

Groningen University, GGDC

Riitta Hjerppe
Helsingin yliopisto

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How the HNA changed the view of Finland's past development

This paper

- History of Finland's Historical National Accounts (HNA)
- What the HNA of Finland contains
- HNA showed major new results about the past development of the Finnish economy: structure and development
- There were several surprises

National Accounting in Finland

- In the late 1940s economists thought that Finland's Gross Domestic Product was decreasing every year because of difficult times after the war
- NA was started in 1948 at the Central Statistical Office
- Surprise: Economy was growing every year.
- NA system logically reveals some shortcomings when it covers all economic activities in a society; total economy from three different sides: total production approach, total expenditure approach and income approach

Early efforts of national accounting in Finland

- First effort of GDP 1880, based on income taxation and other statistical information
- => Finland's GDP per capita was clearly behind that of Sweden, Denmark and Norway
- Various efforts of NA in the 1920s and 1930s
- Concepts different from the present calculations

Historical National Accounting Project

- Discussed in the early 1950s in Finland
- Simon Kuznets in a congress of the International Association of Research in Income and Wealth 1959 suggested HNA to be done in all countries according to the **S**ystem of **N**ational **A**ccounts, a United Nations recommendation from the early 1950s
- HNAs were started in many countries

HNA in Finland

- Were started in 1960
- Ambitious plan
- Separate volumes planned for separate industries and the total economy, with aggregate supply and demand i.e. foreign trade, private and public consumption expenditure and gross fixed capital formation

History

- The research took a long time; first book on agriculture published 1965
- The Finnish Economy 1860-1985. Growth and Structural Change published in 1989 as vol 13
- 12 volumes on industries and foreign trade altogether in the Bank of Finland publication series
- Two other volumes in different publication series
- Researchers were people in national accounting in Central Statistical Office of Finland/Statistics Finland and Department of Economic and Social History, University of Helsinki

Now

- Statistics Finland updates annually
- http://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin_kan_vtp/210_vtp_tau_210.px/?rxid=c6922593-c73f-45ad-b584-e891e6c80b11
- Or google: Finland historical national accounts
- Contains GDP 1860- at basic and market prices and GDP per capita
- Value added by 4 major industries (originally 17 industries 1860-1985)
- Wage and salary totals by industries
- Main components of aggregate demand and supply
- All in current prices and volume indices (1926=100)
- Employment by industries and total population
- Some basic price indices

Difficulties in HNA

- It was not easy to assign e.g. the 19th century farming related or home production activities into their correct industries: agriculture (grain growing, cattle raising), forestry, house building, land and water construction (land clearing for cultivation) and manufacturing (production for sale of small cottage industries; tar burning)
- Much of primary industry production went to own use; marketed share of production was small
- Statistical base was weak or missing
- Plenty of indicator based estimations were needed

Updating/continuing difficulties

- National accounting recommendations are constantly changing
- Concepts and methods are changing because of the changing society
- Now internet pages of HNA contain less industries because of the changed industrial classifications

Take off or industrialisation

- The earlier suggestions for industrialisation or take off in Finland:
- 1860s because the legislation changed more liberal and made industrialisation possible;
 - This was presented 1940s and was long a textbook explanation in the school books (introduced by H. Waris and K. Alho)
- 1870s because after the French-German war a boom of timber demand caused a big boom for a few years and the first big steam sawmills were founded.
 - This was presented in the 1950s, 1960s
- Some other suggestions from 1840s to 1890s

**Figure 1. GDP and GDP per capita volume indices (1926=100),
1860–2015, log.**

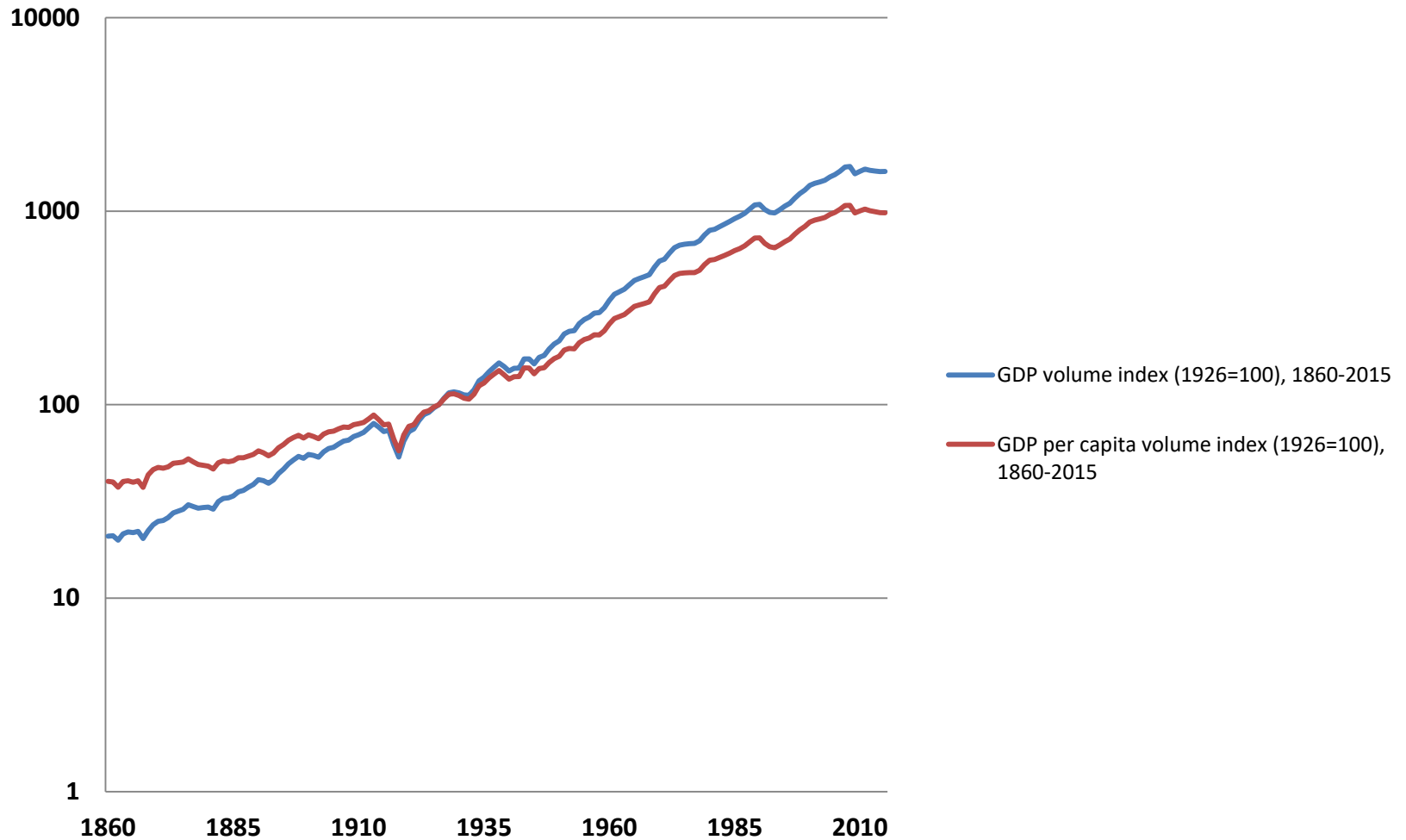


Figure 2. GDP and GDP per capita growth at time time intervals, 1860-2015, %/y.

Annual average growth: GDP 2,8%/y and GDP per capita 2,1%/y

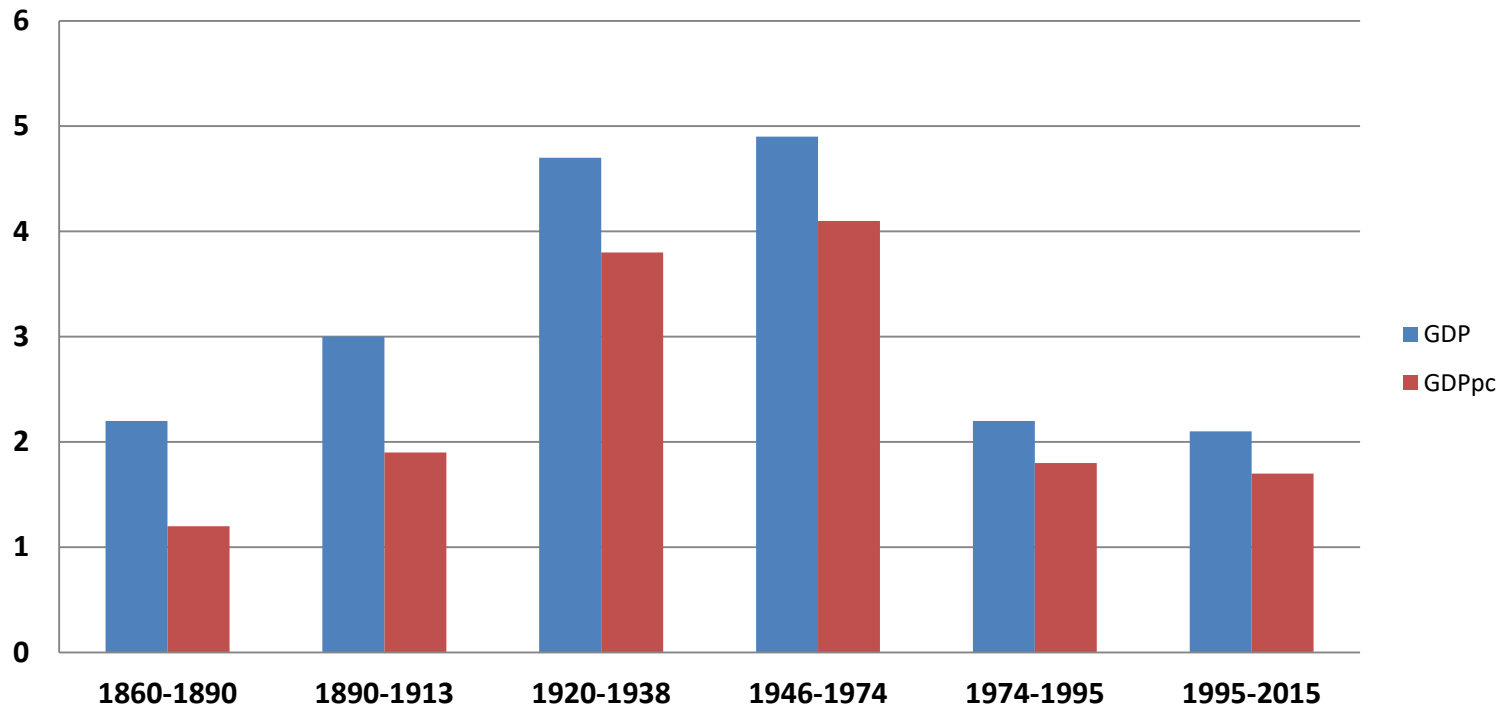


Figure 3a. Finland's, Sweden's and EU-15/18 real GDP per capita in Geary Khamis 1990 US\$ and PPPs, 1900-2015.

EU-15 1900-2008, EU-18 2009-2015.

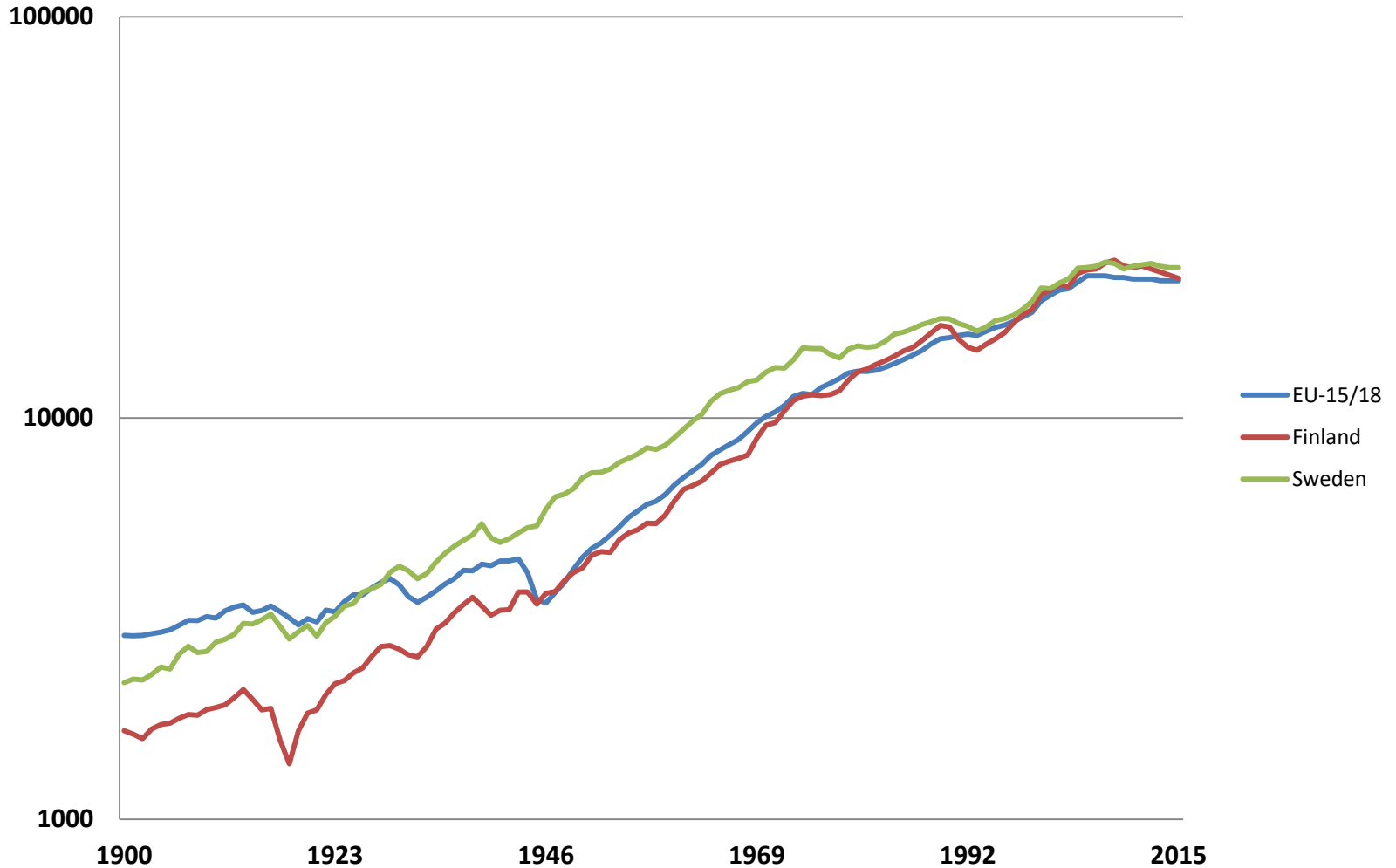
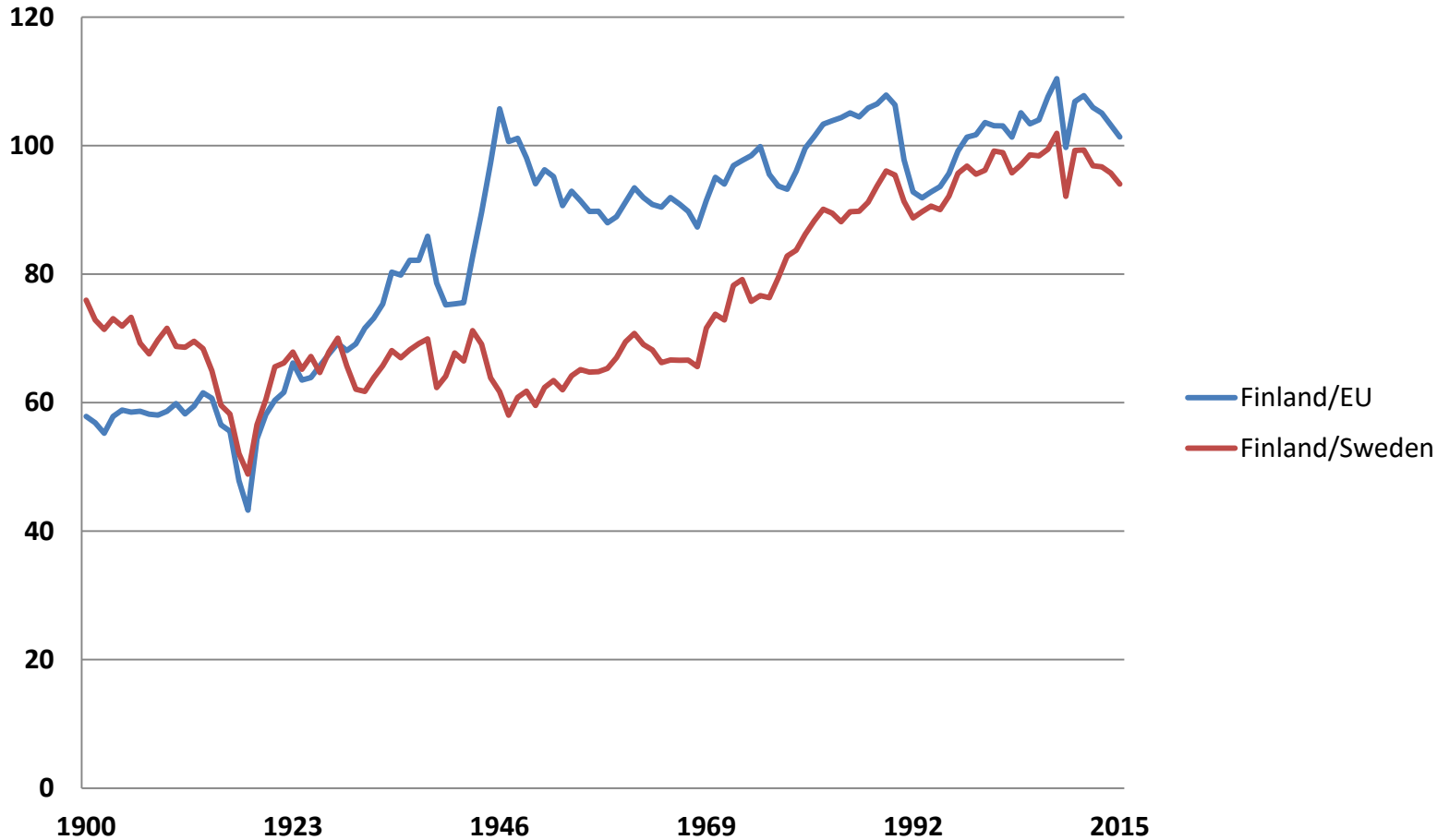


Figure 3b. Finland's real GDP per capita in relation to EU-15/EU-18 and Sweden, 1900-2015, %.

Line 100 if they are equal. EU-15 1900-2008, EU-18 2009-2015.



Shares of major industries, 1860–2015, %.

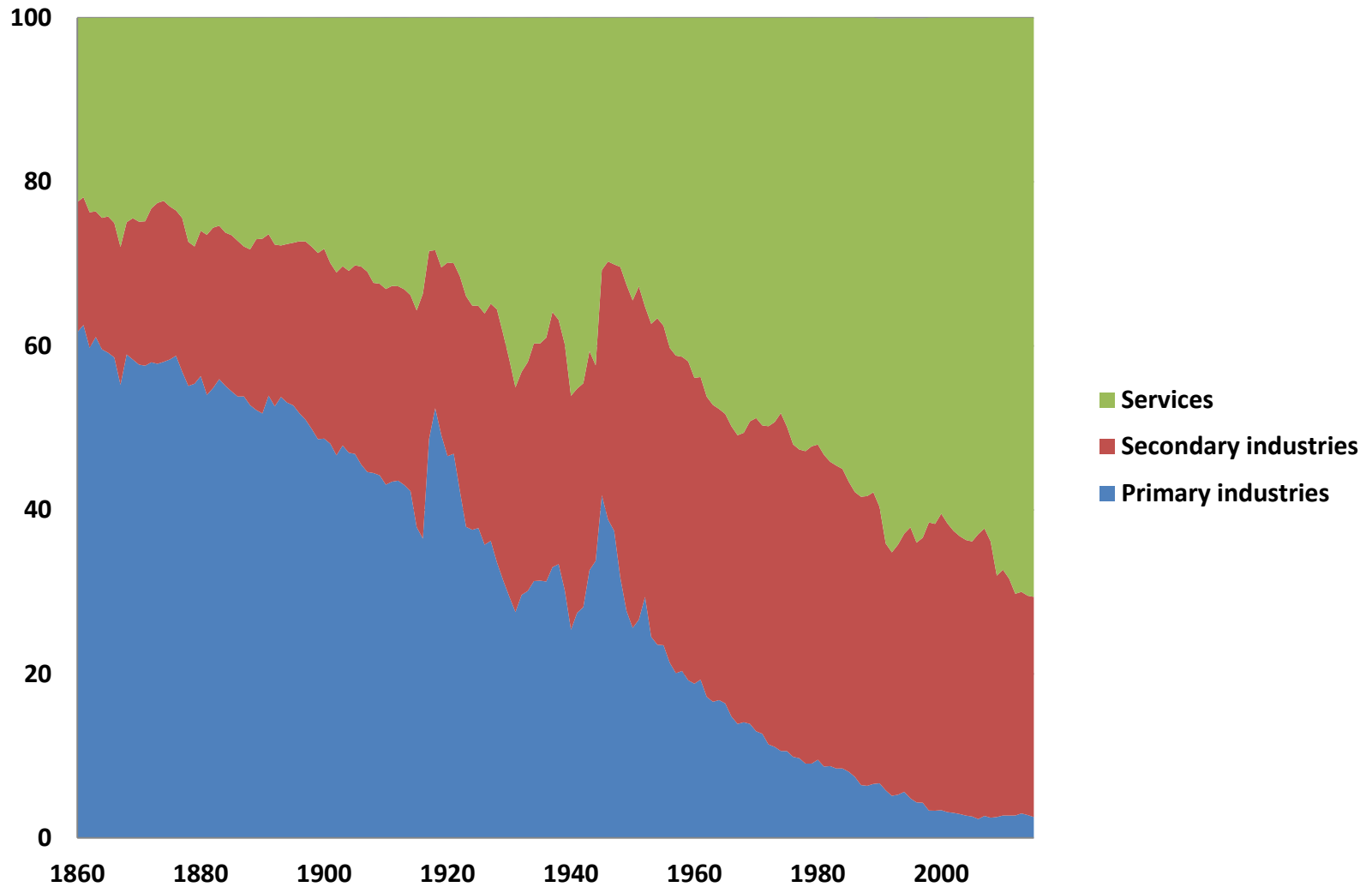


Figure 4. Shares of primary, secondary and service industries in GDP, 1860–2015, %.

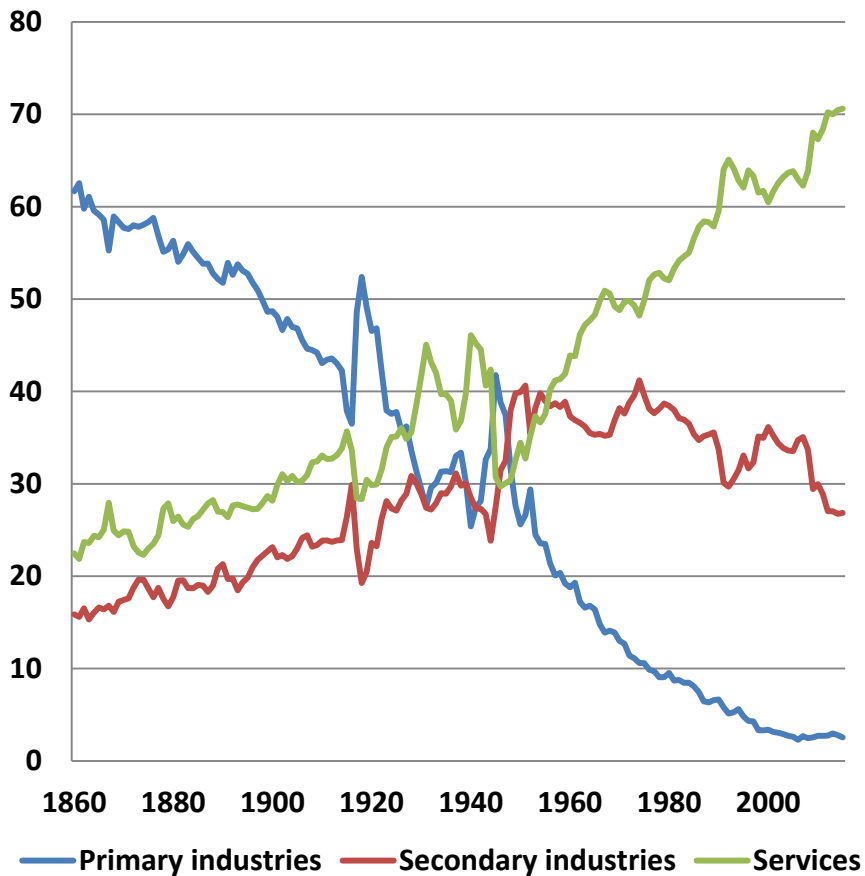


Figure 5. Shares of employment in primary, secondary and service industries in GDP, 1860–2015, %.

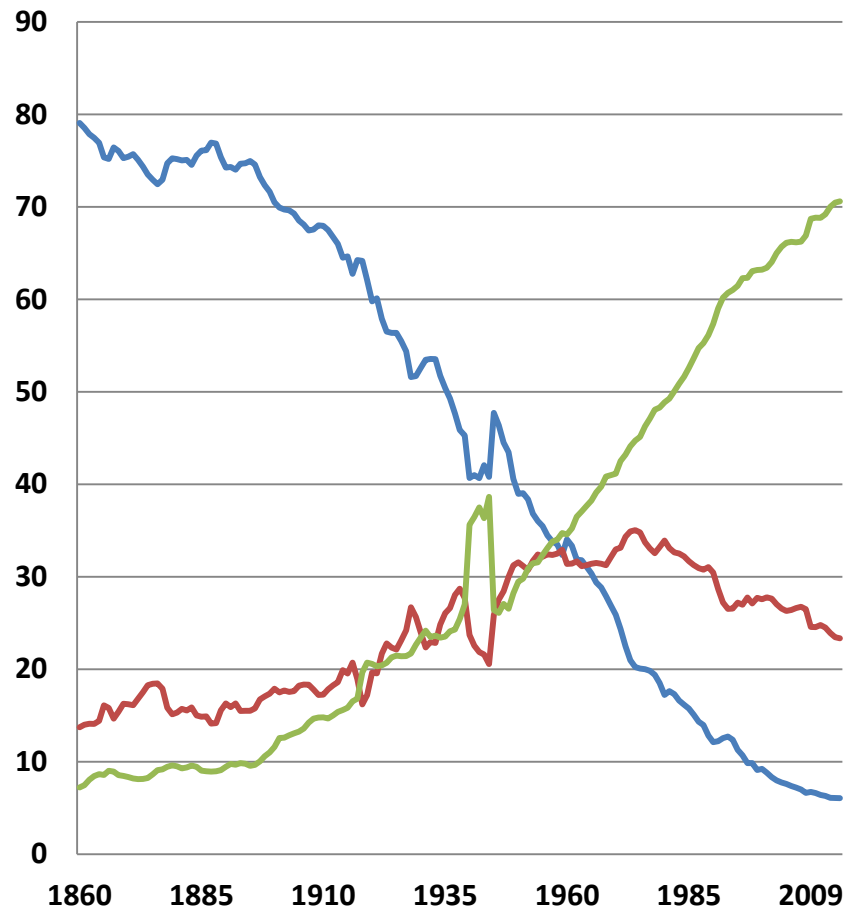


Figure 6. Relative productivity of labour in primary, secondary and service industries (share of value added/share of employment), 1860–2015.

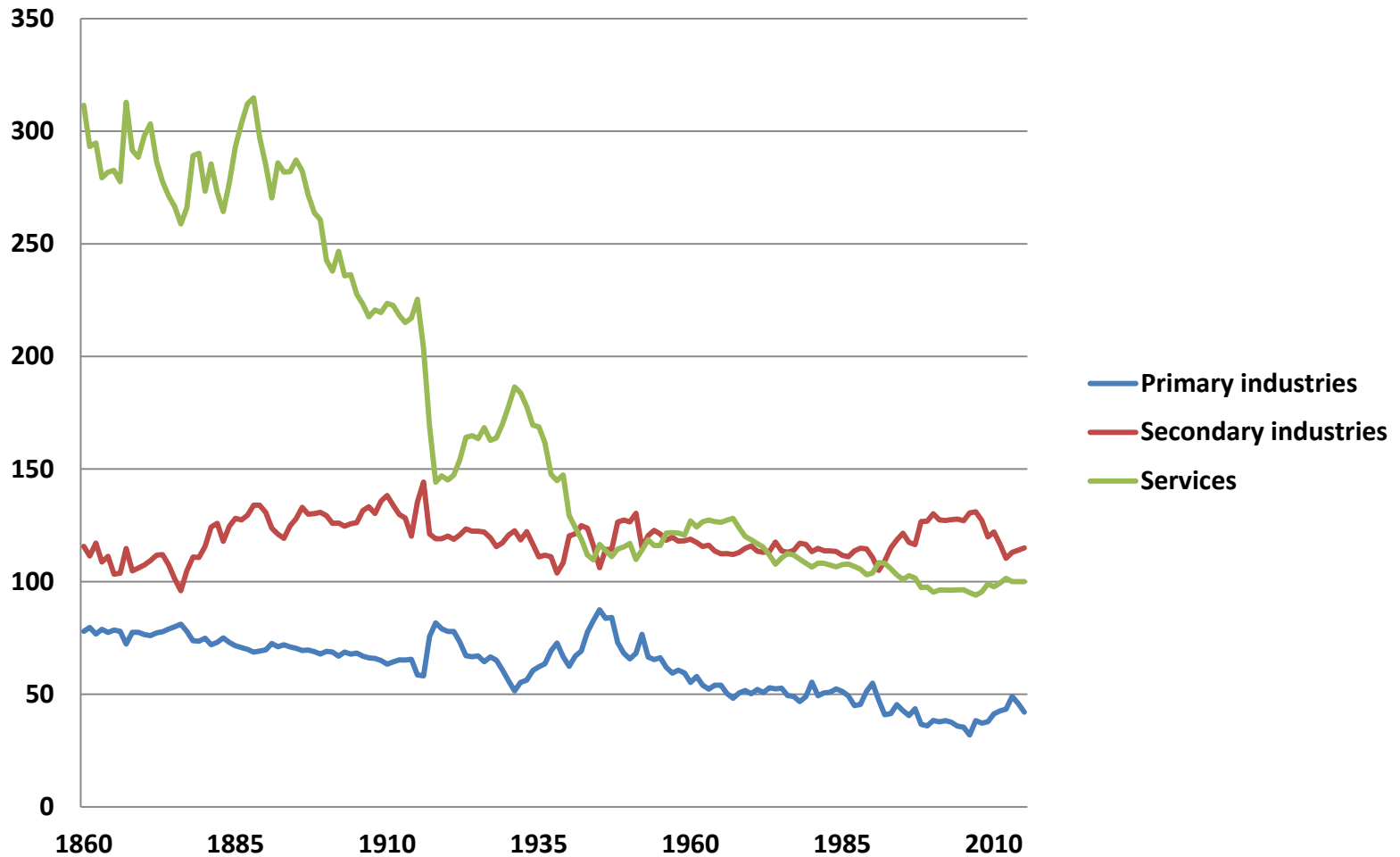


Figure 7. Investment rate (gross capital formation/GDP, %)1860–2015

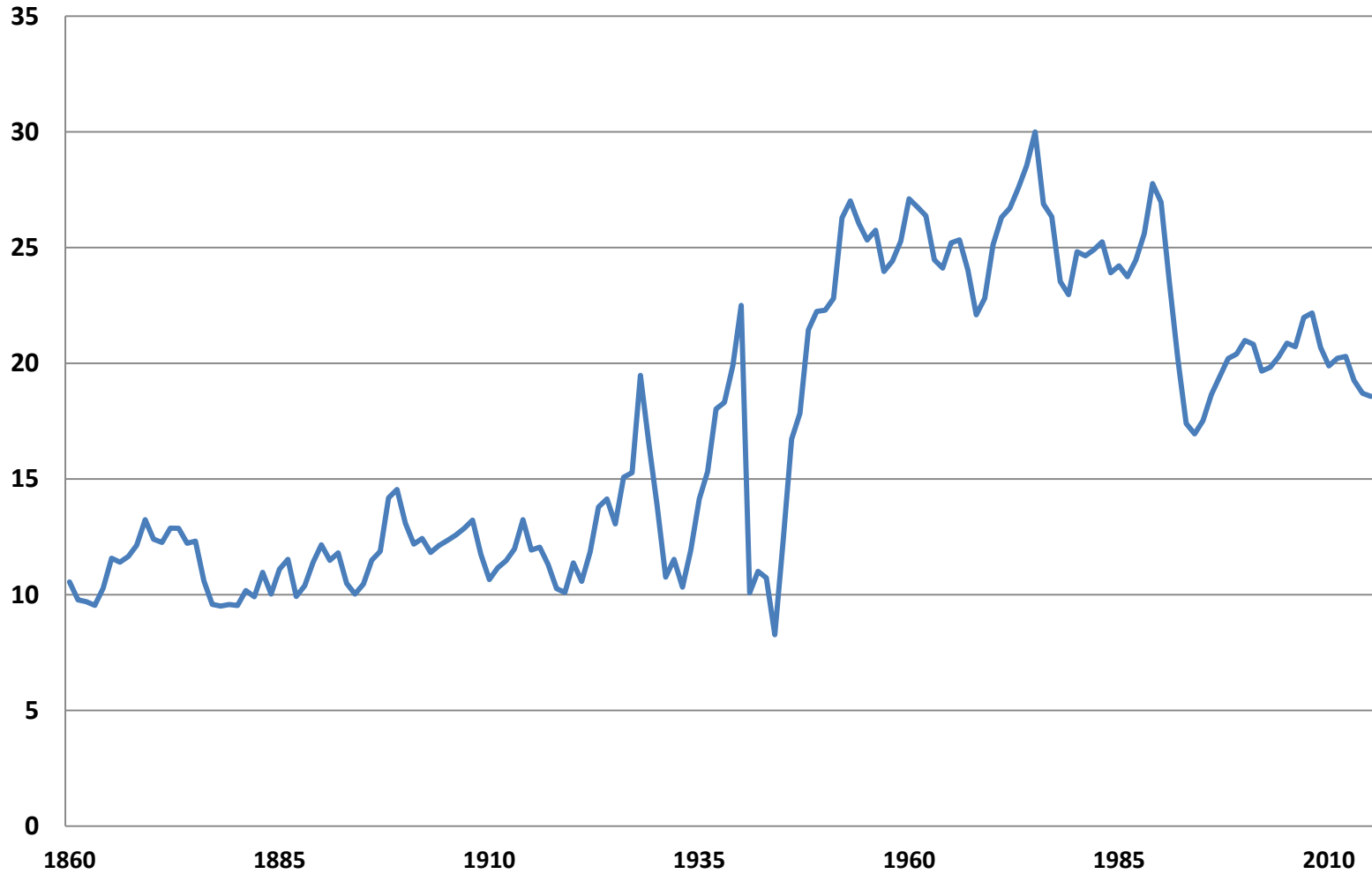


Figure 8. Imports and exports of goods in relation to GDP, 1860–2015, %.

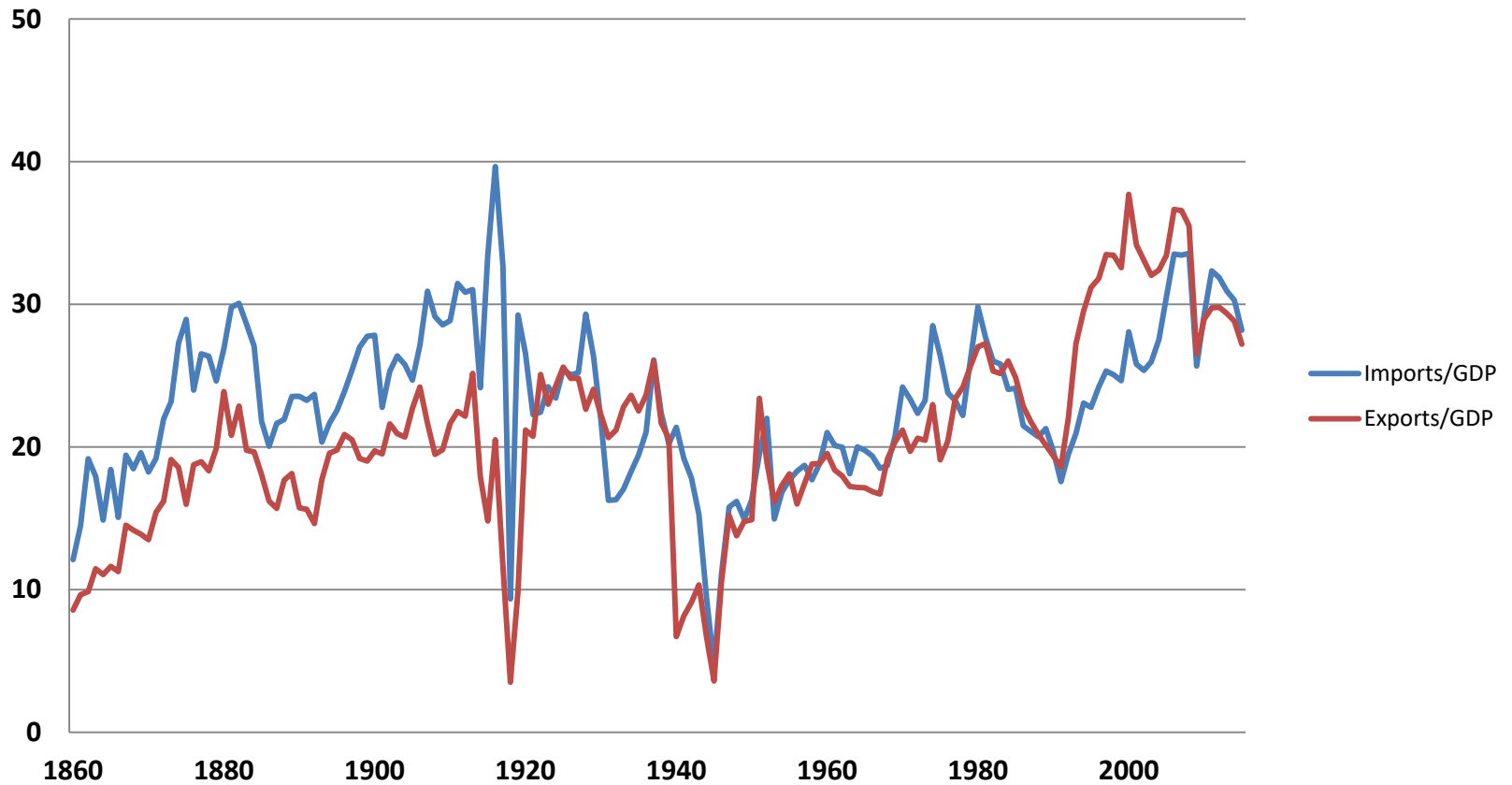
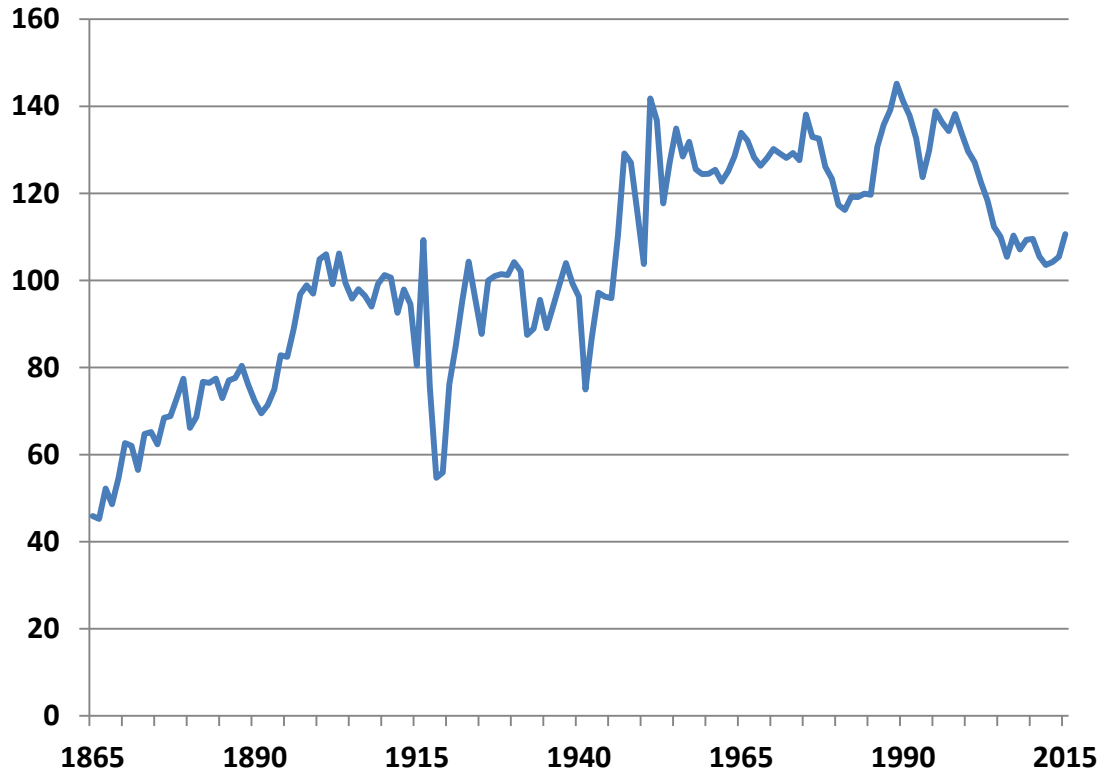


Figure 9. TERMS OF TRADE (export prices divided by import prices), 1865–2015, 1926=100.



Conclusions

- Before HNA, research on economic growth was based on narrow statistical information, often on commercial exports or manufacturing
- With HNA we have found fundamental economic relations and structural changes in the society and can make comparisons between different countries.
- "Les chiffrephiles" have an important share in economic historical research
- HNA are actually used a lot in Finland in research and in media
- New research planned to go further back in time