Jobs and exposure to international trade within the service sector

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Background

• Historically, manufacturing has often been regarded as tradable and the service sector as nontradable

• In practice there is considerable heterogeneity within the service sector

• The paper aims to identify, on detailed level, in which industries in the service sector there is international trade (or potentially could exist)
Basic idea

• Based on the regional concentration of different activities within the service sector in Sweden we try to identify industries where international trade appears to occur

• Regionally traded activities have also a potential to be traded internationally (Jensen and Kletzer 2005)
Questions

How large share of the employment in the Swedish economy is in tradable industries and what are the characteristics of individuals working in tradable industries?

Are wages higher in tradable industries than in nontradable industries?

How has the employment developed in tradable service industries compared to nontradable service industries and manufacturing industries?
Figure 1  Geographic concentration within sectors 2005
Figure 2  Employment in tradable (or potentially tradable) industries

- Manufacturing: 17.1%
- Wholesale and retail trade: 4.1%
- Transport and communication: 2.7%
- Financial intermediation: 2.0%
- Business services: 8.2%
- Other services: 5.4%
- Nontradable activities: 58.4%
- Agriculture, forestry and mining: 2.1%

Employment:
- Tradable: 1.7 million
- Nontradable: 2.4 million
Summary of the results I

• More than half (54%) of the employed in tradable industries are working in the service sector.

• Many of the less-skilled employees working in tradable industries are employed in manufacturing (49%), whereas skilled employees in tradable industries in the main are employed in services (71%).

• The share of skilled labor is higher and average wages are higher in tradable service than in nontradable service.
Summary of the results II

• Wages are higher in tradable industries even if we control for observable characteristics such as level of education, experience and sex (see figure 3)

• Total employment has increased in tradable service and decreased in manufacturing (tradable)

• Generally, an increase of skilled labor in all industries and a decrease of less-skilled labor in manufacturing industries
Wage premia in tradable industries and occupation 2005

- Tradable industry and tradable occupation
- Tradable industry and nontradable occupation
- Nontradable industry and nontradable occupation

All industries:
- Tradable industry and tradable occupation: 11.6%
- Tradable industry and nontradable occupation: 7.1%
- Nontradable industry and nontradable occupation: 3.2%

Service:
- Tradable industry and tradable occupation: 12.7%
- Tradable industry and nontradable occupation: 6.8%
- Nontradable industry and nontradable occupation: 3.5%
Summary of the results III

• A structural change seems to have taking place where the employment of skilled labor has grown at the expense of less-skilled labor and this development appears to have been more pronounced in manufacturing.

• Relative wages of skilled labor has remained fairly constant, which indicates that despite a heavy increase in the supply of skilled labor, the factors on the demand side appears to have had a considerable impact too.
Prospects for the future

• It is reasonable to expect that the employment will continue to be reduced in manufacturing, in particular of less-skilled labor, due to even harder competition from low-wage countries.

• The development of the employment within tradable services depends on how well the Swedish business sector is able to compete in activities that are relatively skilled labor intensive.