

Depreciation on Organisational Capital A Micro-Level Analysis for Germany

Bernd Görzig and Martin Gornig

DIW Berlin - German Institute For Economic Research

**Paper prepared for the IARIW 34th General Conference
Dresden, Germany, August 21 – 27, 2016**

Presented by Erich Oltmanns

The framework

Intangible capital (Corrado/Hulten/Sichel, 2009)

- Computerised information
- Innovative property
- Economic competencies
 - Brands
 - Organisational capital
 - Firm-specific human capital

Value of a team as part of organisational capital

Aim of the study

**Assessment of depreciation rates
for organisational capital**

Focus on the value of a team

Have a look on

- **Public influenced industries**
- **Comparison of results for Germany and the United States**

Structure of the paper

Introduction

Background

Data

Results

Conclusions

Background

Explaining

- Organisational capital
- Capital value of a team
- Depreciation and asset's service life

Why service life differ

The decline in value of organisational capital

- Normal wear and tear
- Obsolescence

What is „the team“?

Composition of the team?

**Related to the management employees
in a production unit**

Should be subject to further variations

Operationalisation

- **All employees in some occupations**
- **Employees with higher education in other branches**

Table 1: Basic Team - management staff definition in INNODRIVE

BKdI88 ¹	description ²	Management staff
31-32	Agricultural engineers and administrators, a.s.	All
601-612	Engineers, physicists, mathematicians, a.s.	High
681	Wholesale, retail trade agents, purchasing agents, a.s.	High
682-688	Sales assistants, a.s.	High
691-692	Banker, a.s.	High
703	Advertising specialists, a.s.	High
751-763	Chief executives, consultants, tax adviser, a.s.	All
771-773	Financial officers, chief accountants, a.s.	High
781-782	Office executives, a.s.	High
784-794	Office clerks, a.s.	High
862-863	Chief executives, consultants of social institutions, a.s.	High
911	Directors of hotels, restaurants, a.s.	High
921	Home economy administrators, a.s.	High

¹German classification of occupations (IAB 2008; chapter 5). - ²Translated from German. - All: All employees. - High: Employees with higher education (code numbers 4 to 6 in IAB 2008). - Low: Employees without higher education (all other code numbers)

Sources: IAB 2008, INNODRIVE 2011

„Public influenced industries“

No trivial task to differ the public and the private sector

Kind of production

- **Non-market production of**
 - **General government**
 - **Private Non-profits**
- **Market production controlled by General Government**

Operationalisation

- **Majority of units is either non-market production**
- **or unit under control of governmental institutions**

Table 2: Industry breakdown

Activities	Nace 2
"All other activities"	(AO)
Scientific research and development	MB
Public administration, defence; compulsory social security	O
Education	P
Human health activities	QA
Residential care, social work activities	QB
Creative, arts, entertainment activities; libraries, archives museums, other cultural	R (1)
Gambling, betting activities; sports, amusement, recreation	R (2)

The data

EUKLEED

- **Micro data set on employment, investment and output**
- **for about 1.6 million German establishments**
- **with around 40 million employment cases per year**

Calculation of quit rates

Figure 1: Employment patterns over the year

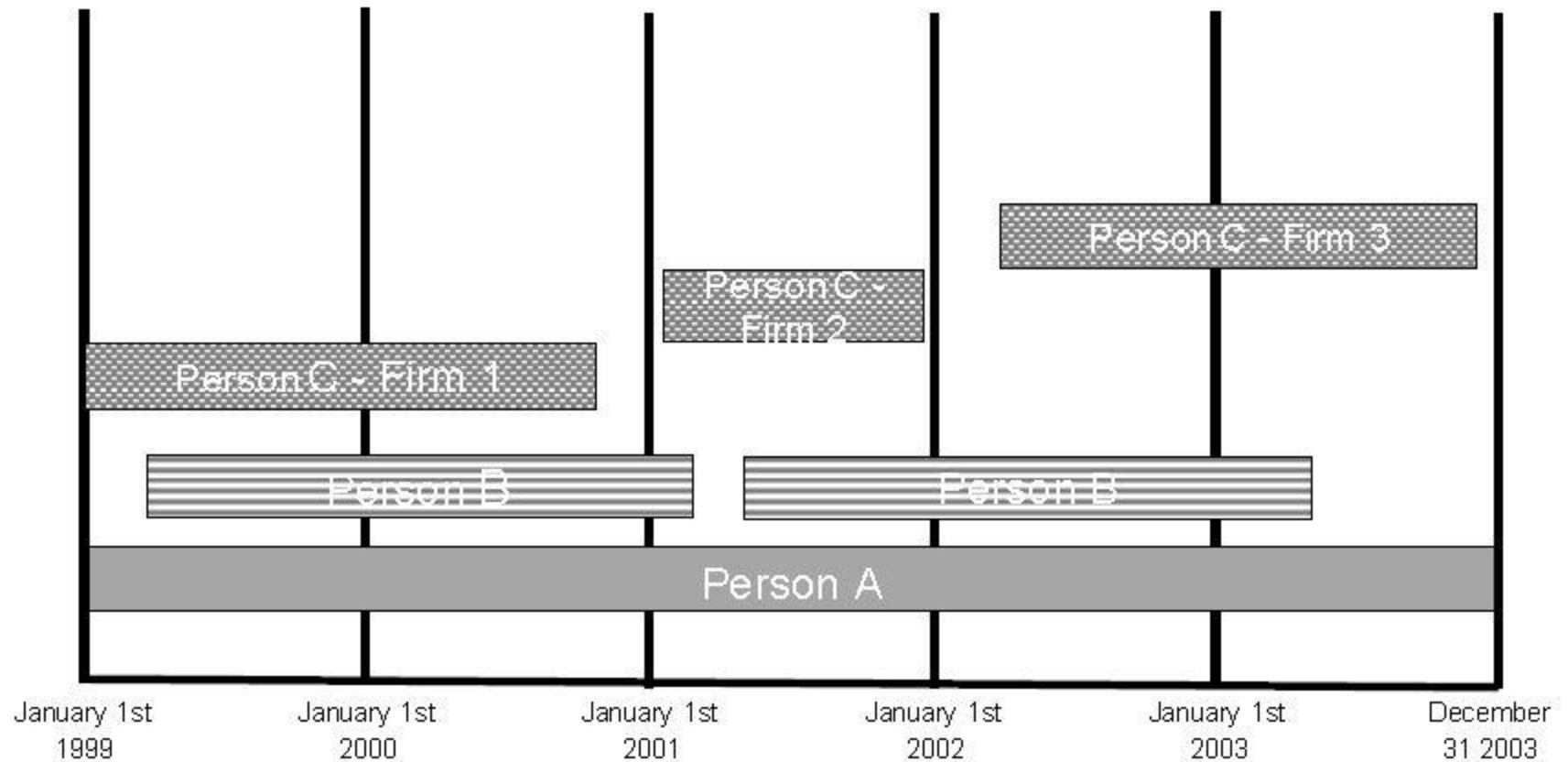


Table 3: Aggregated results

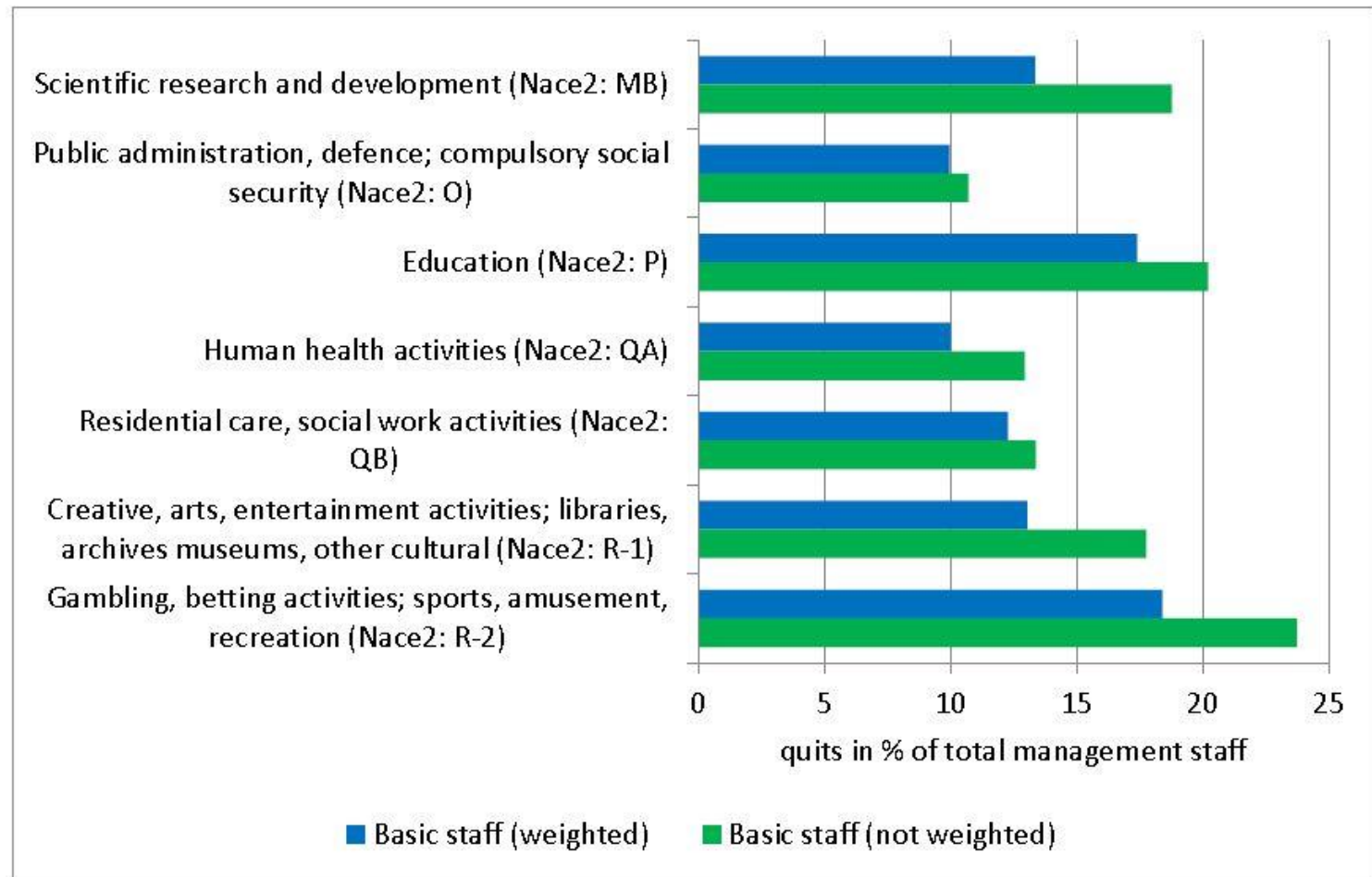
	Averages 1999- 2003	SPINTAN related industries ¹	All other industries
Establishments	million	0,301	1,473
Employees	million	5,641	18,492
Management staff ²	million	0,462	2,259
Management quits	million	0,059	0,295
Average establishment size	employees	19	13
Average management share	per cent	8	12
Average management quit rate	per cent	13	13
¹ Nace 2 industries MB, O, P, Q, R. - ² As defined in INNODRIVE (see table 1). - Sources: Eukleed, Own calculations.			

Table 5: Comparison of depreciation rates for public influenced industries

Public influenced industries - Nace 2		Depreciation rates in % of the team value		US NAICS 2007 - NACE Rev. 2 CORRESPONDENCE TABLE AT TWO-DIGIT LEVEL - primary links only ²	
		Germany ¹	US ²		
Scientific research and development	72	19	20	54	Professional & technical services
Public administration, defence; compulsory social security	84	11	9	92	Public administration
Education	85	20	18	61	Educational services
Human health activities	86	13	17-18	62	Health care services, hospitals, and social assistance
Creative, arts, entertainment activities; libraries, archives museums, other cultural, gambling, betting activities; sports, amusement, recreation	90-93	24	25	71	Arts, entertainment & recreation

¹ Non-weighted averages across all production units. - ² Squicciarini/Le Mouel (2012), table 5. - ³ Commission of the European Communities (2010).- Own calculations.

Figure 2: Quit rates for public influenced industries (weighted and not weighted)



Comments/questions

Is it management only that makes the team?

Stages of a team

EUKLEED, INNODRIVE, SPINTAN?

Thanks for your attention!

Erich Oltmanns
Telephone: +49 611 752087
erich.oltmanns@destatis.de
www.destatis.de

