

decentralise decision power. In techn. homogeneous industries decision power will be centralised.

- ▶ Knowledge Capital (Markusen, 2002): Because of moral hazard of agents, the higher the amount of knowledge capital of a firm, the likelier integration will be.
- ▶ Incomplete Contracts (Grossman and Hart, 1986): Residual rights should be owned by firm for which investment is more crucial to avoid ex-ante underinvestment. K intensive firms should be more likely to be integrated.
- ▶ Factor Price Differences (Helpman and Krugman, 1985): The production of an intermediate good will happen in the region where the input factor, which is intensively used, is relatively abundant.

Research Question: What are the determinants of the organisational structure of UK firms?

The Data

- ▶ Business Structure Database (BSD): Includes all firms and local units with sig. activity within UK. Contains information about location, employment, turnover and SIC03. After cleaning 1.6m man., 5.5m trad. and 4.8m non-trad. services observations are left.
- ▶ Annual Survey of Hours and Earnings (ASHE): Contains data for average wages per region and industry.
- ▶ Business expenditures on R&D (BERD): Captures 80% of R&D conducted in the UK. Contains external, in-house and scientific staff information per firm.
- ▶ Input-Output tables: Necessary to calculate degree of vertical integration:
 - ▶ First for local units: $vib_{lk} = \sum_{j=1}^R a_{ij} \times I_{kj}$
 a_{ij} ... % of how many goods are demanded by a local unit l of industry i from a supplying industries j
 I_{kj} ... dummy vector which is 1 if company k owns another local unit in a sector j or 0 otherwise.
 - ▶ Second for firms: $\overline{vib}_k = \frac{\sum_{l=1}^n vib_{lk}}{n}$
 n ... amount of local units