

Organisational capital and human capital as strategic resources



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The Franco-German Round Table on Intangibles
(knowledge assets)

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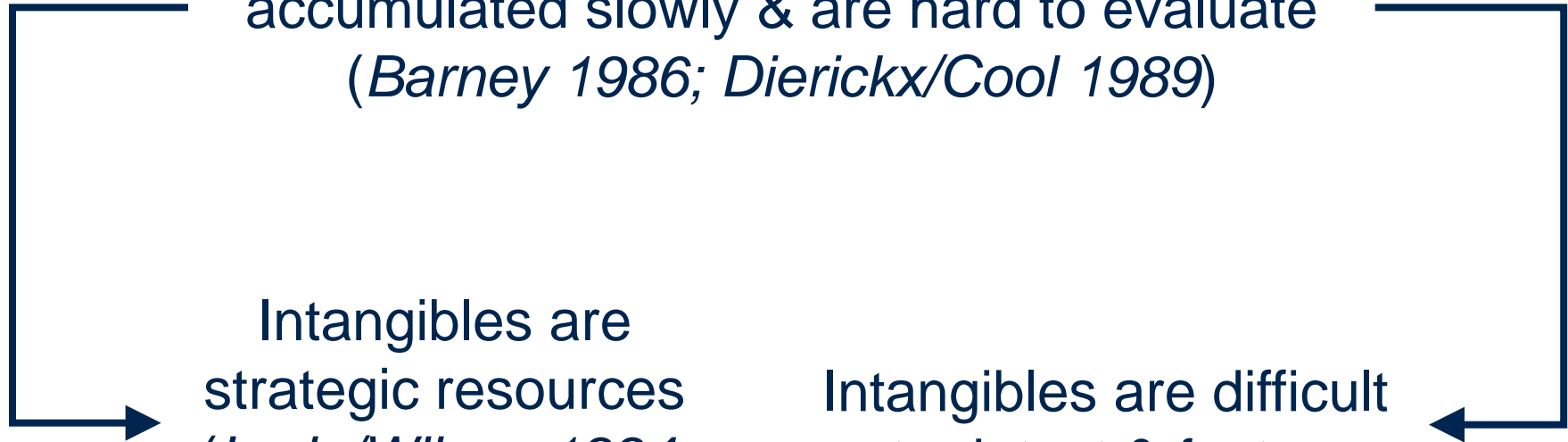
Intangibles in the resource-based perspective: a paradox



Intangibles are socially complex, must be accumulated slowly & are hard to evaluate
(*Barney 1986; Dierickx/Cool 1989*)

Intangibles are strategic resources
(*Lado/Wilson 1994; Wright et al. 1994*)

Intangibles are difficult to detect & foster



Problem: How can we **measure** intangibles as **researchers**?



Two metaphors & a stream of studies

- Strategic resources according to *Tomer 1987*
 - **Human capital**
individual knowledge assets (skills, knowledge)
 - **Organisational capital**
company-level knowledge assets (routines, practices)

- 13 empirical papers since 1997:
Cooper/Johri 1997; Brynjolfsson/Hitt/ Yang 2002; Brynjolfsson/Hitt 2003; Lev/Radhakrishnan 2003; Sadowski/Ludewig 2003, 2005; Bugamelli/Pagano 2004; Black/Lynch 2004, 2005; Youndt/Subramaniam/Snell 2004; Subramaniam/Youndt 2005; Atkeson/Kehoe 2002, 2005; Tseng/Goo 2005; García-Olaverri/ Huerta-Arribas/Larraza-Kintana 2006; Ramirez/Hachiya 2006

Empirical designs and representatives studies

Measurement	Sample	
	Multiple industries	Single industry
Practices (objective)	Econometrics <i>Sadowski/Ludewig 2009;</i>	Insider econometrics <i>Schneider 2008</i>
Evaluation (subjective)	Sociometrics <i>Subramiam/Youndt 2005;</i>	

Intangibles influenced profit situation in the German *Maschinenbau* in the 1990s

Variable	Coefficient
Organisational capital (IT)	
No. of NC/CNC machines per worker	0.0331**
No. of computer-aided practices of planning & control	0.0783**
Human capital (training, retention)	
% of skilled shop-floor workers (<i>Facharbeiter</i>) receiving further training	0.0149**
Personnel turnover	-0.2125**
Personnel turnover squared	0.0078**

N=201; various controls included; ** significant at 5%;
Data from the „NIFA-Panel“ covering plants of the German *Maschinenbau*. Profit situation in 1997 (dependent variable) given by subjective ratings on 5-point scale; independent variables in 1995

Conclusions: How to grasp intangibles

- Method: Insider econometrics
 - One industry
 - Quantitative measures (policies & practices)
 - Qualitative insights provided by experts (managers & workers)

- Questions to be addressed
 - Which policies & practices are strategic resources?
 - Can we distinguish between IT investment & organizational capital?
 - Are there interactions between different strategic resources?
 - How sustainable are competitive advantages?