# nal Structure of UK Firms

Jpward, Richard Kneller and Robert Riegler University of Nottingham, GEP



## **Empirical Strategy**

Estimated Model: conducted for manufacturing, tradable and non-tradable services

 $VI_{ijrt} = eta_0 + eta_1 T_{it-1} + eta_2 R \& D_{jt-1} + eta_3 X_{it-1} + eta_4 I_{jt-1} + eta_5 R_{rt-1} + D_t + D_j + D_r + arepsilon_{ijrt}$ 

### Vertical integration: VI-dummy and degree

- T: Distance of firm to techn. frontier, techn. heterogeneity of industry
- R&D: in-house R&D exp., external R&D expenditure per industry
  - X: age, size, foreign ownership of firms
  - I: Competition, degree of unionisation, average wage of industry
  - R: agglomeration per region

#### Spatial fragmentation: ML-dummy and distance

R: plus average wages per region

Causality: Sti	ll prevailing,	but to r	mitigate	effects	lagged	${\sf dependent}$	variables	have	been	used	and firm	n, t	ime,
industry and o	country fixed	d effects	have be	en emp	loyed.								

		Organ	isation					
		Market	Integration					
ace	conc.	fragmented, re- gional multi-plant firm	integrated, regional multi-plant firm					
Sp	disp.	fragmented, na- tional multi-plant firm	integrated, na- tional multi-plant firm					

Classification of fragmentation, by Prize (2001), altered by author. Four different organisational forms are considered, based on a spatial and organisational dimension. Single plant firms are a fifth form. They are special because they could be completely fragmented or integrated.

#### Organisation