TURUN KAUPPAKORKEAKOULU
Turku School of Economics

Finland State of Logistics 2009 Survey

With 2,705 responses it is the largest survey material of its kind in the World

May 2009

By Professor Lauri Ojala

The research team comprises also Mr. Tomi Solakivi, Dr. Juuso Töyli, Mr. Harri Lorentz and Ms. Hanne-Mari Hälinen

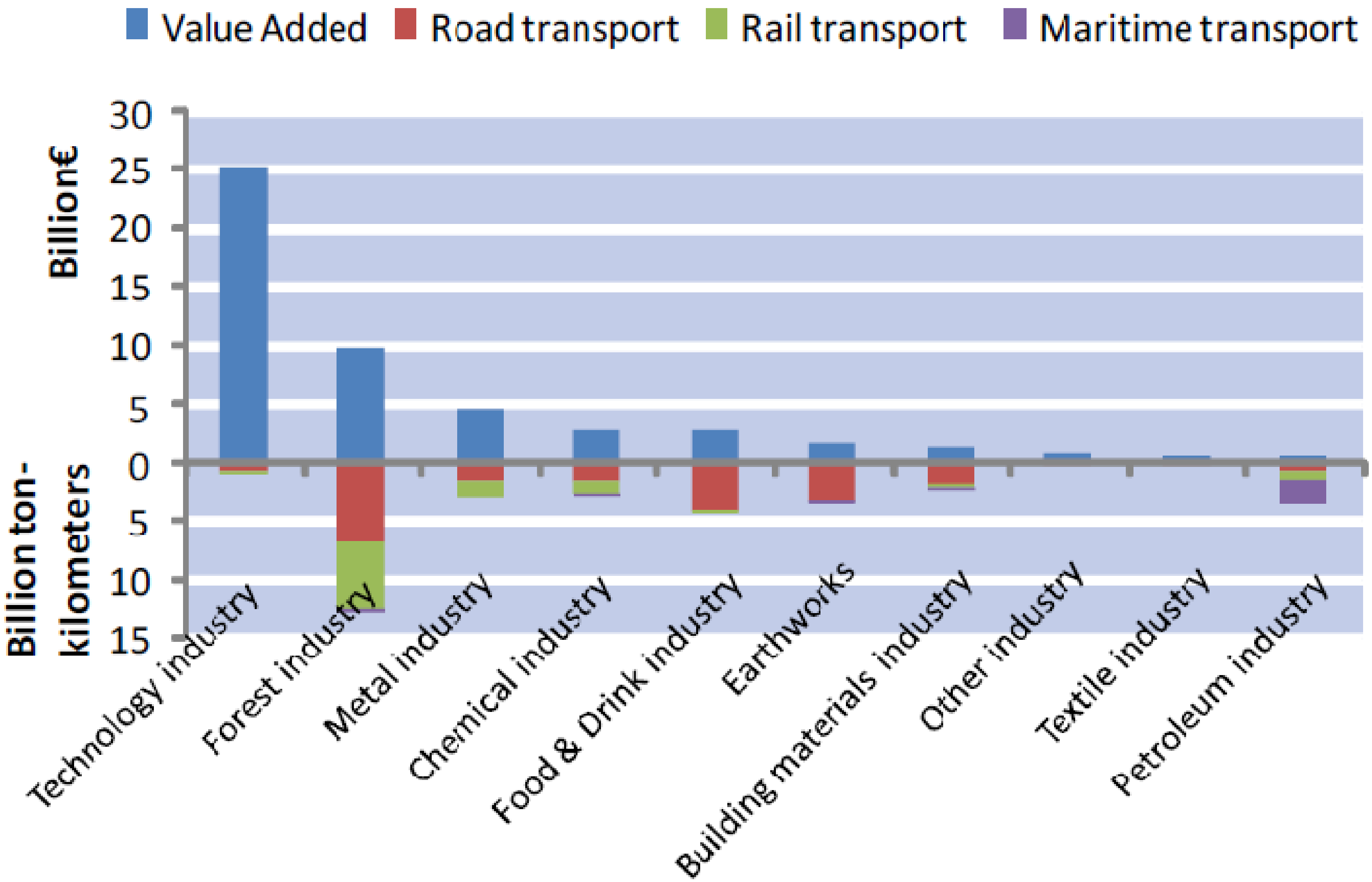
Firstname.lastname@tse.fi

www.tse.fi

Finland State of Logistics 2009

- Fifth national logistics survey in Finland
- Commissioned by the Ministry of Transport and Communications Finland
- Data collection in October-December 2008
- In co-operation with the Finnish industry associations, like:
  - The Finnish Association of Purchasing and Logistics (LOGY);
  - Federation of Finnish Entrepreneurs (SY);
  - Finnish Transport and Logistics Association (SKAL); and
  - Chambers of Commerce around the country.

Value added and transport performance vary a lot by Finnish industries; data for 2007 in prices of year 2002



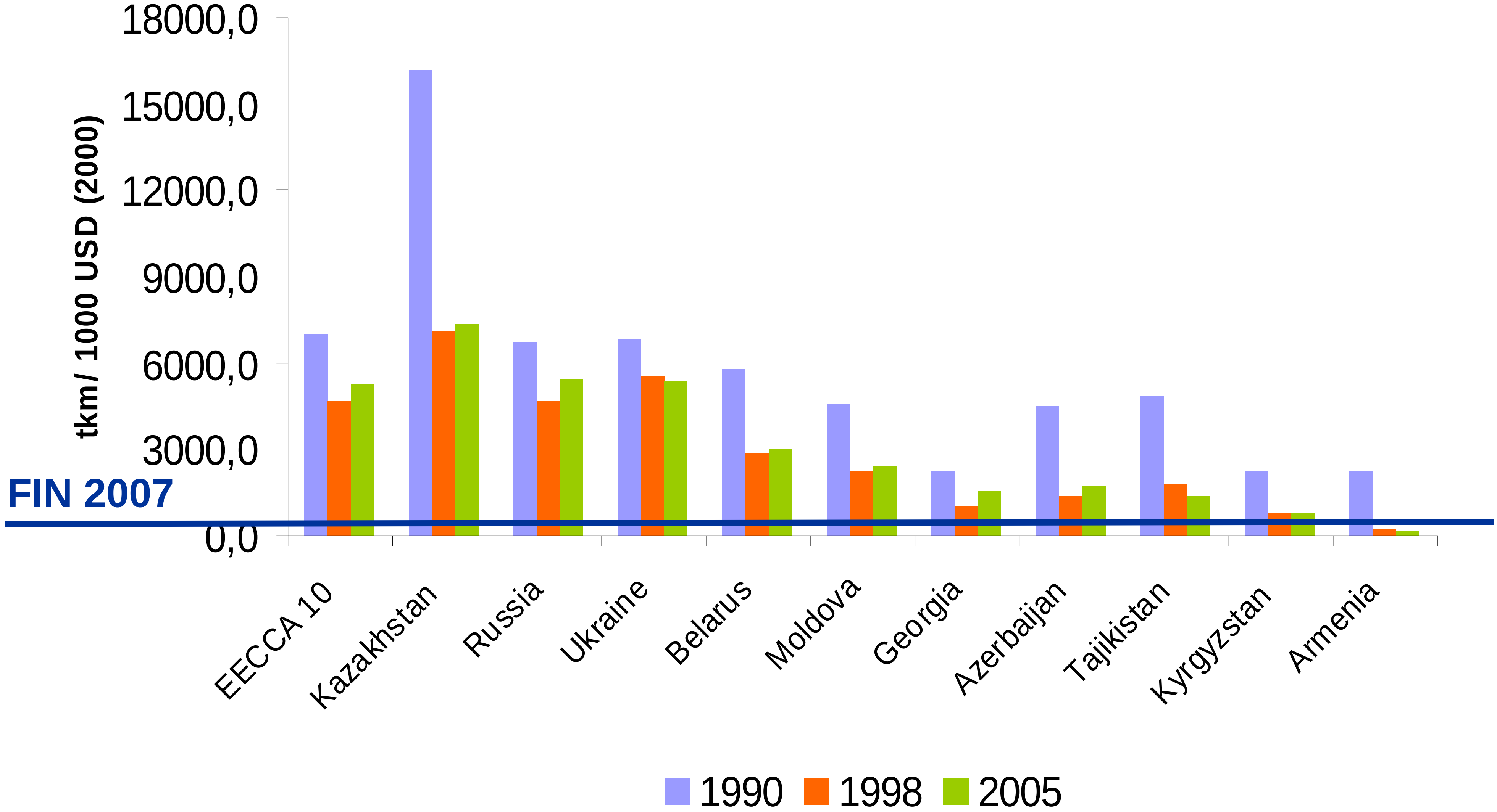
Finland State of Logistics, Ojala et al. 2009

Transport intensity observations: Finland

- By 2007, industrial transport intensity was less than half of that in the mid-1990s.
- In 1995-1996, 1.4 ton-km was required for one euro increment of value added (VA; adjusted to the monetary value in 2002).
- On average, 0.6 ton-km was required in 2007 for a similar VA.
- Technology industry required only 0.1 ton-km for 1 € VA in 2007.

Source: Finland State of Logistics 2009, pp. 50-51

Transport intensity Finland vs. CIS countries



http://www.unece.org/env/europe/monitoring/EECCA_CSI/EECCA%20CSI%20_Eng/EECCA%20CSI%2030_freight%20transport%20demand_eng.doc

Finland State of Logistics 2009…

- Total 2,705 respondents from manufacturing and costruction, trading and logistics service providers
  - ***The World's largest database of its kind***
  - ***Finland State of Logistics 2006 had 2,255 respondents***
  - ***Respondent profile very similar in both surveys***

- All respondents receive a personalized feedback report

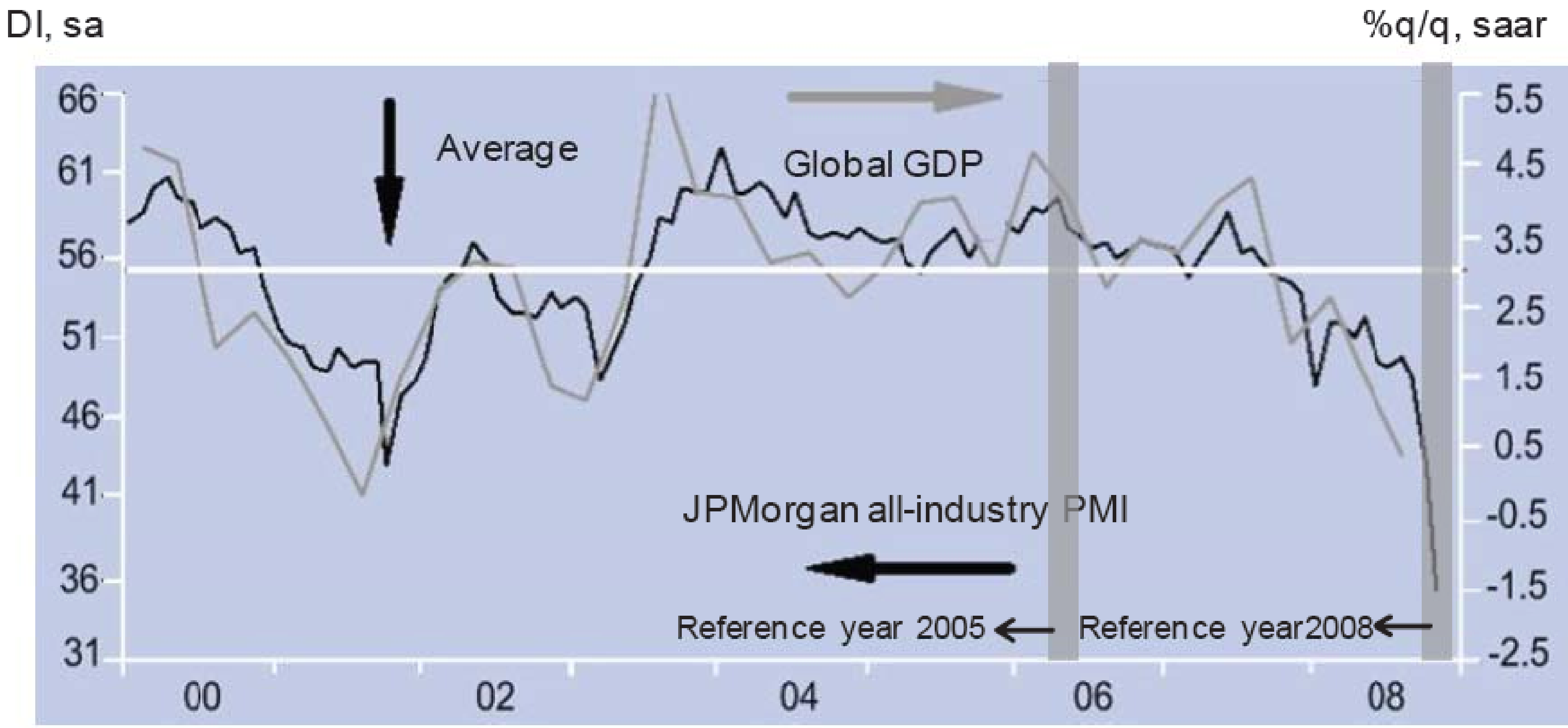
- Reports (2006 and 2009) published in Finnish and English

  Full reports available in English (public domain):

  http://www.lvm.fi/web/en/publications

  Publications 45:2006 and 21:2009

Survey data from 2005 and 2008 collected during very different circumstances



Source: JPMorgan Global PMI 20002008 (Institute for Supply Management)

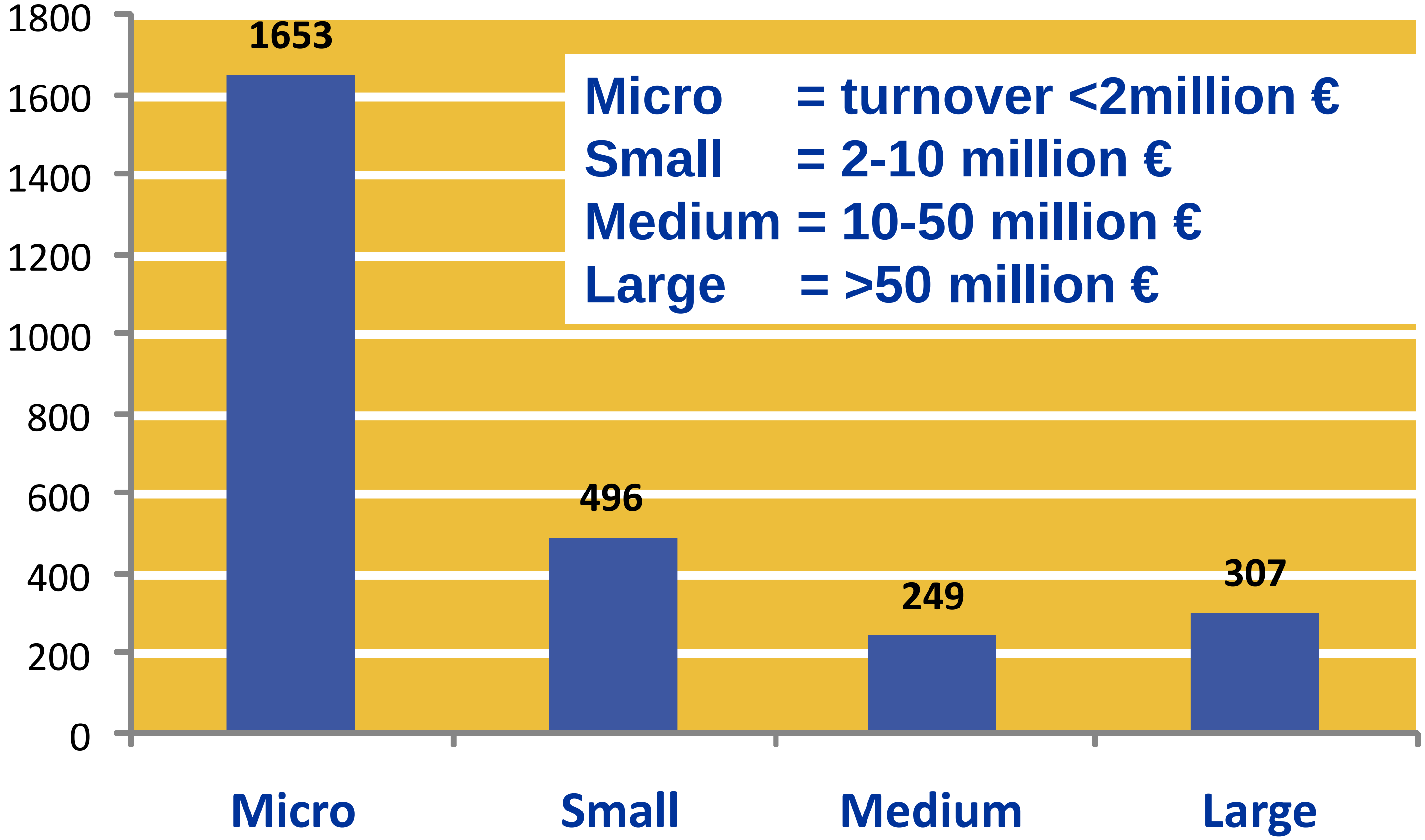
Finland State of Logistics, Ojala et al. 2009

Survey themes

- The significance of logistics in corporate decision making
- Level of firms´ logistics costs, and their future development
- KPIs e.g. *cash to cash cycle time, perfect order fulfillment rate*
- Demand of logistics services and logistics outsourcing
- External threats to business
- The most important logistics development needs
- Operating preconditions in firms’ geographic location

Finland State of Logistics 2009 respondents by main industry

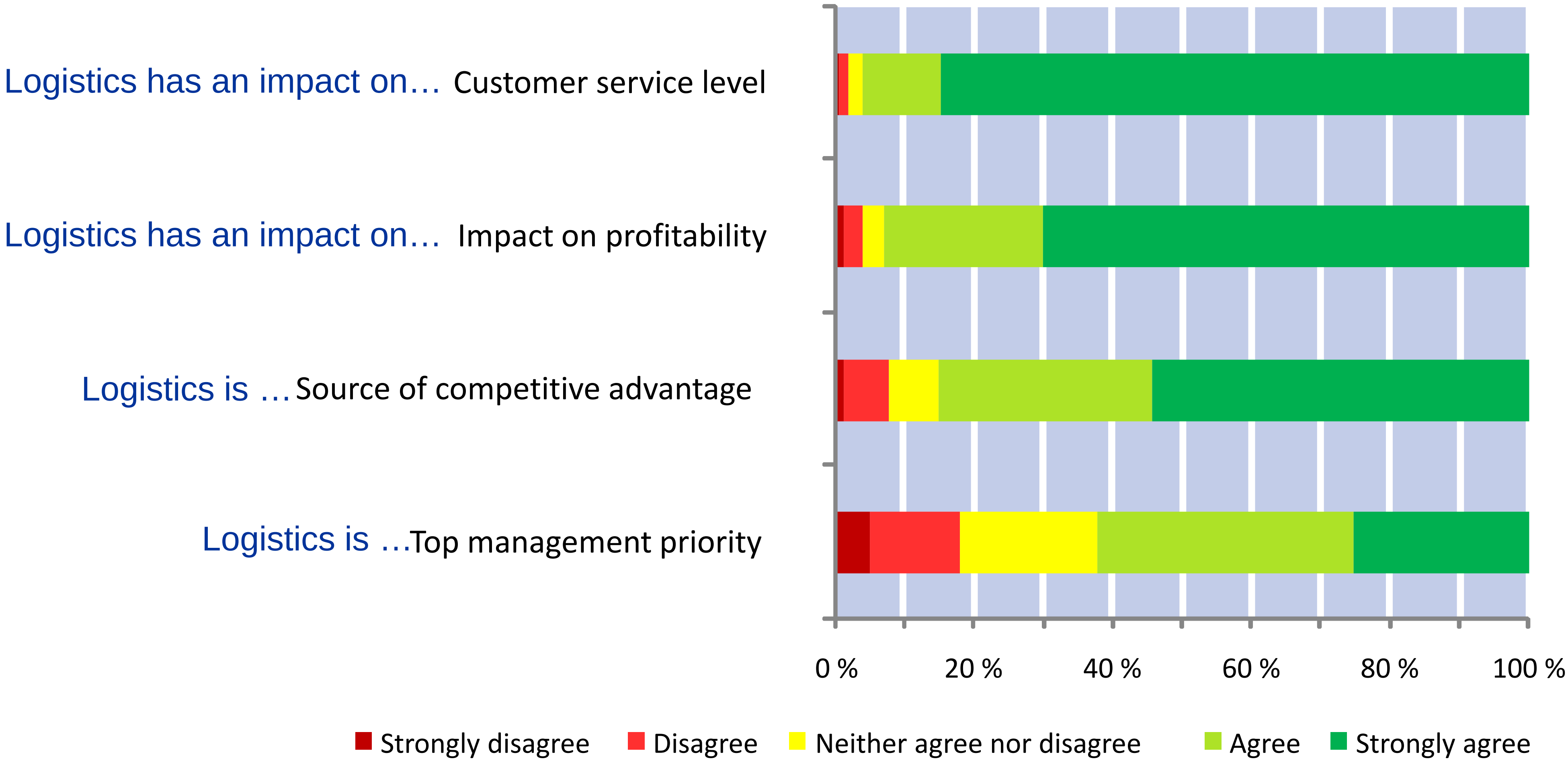
Finland State of Logistics 2009, respondents by company size (turnover)



Key findings on logistics

- Logistics is essential to the competitiveness of especially medium sized and large companies
- Lack of demand and rising costs the most serious threats to business of Finnish manufacturing and trading companies
- Enhancing customer service and cutting costs the most important development needs in manufacturing and trading as well as in logistics service provision
- Differences in operating preconditions between southern parts of Finland and the rest of the country have grown

Logistics is an important source of competitive advantage for large and medium-sized firms (N=329)



Key findings on logistics costs

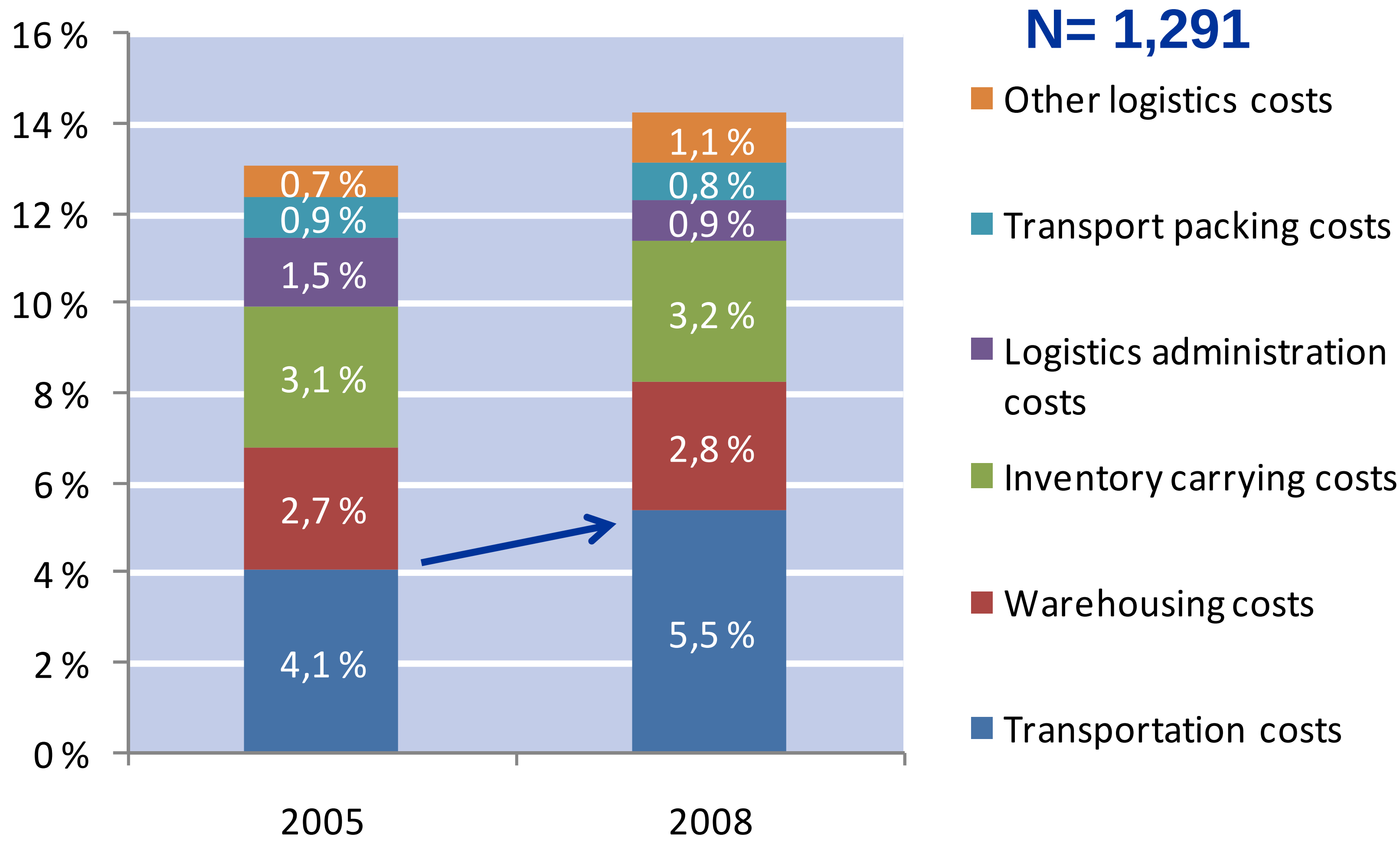
- Logistics costs on average 14.2% of turnover.
  - **The cost level has risen since 2005**.

- The share of transportation costs has increased, internal efficiency of the companies has improved

- No consensus nor binding conventions on how to define logistics costs exists neither on firm level nor on macro level.

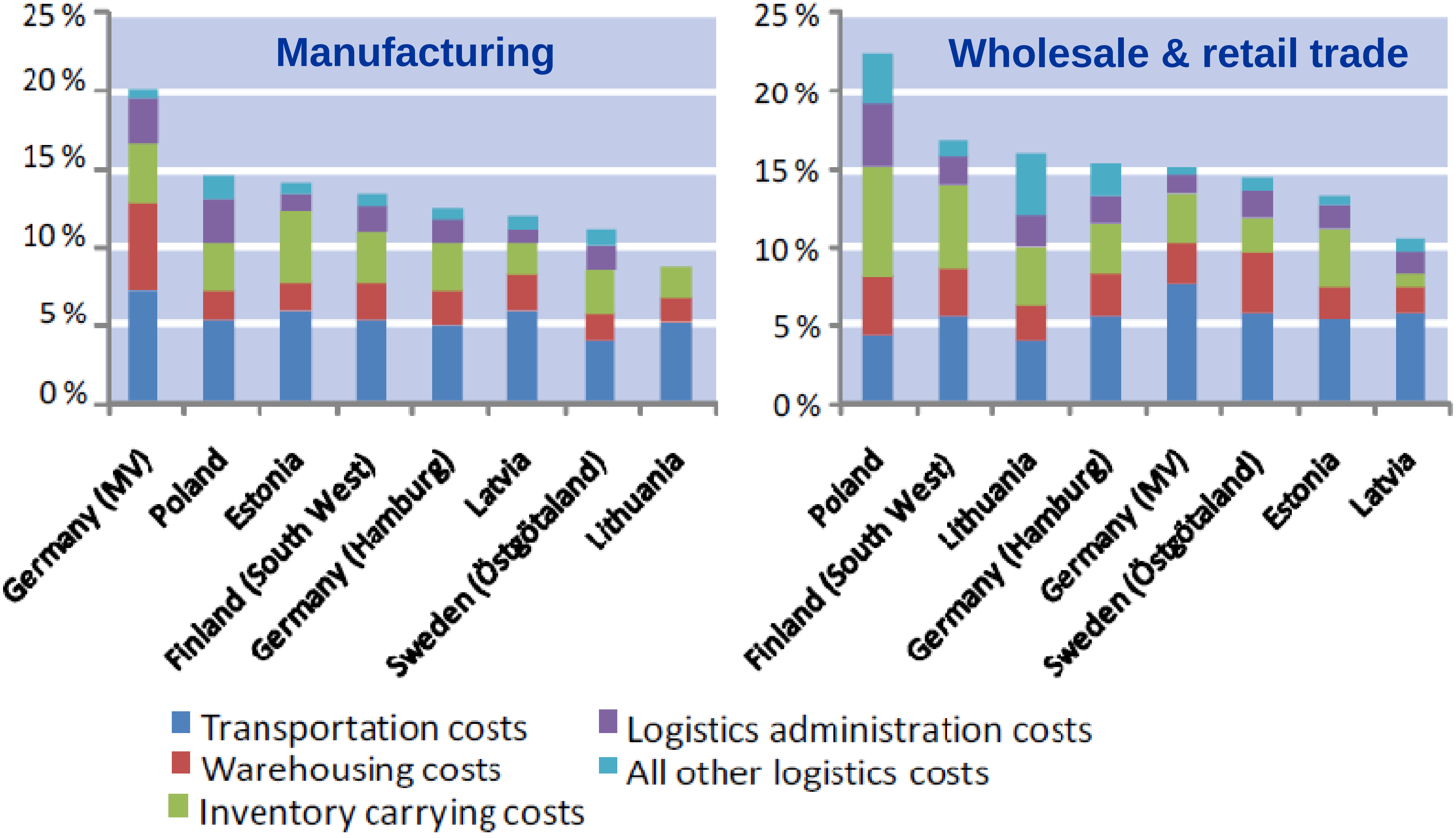
- Therefore the concept remains elusive.

Finnish firms’ logistics costs on average 14.2% of turnover, transport costs increased; internal ones decreased



Manufacturing and trading firms, weighted by industry and firm size according to national statistics

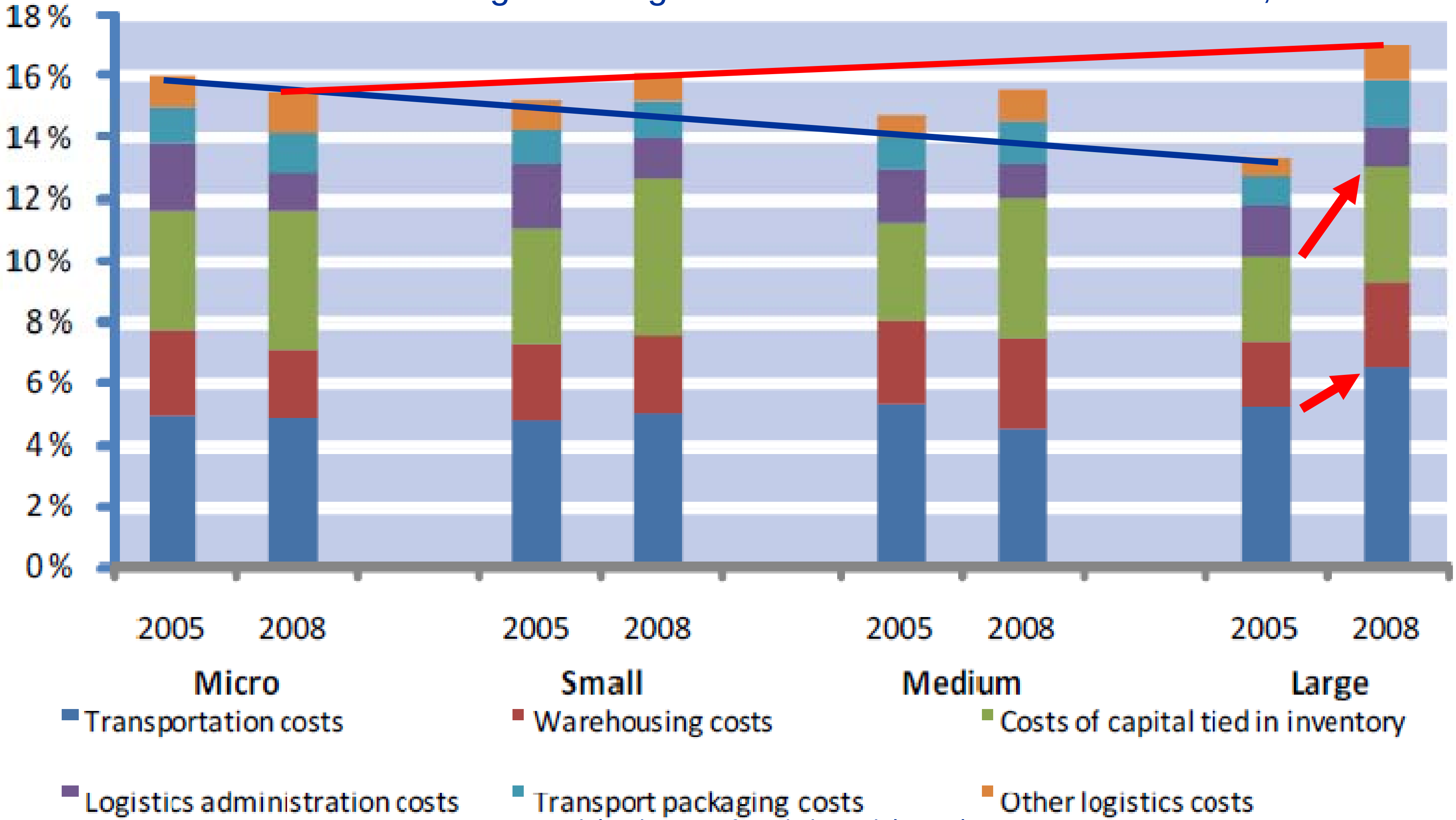
Comparative logistics cost indications from the Baltic Sea Region in 2006-2007, N = 574



Source: Ojala et al.; LogOn Baltic Master Report 3:2007, www.logonbaltic.info

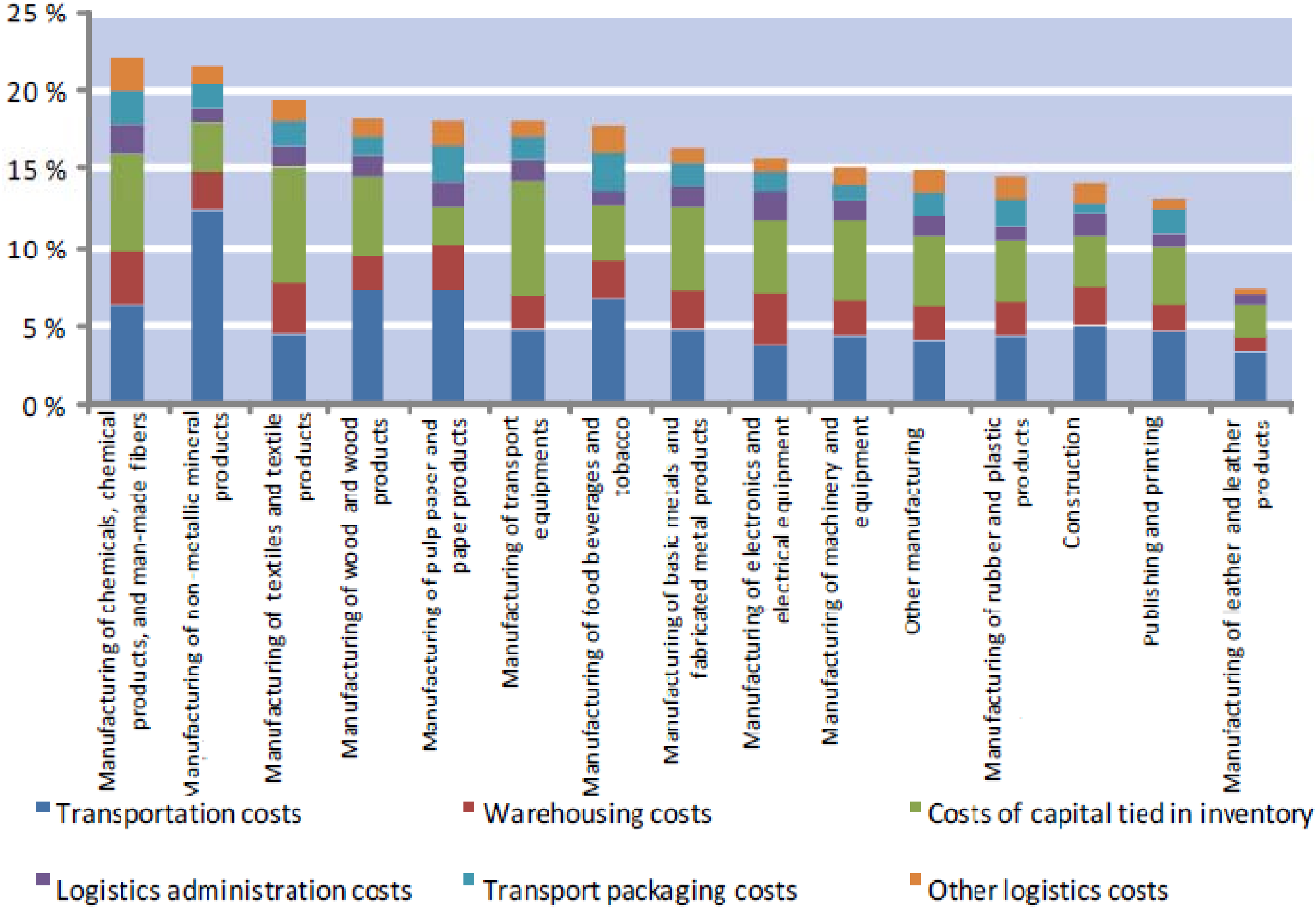
Firm size matters, but the 2005 pattern is almost reversed: now largest firms had the highest logistics cost share of all

Finnish manufacturing firms' logistics costs as % of turnover in 2008, N = 780



Finland State of Logistics, Ojala et al. 2009

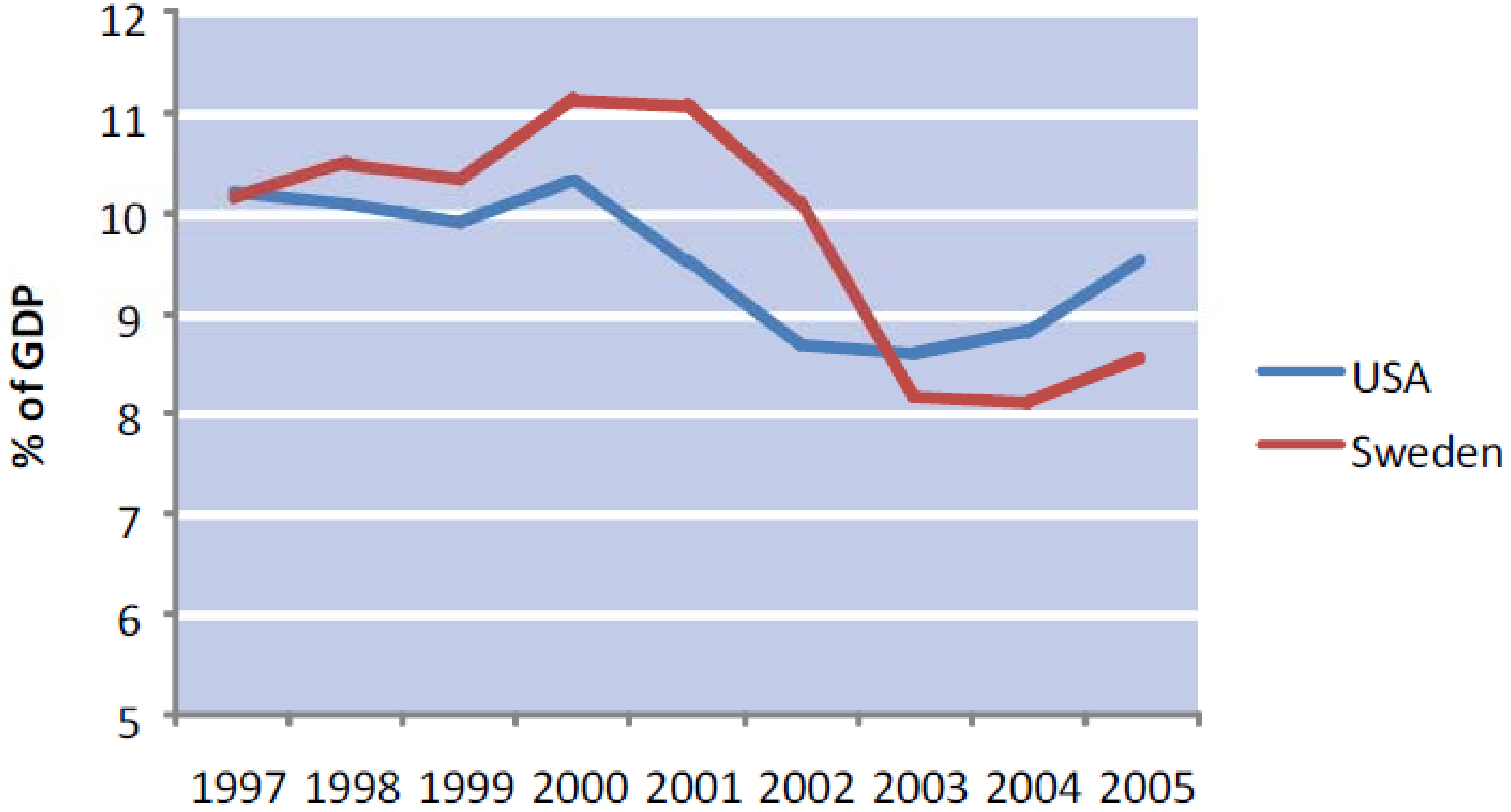
Logistics cost levels also affected by type of industry, % of turnover in 2008, N = 780



Key findings on macro level logistics costs

- Logistics costs related to Finnish GDP 19%*) in 2008, which seems high internationally, but comparisons are difficult
  - GDP of Finland 186.2 billion € in 2008, population 5.2 million
- Data was aggregated from micro level survey data
- Data includes firms' logistics costs also outside Finland
- This method may also duplicate costs, unlike when using data from National Accounts, such as in:
  - U.S. State of Logistics Reports®
  - Swedish study in 2008: Svensk makrologistik

Logistics costs in Sweden and in USA as a share of GDP, calculated from national accounting statistics 1997-2005



Graph from Finland State of Logistics 2009, Annex 19; Data sources: Elger et al. (2008) Svensk makrologistik and U.S. State of Logistics Reports®

Finland State of Logistics, Ojala et al. 2009

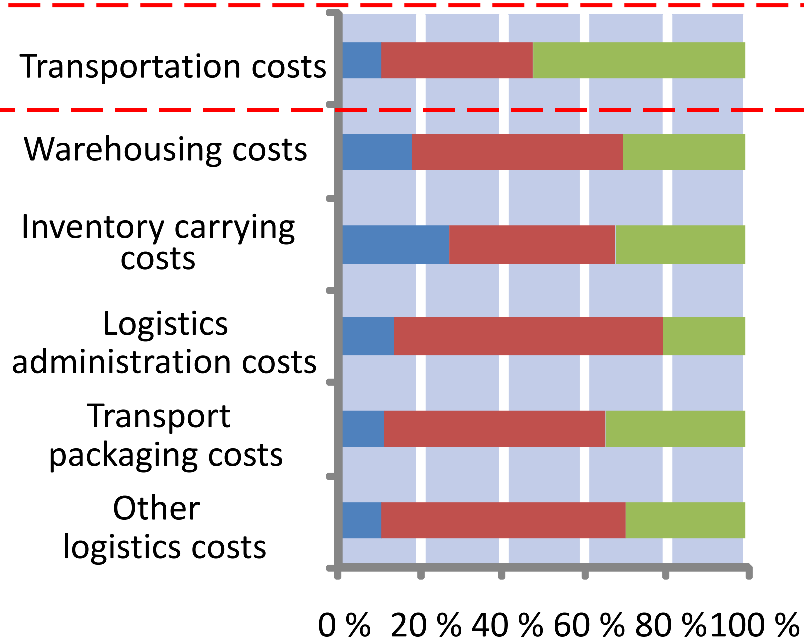
Logistics costs of Finnish firms in a time series Total costs in 2008 prices

Key figure/ year of comparison	1990	1995	2000	2005	2008
Logistics costs in manufac-turing and trading	20.4 bn.€	16.4 bn.€	20.9 bn.€	28.2 bn.€	34.7 bn.€
Logistics costs as percen-tages of turnover	11.0 %	10.3 %	10.2 %	11.5 %	12.3 %
Transportation costs as percentages of turnover	4.8 %	4.7 %	4.5 %	5.0 %	6.3 %
Logistics costs as percen-tages of GDP	17-18%	14-15%	14-15%	17 %	19 %

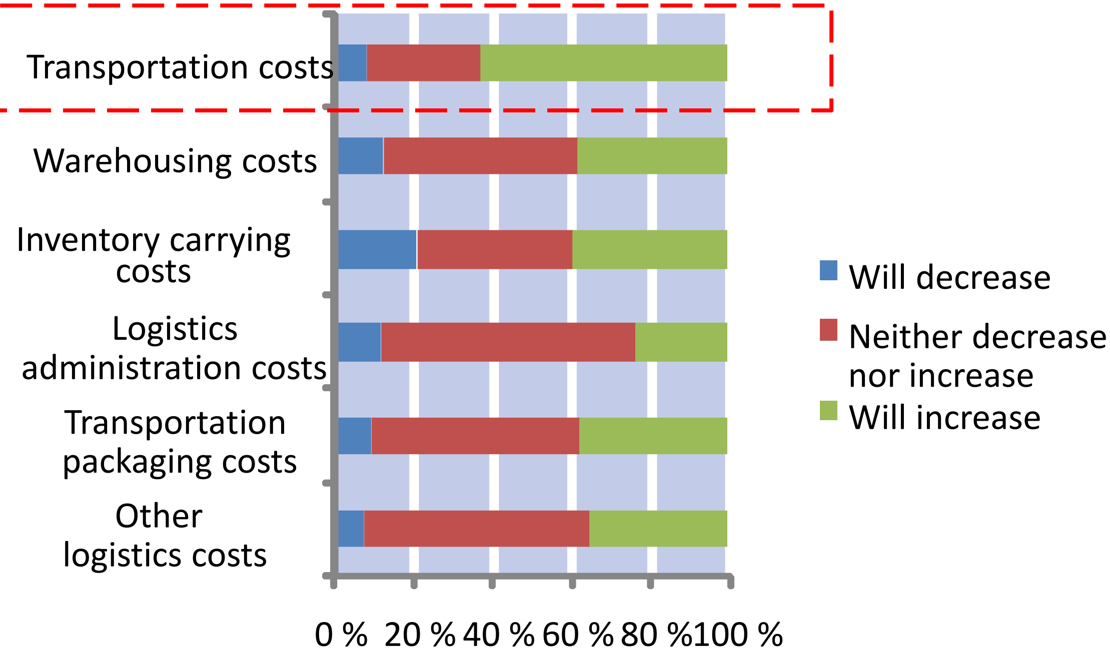
= using the same cost concept as in the 1990’s for comparability

Finland State of Logistics, Ojala et al. 2009

Estimates on the development of logistics cost components until 2013, N = 1,654

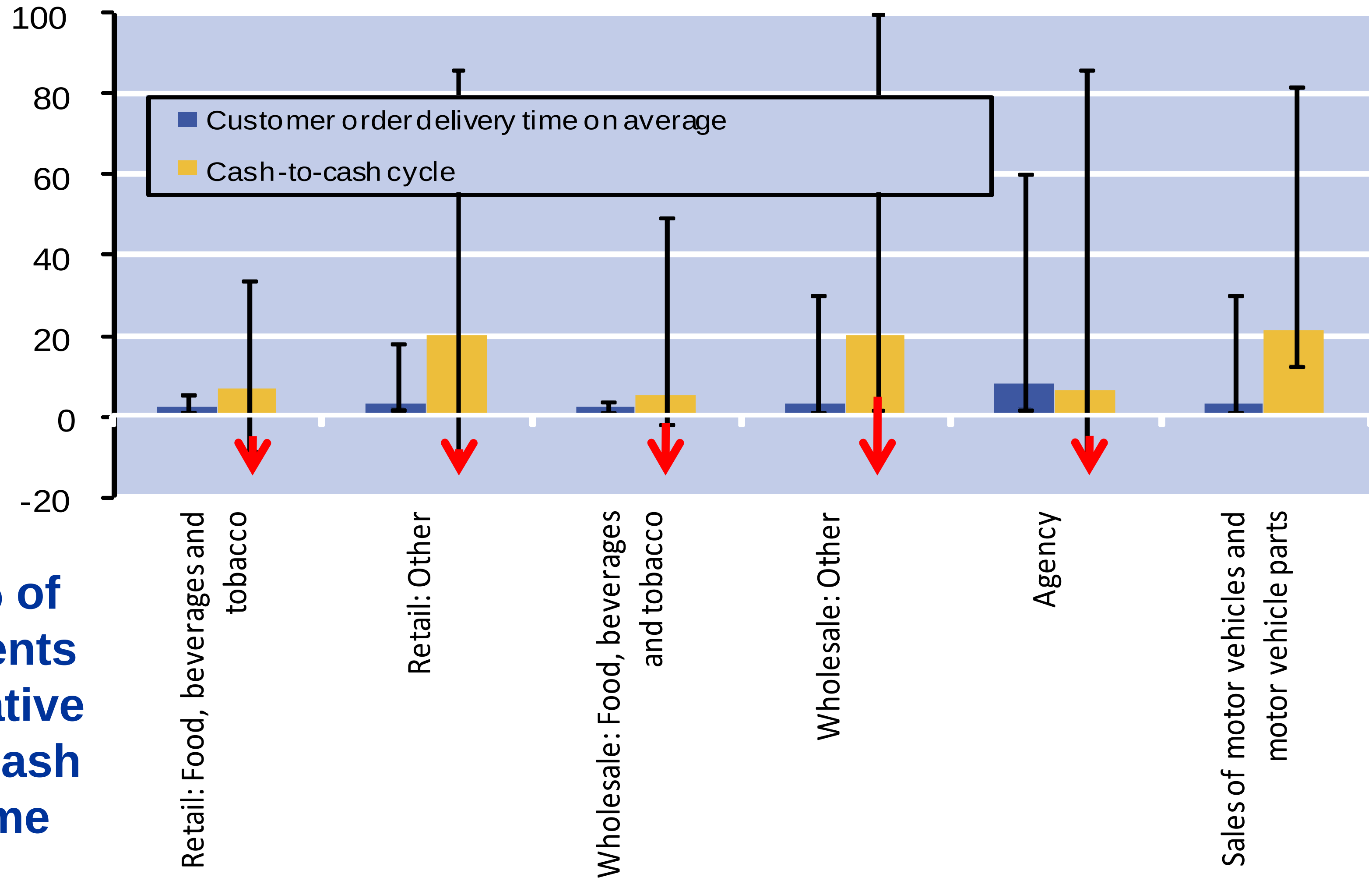


Manufacturing and construction



Wholesale and retail trade

Finnish firms' KPI:s on good level, among the trading companies even excellent



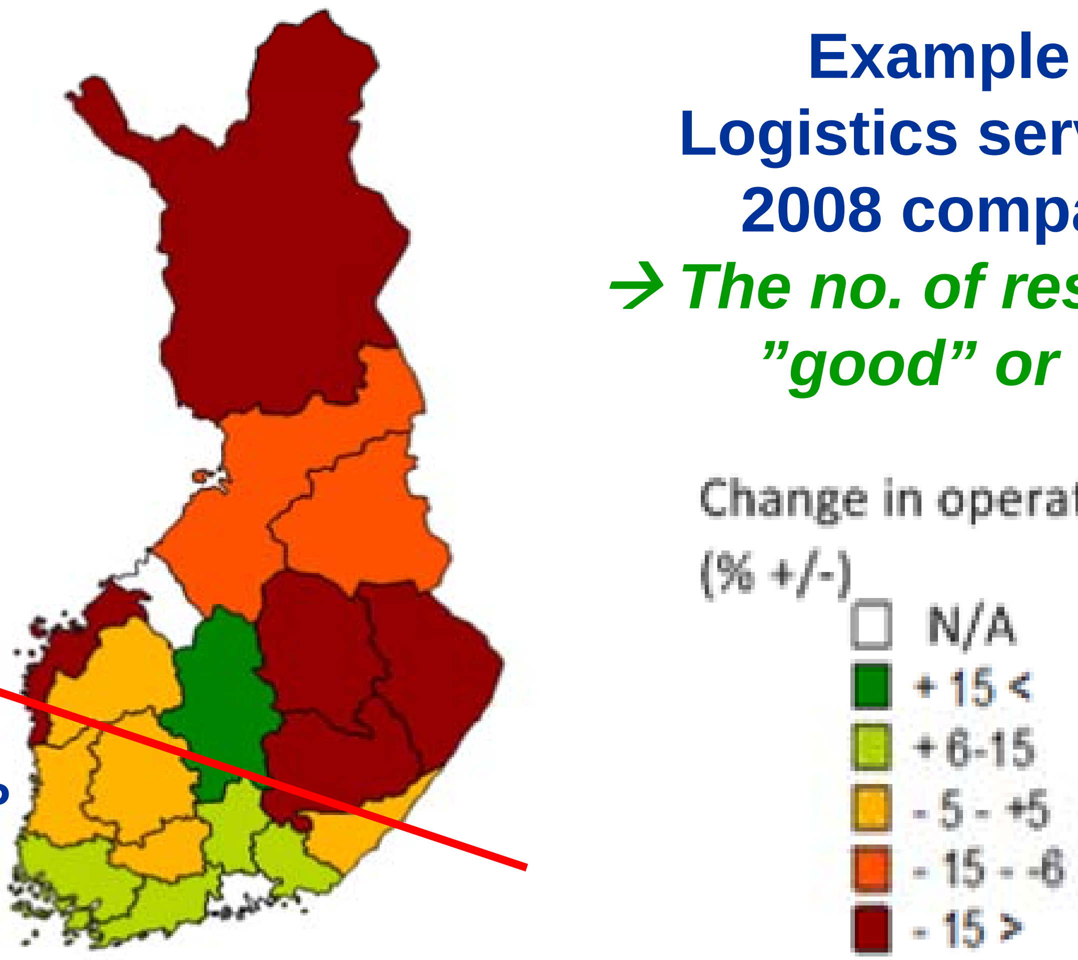
Top 20% of respondents with negative cash-to-cash cycle time

Future demand of logistics services on logistics information related services, N= 2,408

The differences in operating preconditions between southern parts of Finland and the rest of the country have increased

Example (N = 825):
Logistics service providers, 2008 compared to 2005,
→ The no. of respondents saying ”good” or ”very good”

> 55 % of population
> 70 % of GDP



Decrease in demand and increasing costs are the largest threats to business

	Logistics service providers	Manufacturing, Construction and Trading
External threats	**Decrease in demand** **Increasing costs** Availability of competent staff Tightening competition	Tightening competition Availability of competent staff
Internal development-needs	**Cutting costs** Extending range of Service offerings Developing agent network Improving customer service	Improving customer service Increasing supply accuracy Increasings supply chain visibility

The full report in English is available as Publication 21/2009 (and the earlier one as 45/2006) at the website of the Ministry of Transport and Communications Finland: www.lvm.fi

If the link is unavailable, enter the report title ”Finland State of Logistics 2009” or ”Finland State of Logistics 2006” in your web browser