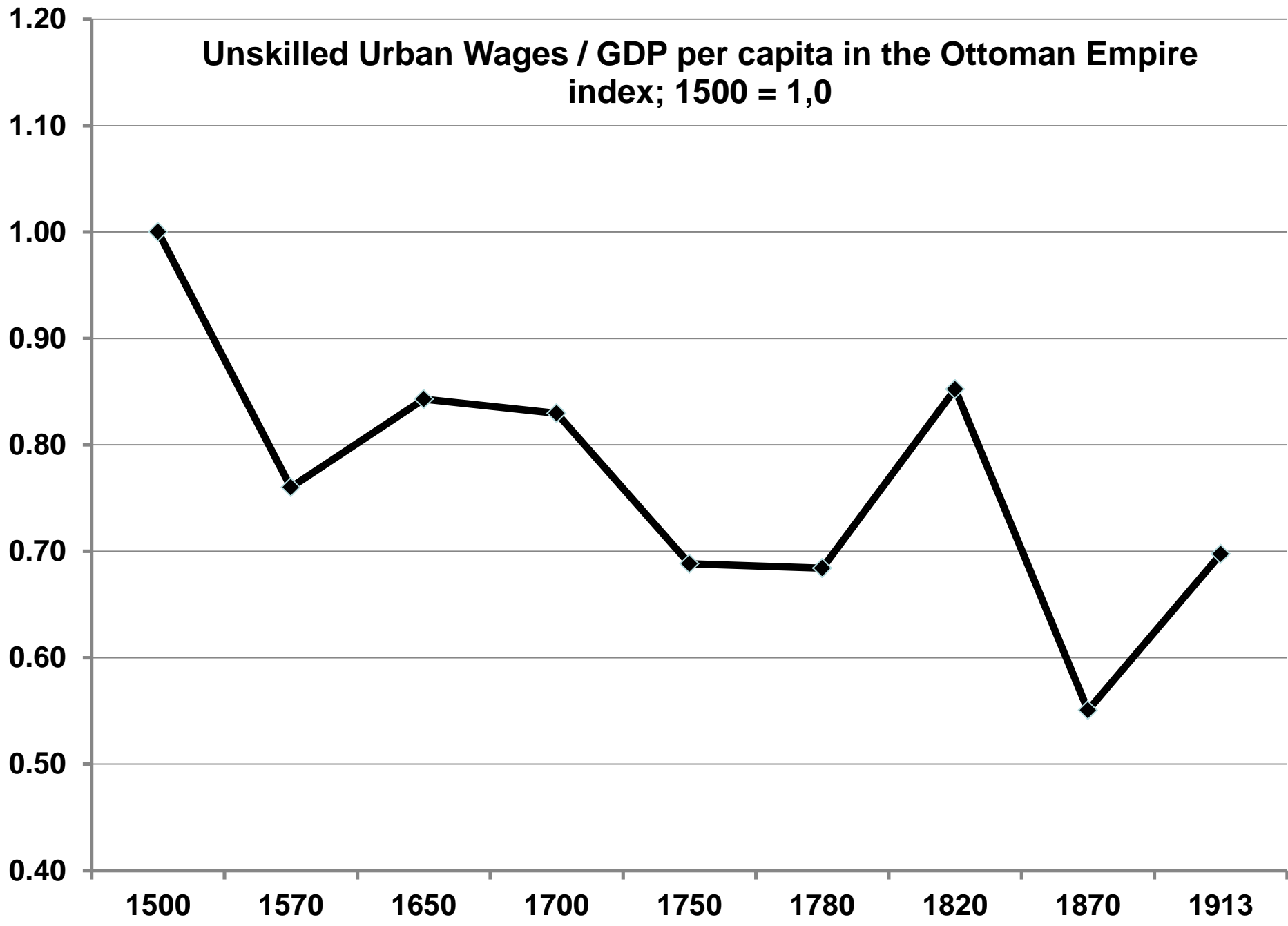
PPP adjusted and as percent of W. Europe + US



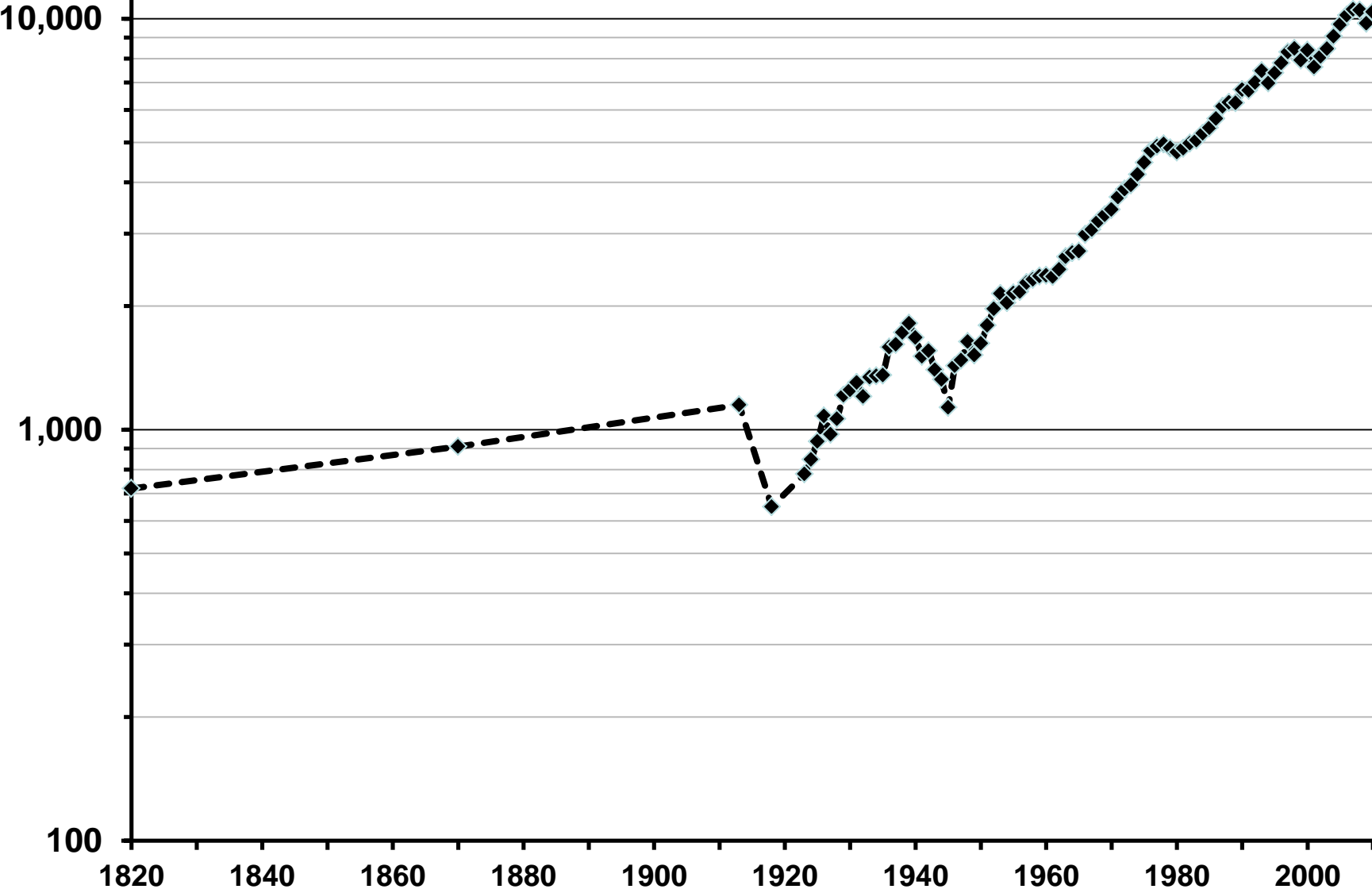
Graph 2: Urbanization Rates, 1500-1820



Unskilled Urban Wages / GDP per capita in the Ottoman Empire index; 1500 = 1,0



Graph 2.1: GDP per capita in Turkey, 1820-2015
in PPP adjusted 1990 US dollars



Graph 2.2: GDP per capita in Turkey and the World, 1820-2015
PPP adjusted and as percent of W.Europe + US

