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The economy and road freight transport in Finland - past, present and future

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Finland

Picture: **findis.org**

Finland
Population 5.4 million
GDP 32,000 €/inhabitant

- Strong economic growth from 1993 to 2008
- Economic growth was highest in branches such as high-tech manufacturing (telecommunication) and the service sector
- Long distances within Finland and to the main markets in Europe

Research questions

- What has been the connection between the economy (euros) and road transports (tonnes) in Finland in recent years?
- How will be the amount of road transport develop in the future (to 2020)?
  - Two different economic scenarios
    - Manufacturing Finland
    - Service Finland

Introduction

- Transport is derived demand
- Transport intensity

  = the ratio between the amount of transport (tonnes or tonne-kilometres) and the GDP (gross domestic product)

  – Big differences between countries

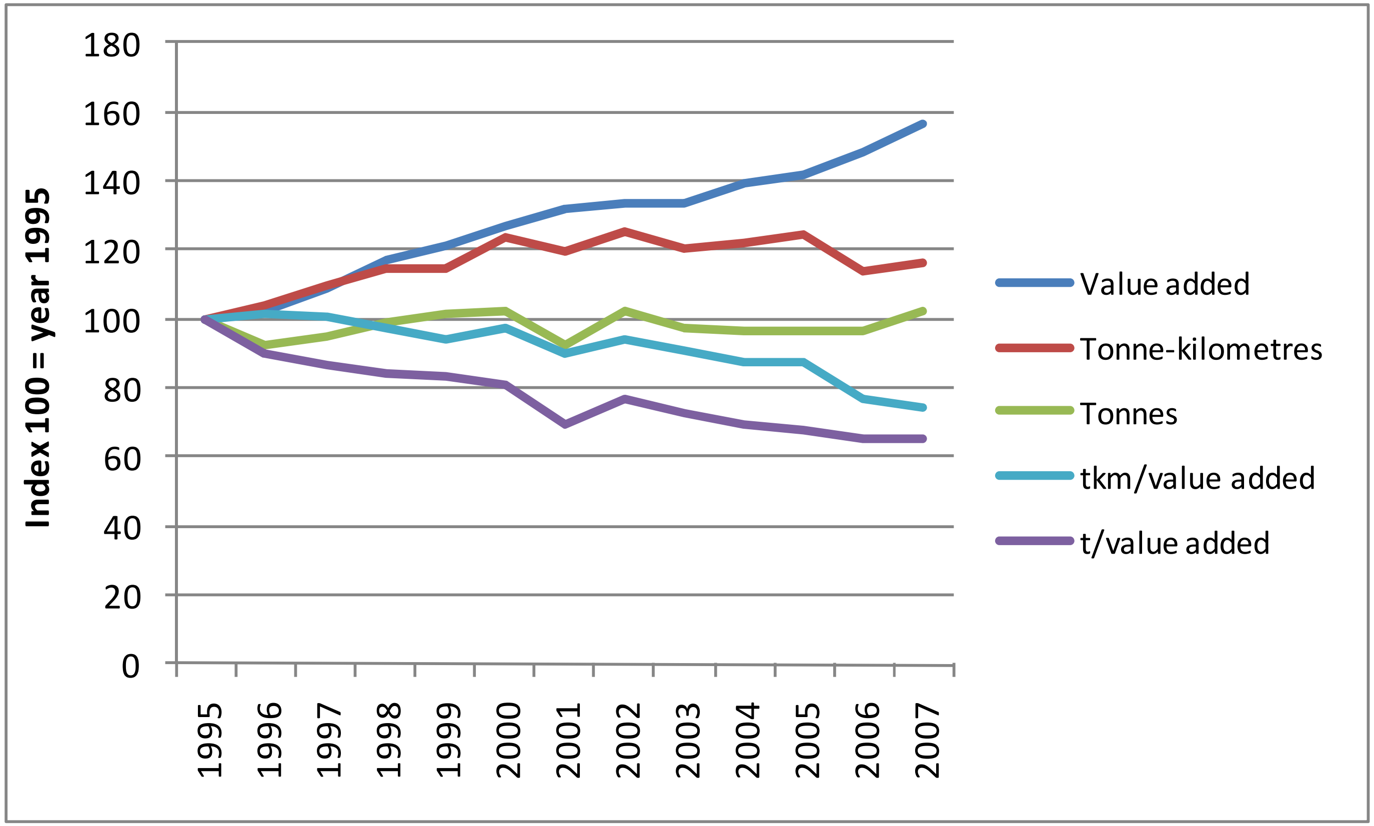
  – Generally lowers as the economy moves towards service society (as more of the GDP comes from other fields than industry)

Transport intensity of road freight transport in Finland

- Road freight transport in 2007
  - – 415 million tonnes
  - – 26.0 billion tonne-kilometres
- The economy in 2007
  - – value added of 157 billion euros
- Intensity of road freight transport
  - – 2.64 tonnes/1,000 euros of value added
  - – 0.17 tonne-kilometres /value added (€)

All data: Statistics Finland

Trends in the economy and road transport 1995-2007



Value added in fixed year currency

Road freight intensity for different branches 1/2

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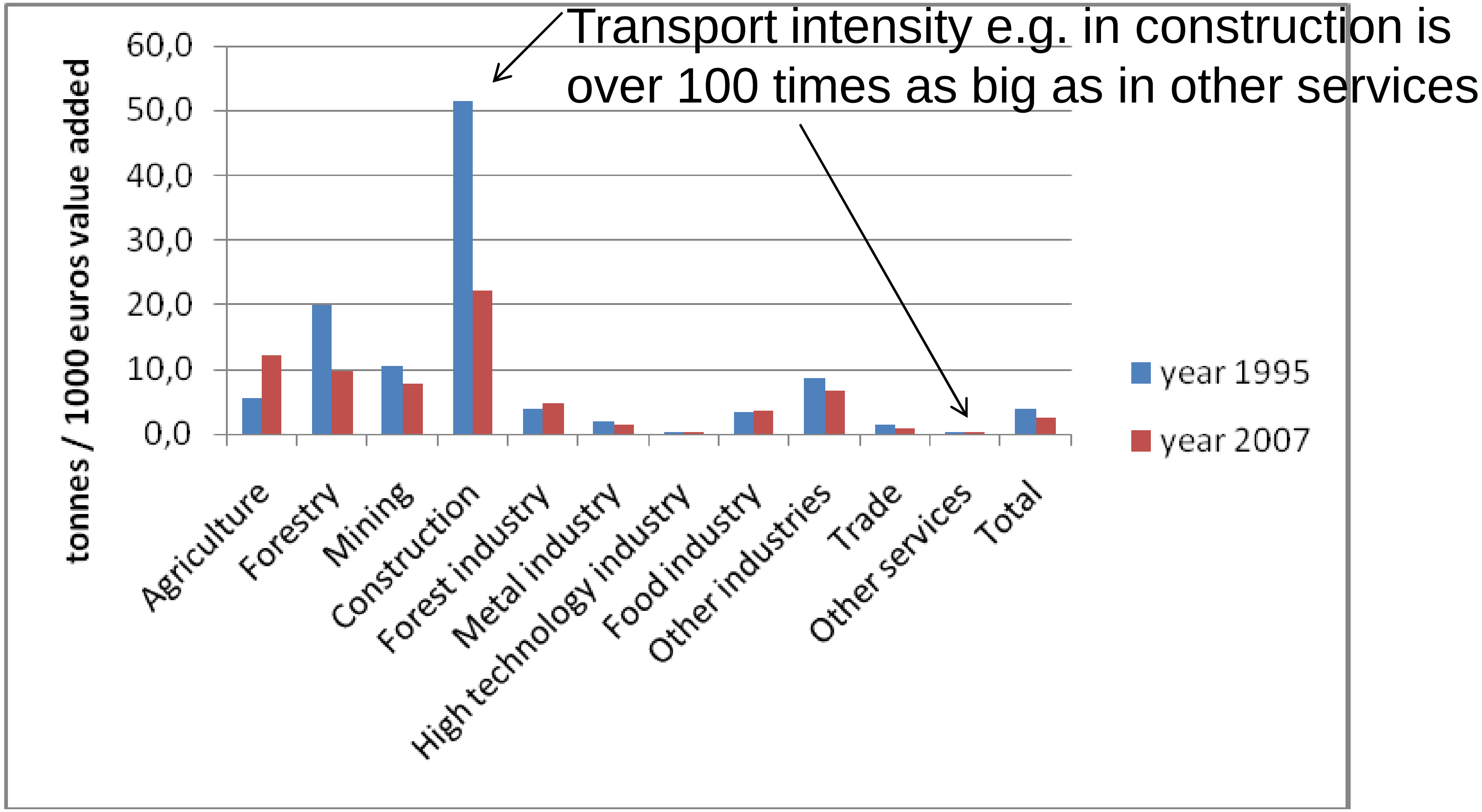
- The most important branch considering value added is trade (10 %) and other services (56 %)
- The most important branch considering road transport is construction (53 % of tonnes, 20 % of tonne-kilometres) and other industries (11 %; 20 %)

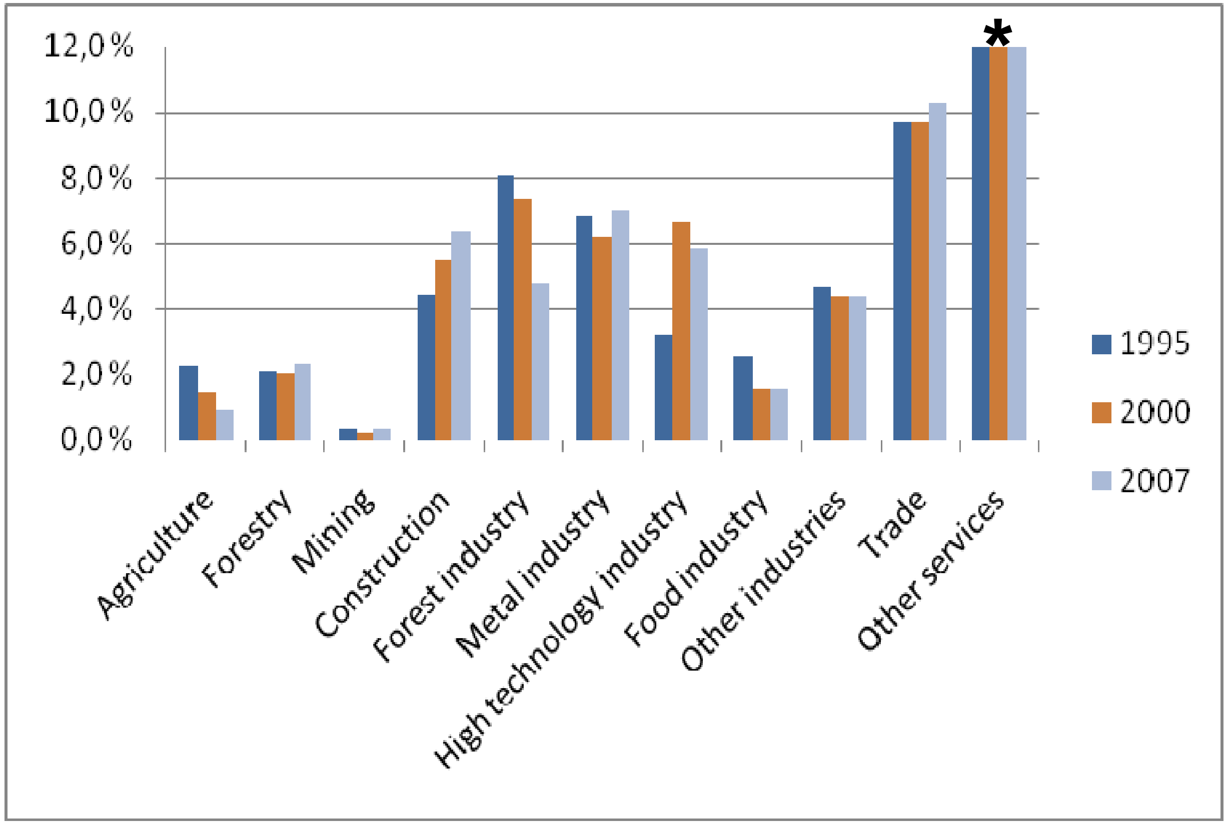
=> branches are very different in terms of transport intensity

Road freight intensity for different branches 2/2



Overall road transport intensity has fallen 35 % between 1995 and 2007

The share of value added in different branches



* The share of other services has been 55.9 % in 1995, 54.8 % in 2000 and 56.1 % in 2007

Two scenarios

- Two scenarios describe alternative development paths for the economy
  - same overall economical situation: an approximate 1.5 per cent yearly increase in the whole economy
  - different growth in branches: stronger service economy (scen. 1), strong manufacturing economy (scen. 2)
  - extrapolation of the development of transport intensity for different branches

Results from the scenarios

- In both scenarios, the total amount of road tonnes is declining
  - In service economy (scen. 1) there would be almost a third (-32 %) less road tonnes
  - In strong manufacturing economy (scen. 2) -5 % tonnes in 2020 than currently.
  - Even with strong development in industry sectors (scen. 2), the amount of road tonnes will reduce, if the whole economy grows annually at the rate of 1,5 % and the transport intensity trend continues as in the past.

Analysis of the results

- Clearly scenario 1 seems more likely in the current global and economic situation
- There is likely to be a smaller market in terms of road tonnes in the future
  - what does this mean for example to the road authorities and transport companies?
- The amount of tonne-kilometres will also be less, unless the mean distances in road transport will grow and counter effect the decrease of tonnes