

COINVEST: Competitiveness, Innovation and Intangible Investment in Europe

Funded by FP7

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Organisation name	Country
Imperial College Business School	United Kingdom
The Conference Board Europe (TCBE)	Belgium
Zentrum fuer Europäische Wirtschaftsforschung GmbH (ZEW)	Germany
GRECSTA/INSEE (CNRS- GRECSTA)	France
Istituto Superior Técnico Lisboa (IST)	Portugal
Research Institute of Industrial Economics (IFN)	Sweden
Club Ekonomika 2000 (CLUB2000)	Bulgaria



Macro work on intangibles

Measure activity and impact

Activity

Ongoing SNA work on capitalisation of software and R&D
Broaden to include other intangible categories such as
design, training, branding, organisational investment

Impact

Recalculate investment, GDP

Revisit

sources of growth

Productivity levels

Innovation



Micro work

Micro side

Exploration of different firm level data sets.

Micro data on firms from CIS etc.

Company accounts and market/book ratio

New surveys (spending and life lengths)

Develop better estimates of

Depreciation

Spending/investment in all intang categories

Informed by matched employer/employee data

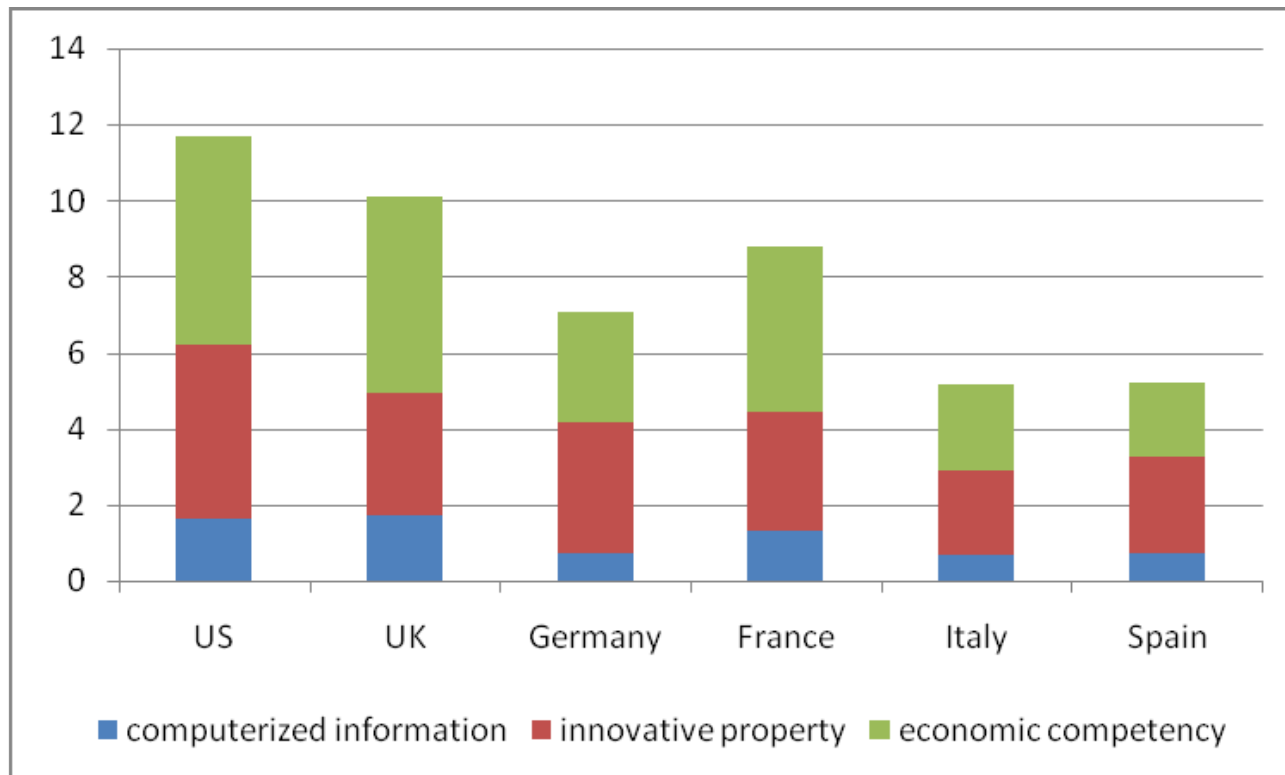


Emerging results

- Macro side
 - How much spend on intang?
 - How do they affect growth and its constituents?
 - Can they be measured better?
 - Are there possible spillovers?
- Micro side
 - Impact of intangibles at company level
 - Important role of intang in explaining mkt/book ratio



Intang invest important (fraction of GDP, 2004)



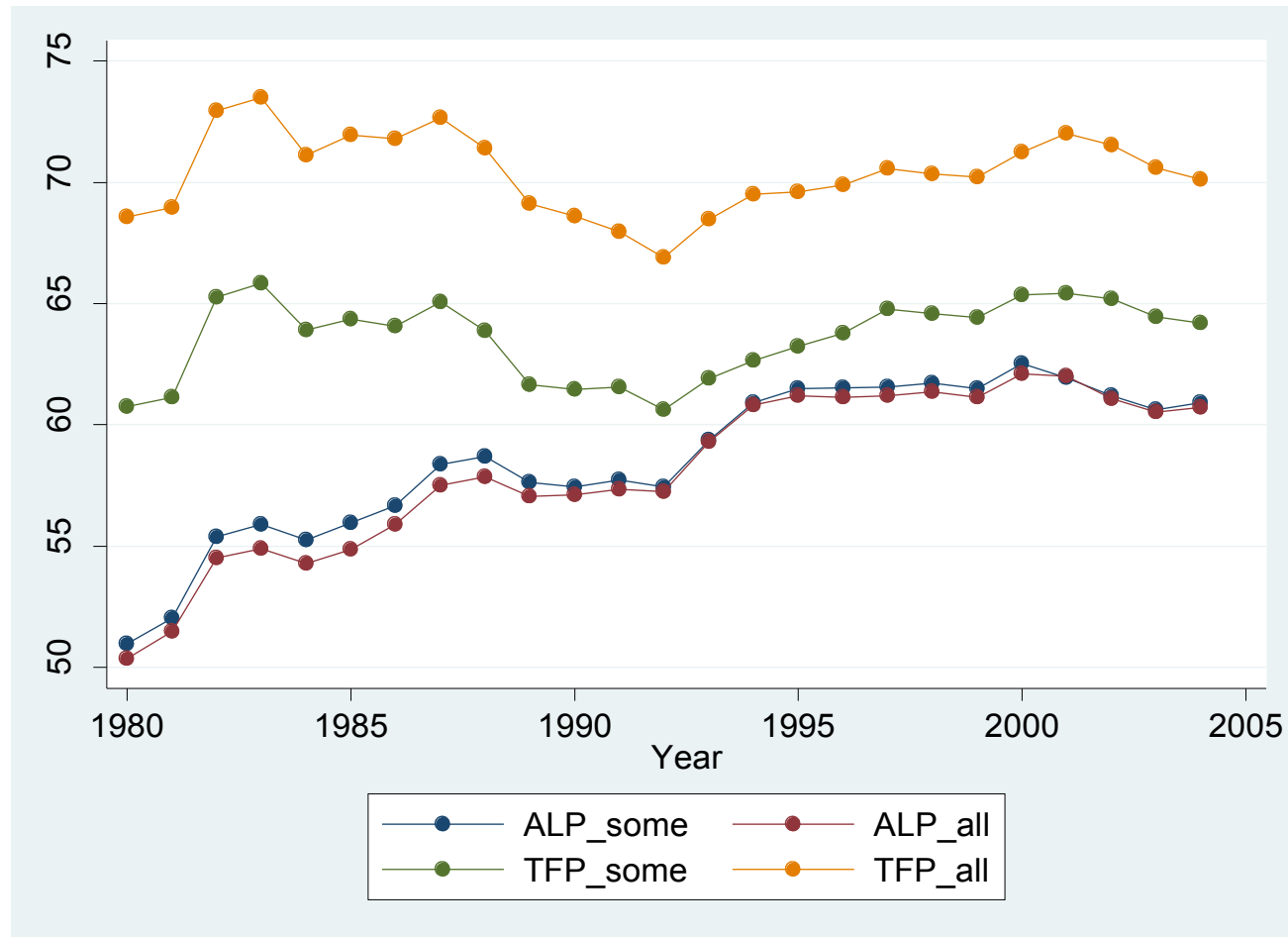


Intang invest changes LPG and TFPG picture (market sector, 1995-2003, labour quality not shown)

	US	UK	Germany	France	Italy	Spain
Excluding Intangible Capital (%)						
Labor productivity growth	2.78	2.59	1.72	2.10	0.43	0.20
<i>Tangible Capital Deepening</i>	<i>0.98</i>	<i>1.64</i>	<i>0.98</i>	<i>0.77</i>	<i>0.54</i>	<i>0.67</i>
MFP	1.42	0.58	0.65	0.93	-0.28	-1.00
Including Intangible Capital (%)						
Labor productivity growth	3.09	2.93	1.90	2.39	0.59	0.28
<i>Tangible Capital deepening</i>	<i>0.84</i>	<i>1.54</i>	<i>0.85</i>	<i>0.63</i>	<i>0.50</i>	<i>0.58</i>
<i>Intangible Capital deepening</i>	<i>0.84</i>	<i>0.59</i>	<i>0.59</i>	<i>0.88</i>	<i>0.35</i>	<i>0.18</i>
MFP	1.08	0.48	0.39	0.54	-0.40	-0.98

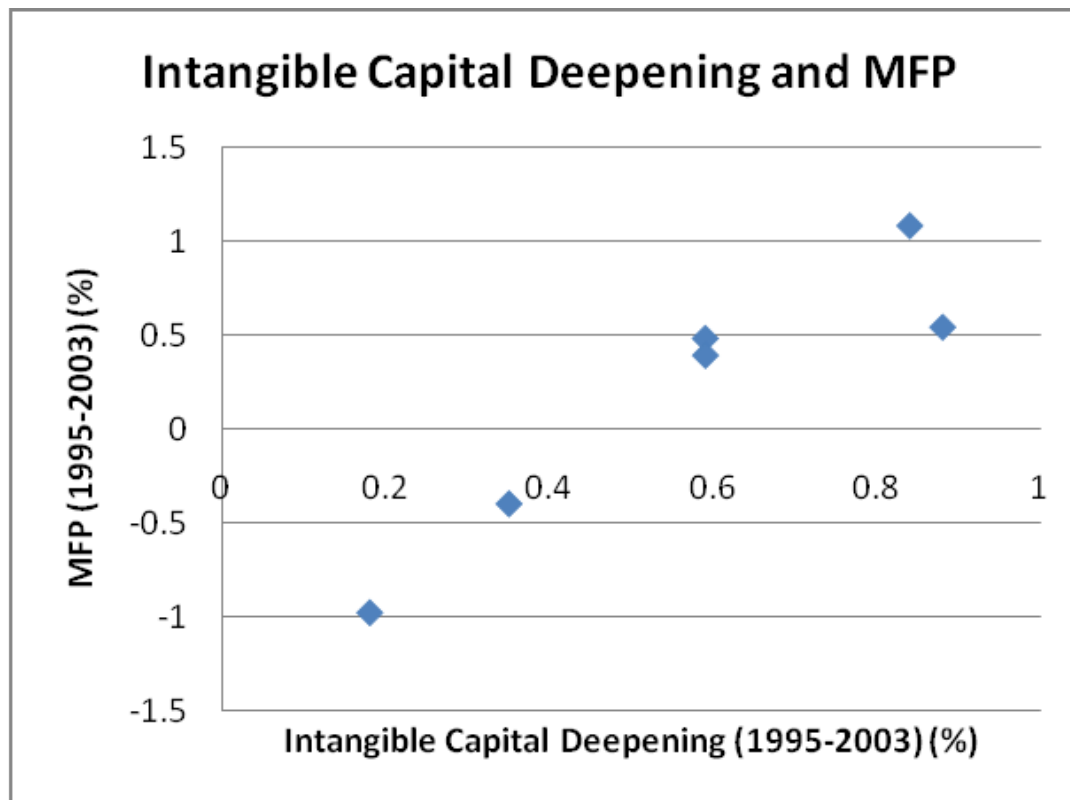


Levels: UK v US: ALP, TFP gaps (US=100)





Possible spillovers?





The new UK Intangible Assets Survey

(a) spending on intang

	Spending invoiced outside the company	Spending in h (including emp time spent, ra etc.)
A) “R&D” : Original investigation to acquire new knowledge in order to resolve scientific or technological uncertainty.		
B) Software and computer networks : Includes purchased and own account (in-house) software development and computerised database and computer networks, but excludes spending covered under “R&D”.		
C) Design of new products and services - Design functions for the development or implementation of new or improved goods, services and processes. Design in the “R&D” phase of product development should be excluded.		
D) Employer-funded training - All internal or external training for your personnel.		
E) Organisation/business process improvement - Including purchased consultancy services and in-house investment of managerial time spent on improving the effectiveness of business organisation.		
F) Reputation and branding - Including all spending on advertising and market research.		



The new UK Intangible Assets Survey (b) life lengths

Question No.	Type of project	[A] Proportion of expenditure	Stage	Information needed	[B] Time in months	[C] Comments
2. A)		%	Development	Average length of time in development		
			Transition	Average length of time between end of development to start of use		
			Use	Average length of time from start of use until end of use		



The new UK Intangible Assets Survey

Intangible asset	% of total intang spending	
	CHS method	IAS
Software	20%	26%
Design	16%	26%
Marketing	17%	22%
Training	26%	11%
Org capital	20%	15%
total	100%	100%



The new UK Intangible Assets Survey (b) life lengths

	Length of development lag in years	Length of transition lag in years	Length of use lag in years	Total length in years
R&D	3.4	0.4	8.5	12.3
Other intang	0.4	0.3	5.8	6.6



Better measurement: financial services

Persons employed in “research” occupations

Persons Occupations	All industries		Finance sector	
	UK	US	UK	US
<i>Eng excl soft</i>	32	37	5	7
<i>Soft</i>	29	36	53	63
<i>Life sci</i>	11	7	-	-
<i>Soc sci</i>	2	6	-	-
<i>Actuaries, econ, stats</i>	7	6*	34	26
<i>Other</i>	18	7	8	4
Total	100	100	100	100