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 System of National Accounts, 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


• 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
  • 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 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.
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, %.

- Services
- Secondary industries
- Primary industries
**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