



ドイツ日本研究所 German Institute for Japanese Studies (DIJ)

International Symposium

November 6th and 7th, 2008 at the Center for the Advancement of Working Women (CAWW)

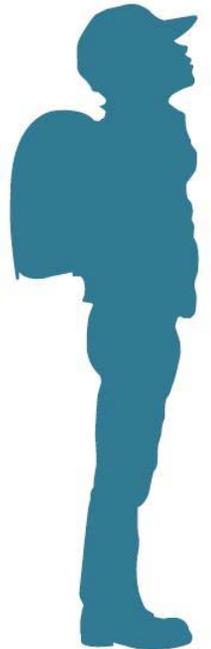
Fertility and Social Stratification Germany and Japan in Comparison

Friday, November 7th, 2008

Section 7: Employment and Education

“Social Inequality of Women over the Employment Cycle”

PowerPoint by **Dana Müller**
(Institute for Employment
Research, Nuremberg)



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Social Inequality of Women over the Employment Life Cycle – a Comparison of Cohorts born after 1935 in West Germany

Dana Mueller & Daniela Hochfellner

Fertility and Social Stratification Germany and Japan in Comparison, November 6-7, 2008

Topics

- Overview on
 - Education
 - Labour force and
 - Fertility in Germany
- Research project and first results

Education System in Germany

ISCED	Education facilities in Germany			
ISCED 1: Primary Education	Grundschule (Primary School) (4)			
ISCED 2: Lower Secondary Education	Hauptschule (Secondary school) (9)	Realschule (Secondary modern school) (10)	Gesamtschule (Comprehensive school) (9/10/13)	Gymnasium (Secondary high school) (10)
	Vocational preparation courses (1)			
ISCED 3: Upper Secondary Education	Duales System (dual system of vocational training) (2) Berufsfachschule (full-time vocational school) (2-3)	Fachoberschule (2) Berufsober- schule (3)	Gymnasiale Oberstufe (2-3) (Continuation with Secondary high school or Comprehensive school)	
ISCED 5: First Stage of Tertiary Education		Fachhochschule (University of applied sciences)	University	

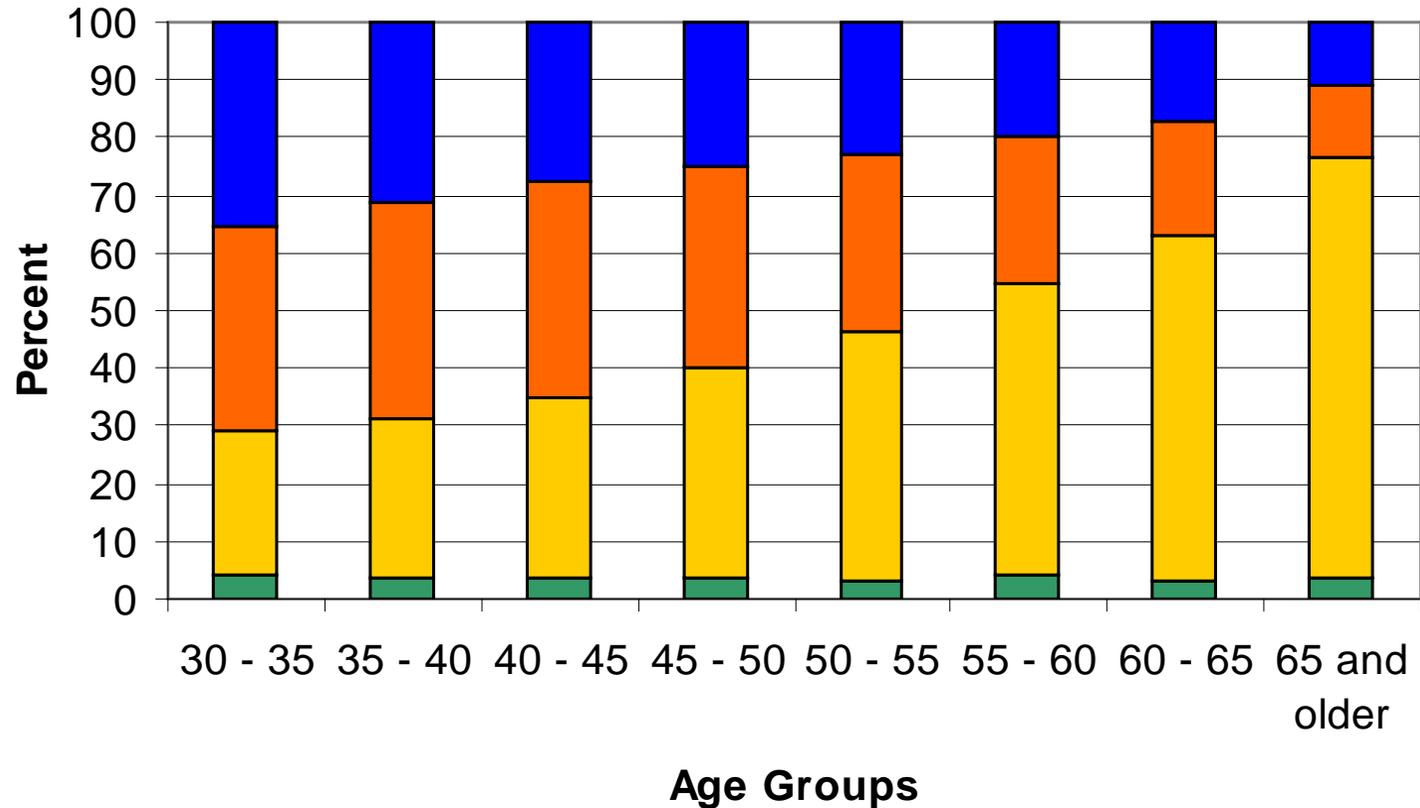
General education

Vocational training



Education - Educational Expansion

Levels of Education by Age Groups in 2005 (in %)



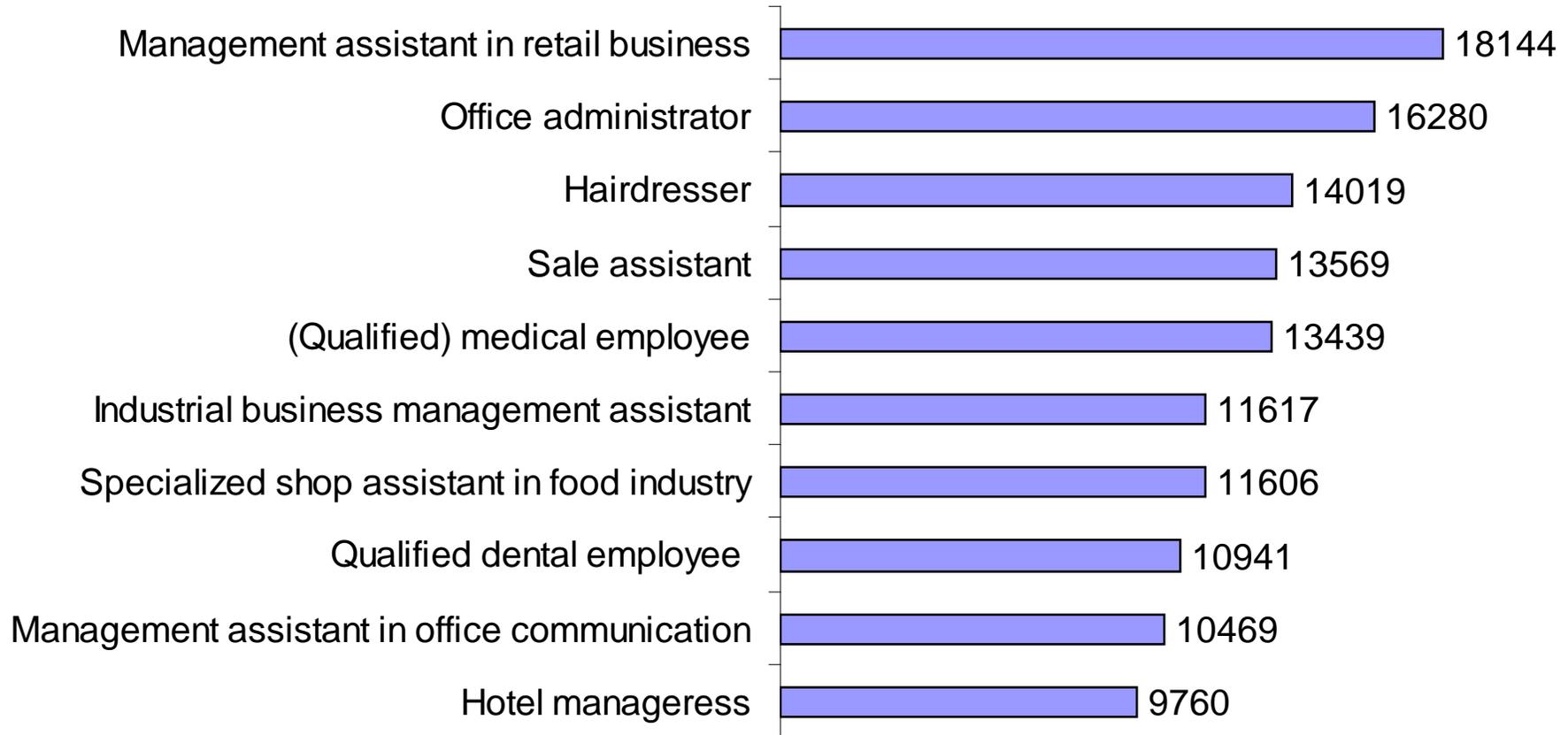
- University entrance level
- lower secondary level (Realschule-Secondary modern school)
- lower secondary level (Hauptschule-Secondary school)
- without school leaving certificate

Source: Federal Statistical Office, Microcensus (Bildung im Zahlenspiegel 2006)

Occupational Segregation of Women and Men

10 most frequent trained occupations (new apprenticeship contract in 2006)

Women



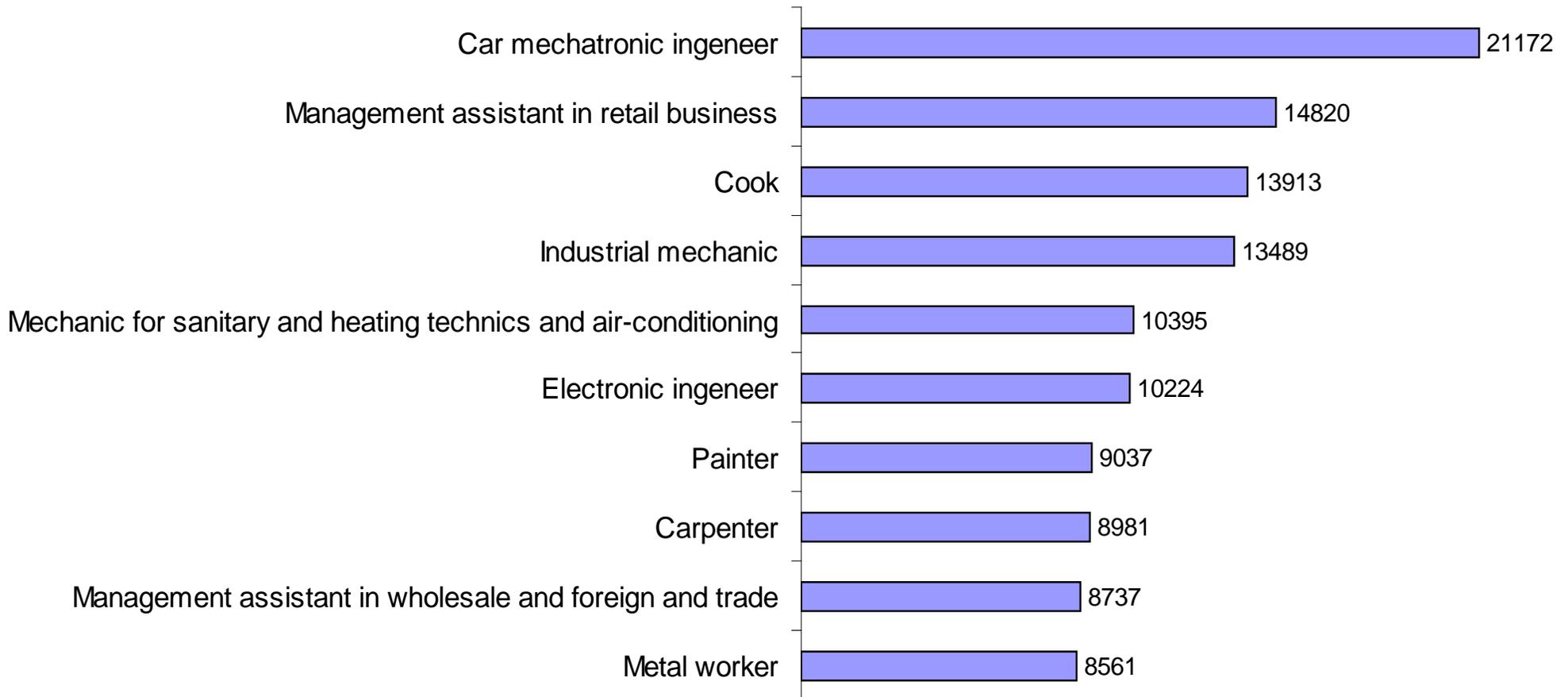
Source: BIBB 2008



Occupational Segregation of Women and Men

10 most frequent trained occupation (new apprenticeship contract in 2006)

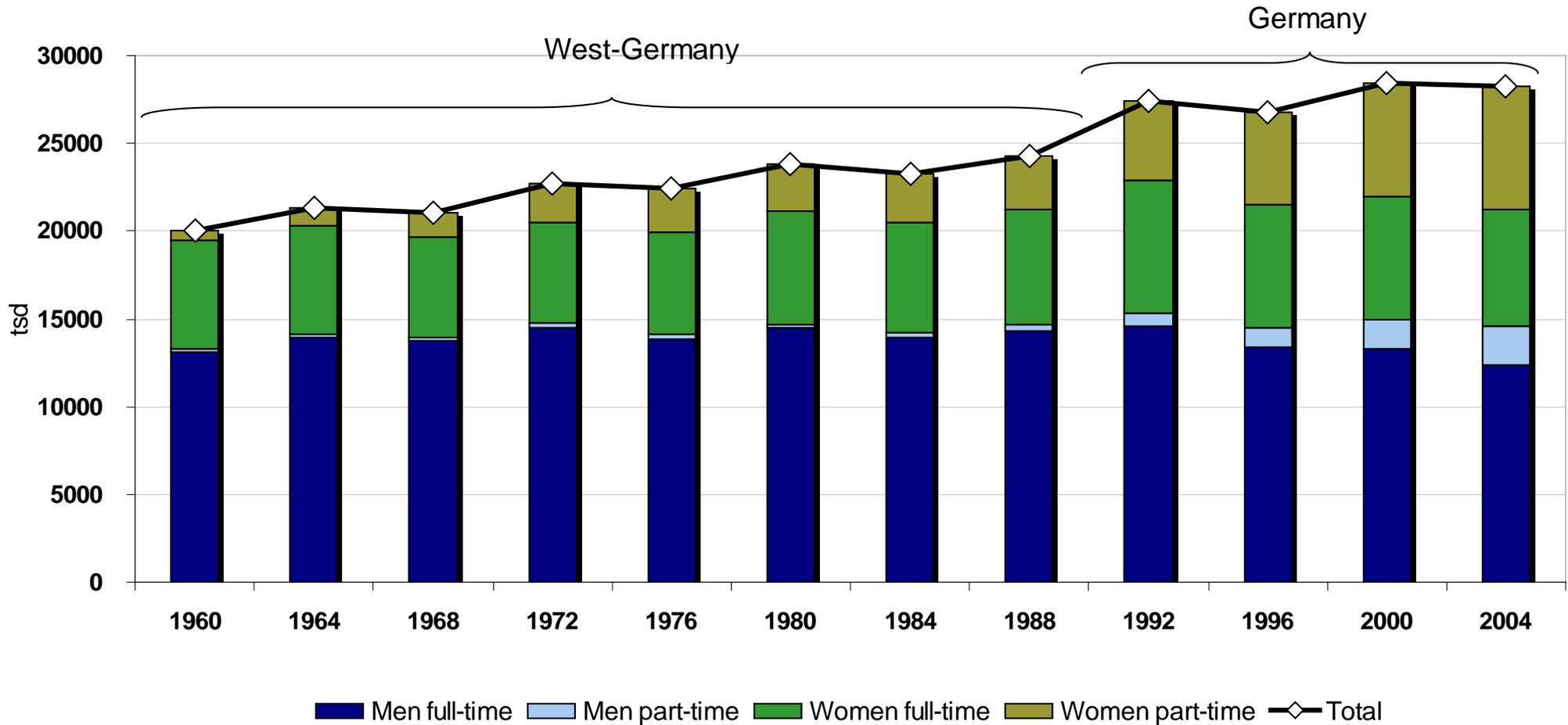
Men



Source: BIBB 2008

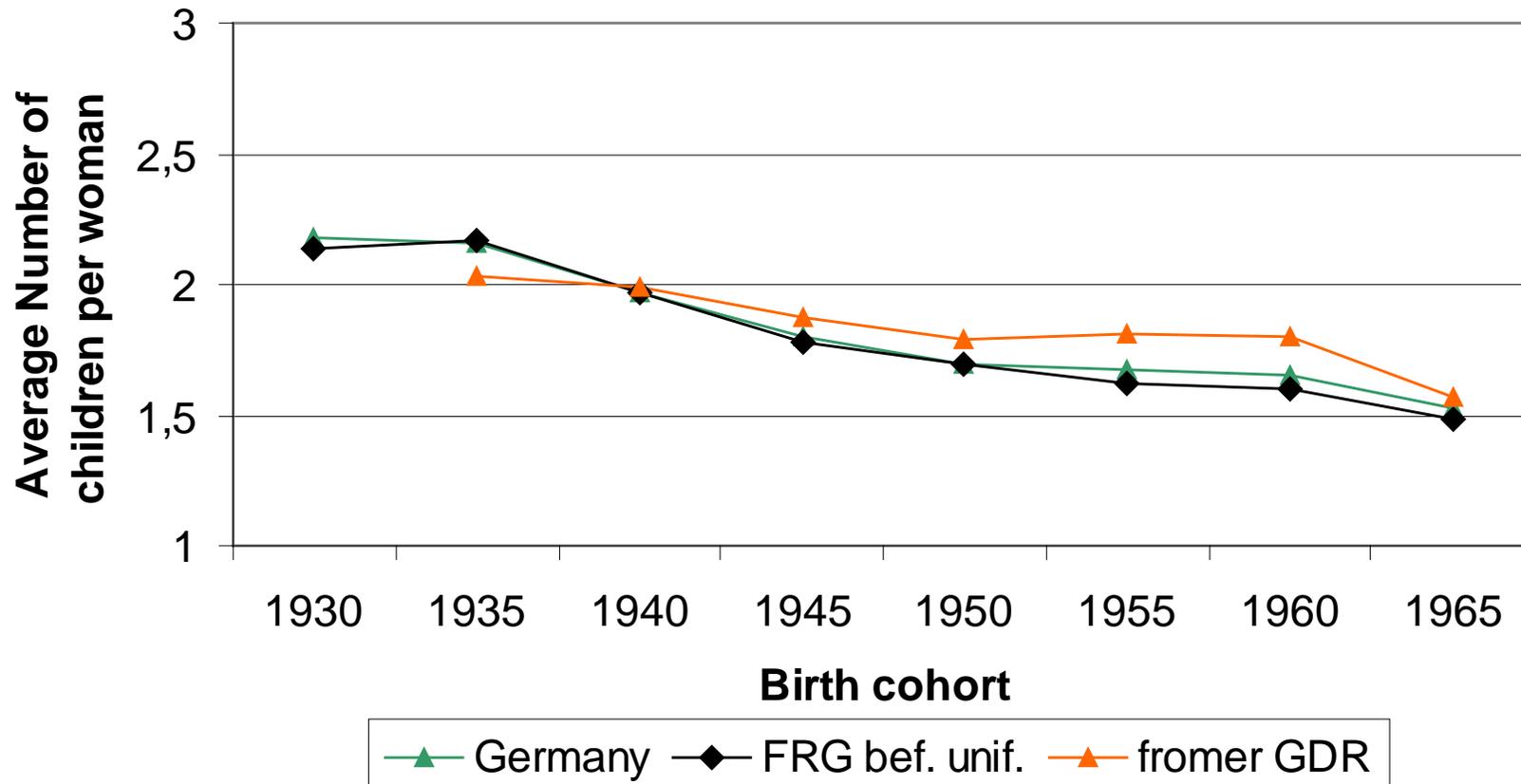
Labor force

Employment 1960-2004



Source: Statistisches Taschenbuch 2007

Complete fertility of female birth cohorts born 1930 or after



Source: Council of Europe 2005: Demographic Yearbook 2004, http://www.coe.int/t/e/social_cohesion/population/Demo2004EN.pdf

Research

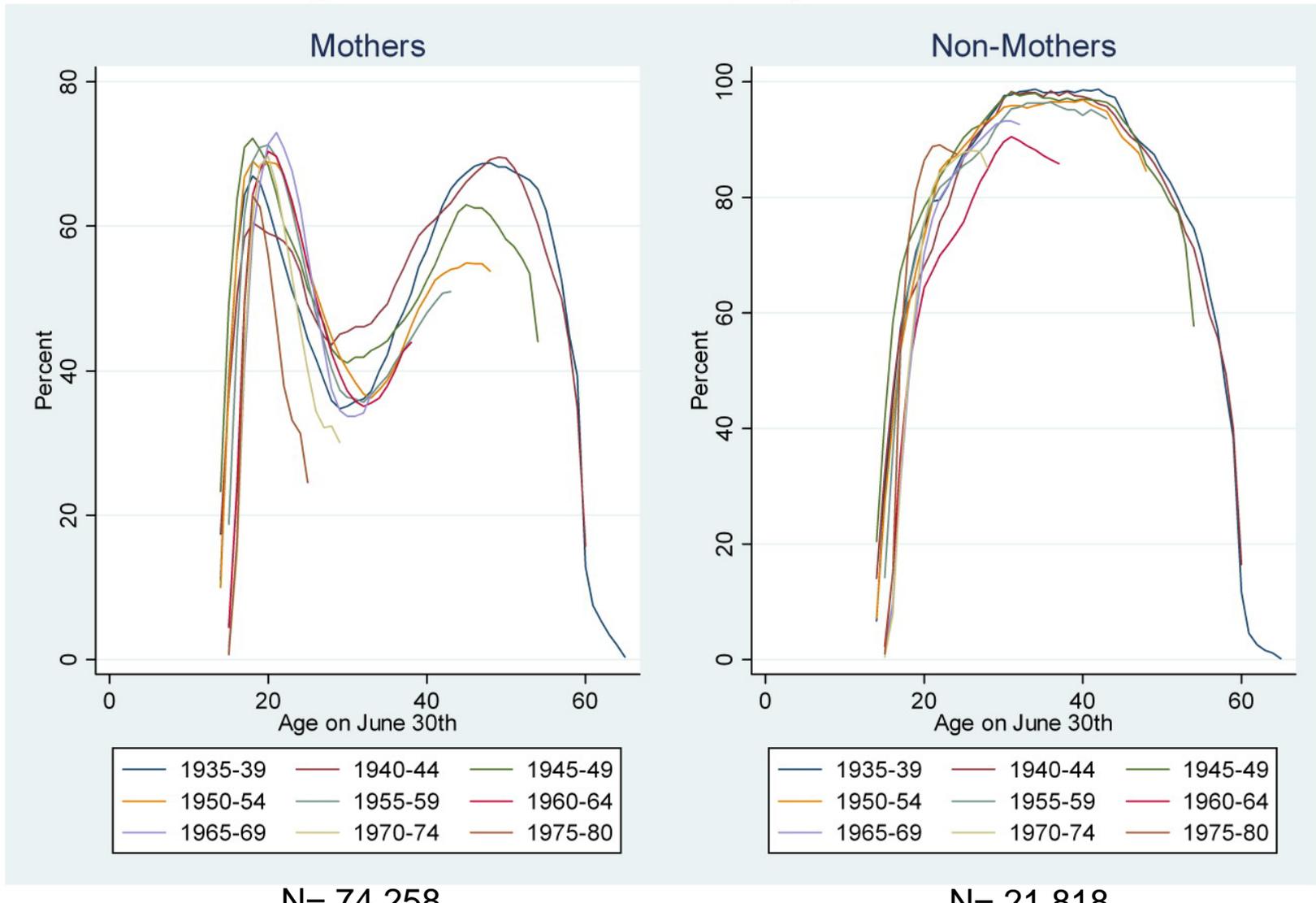
■ Motivation

- What are the occupational differences in mother's and non-mother's employment life cycles?
- What are the determinants of occupational mobility after first childbirth in a short-term and long-term perspective?

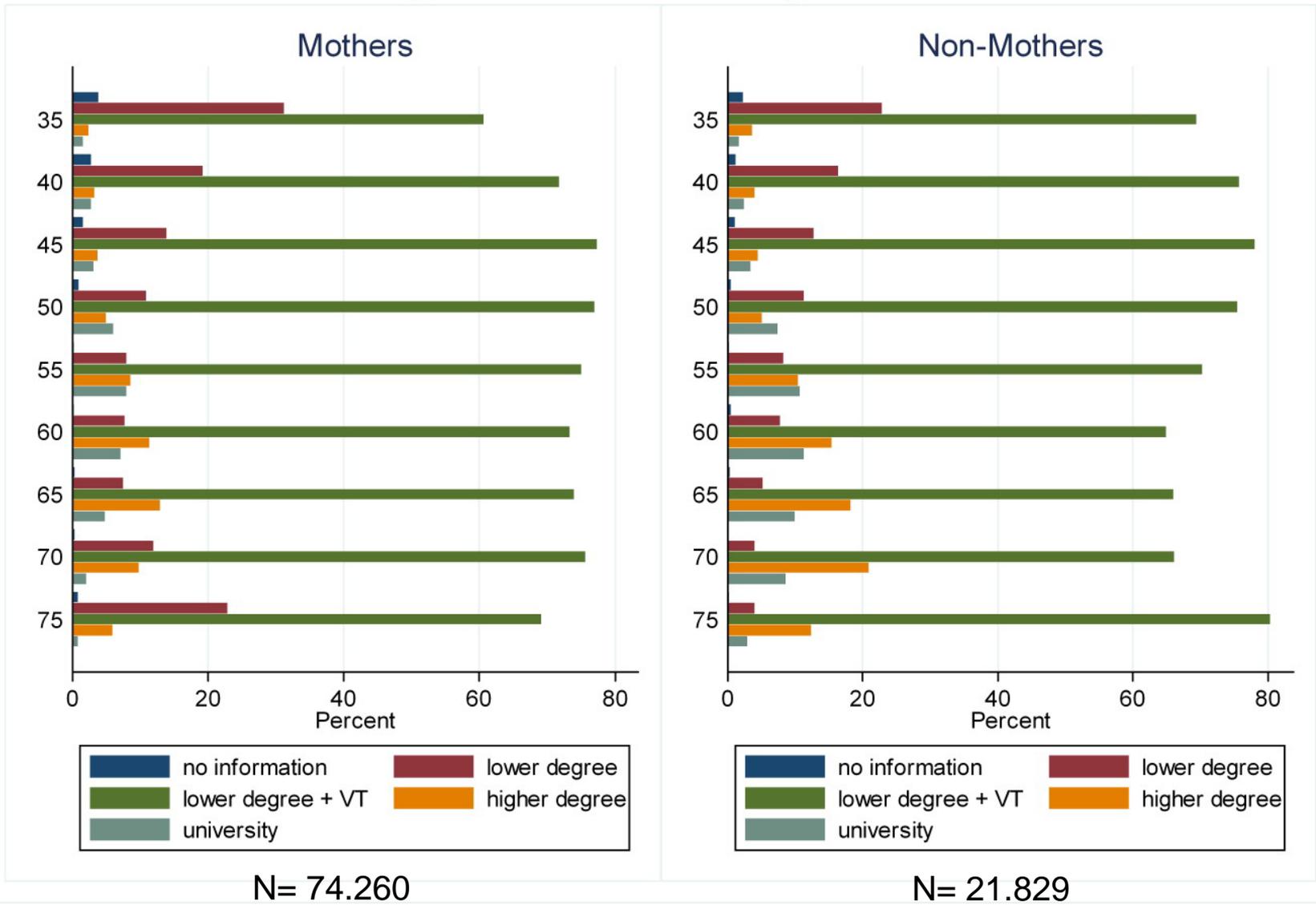
Data Description

- Data from Federal Employment Agency and Institute for Employment Research (IAB Employment Sample) with
 - additional information from the German Pension Insurance
 - additional information from the Establishment History Panel
- No information about: self-employment people, unpaid family workers, household context or partnership
- Sample size (after data cleansing): 96.089 women (21.829 non-mothers)

Percentage of Women in Employment on June 30th



Highest Education by Cohort

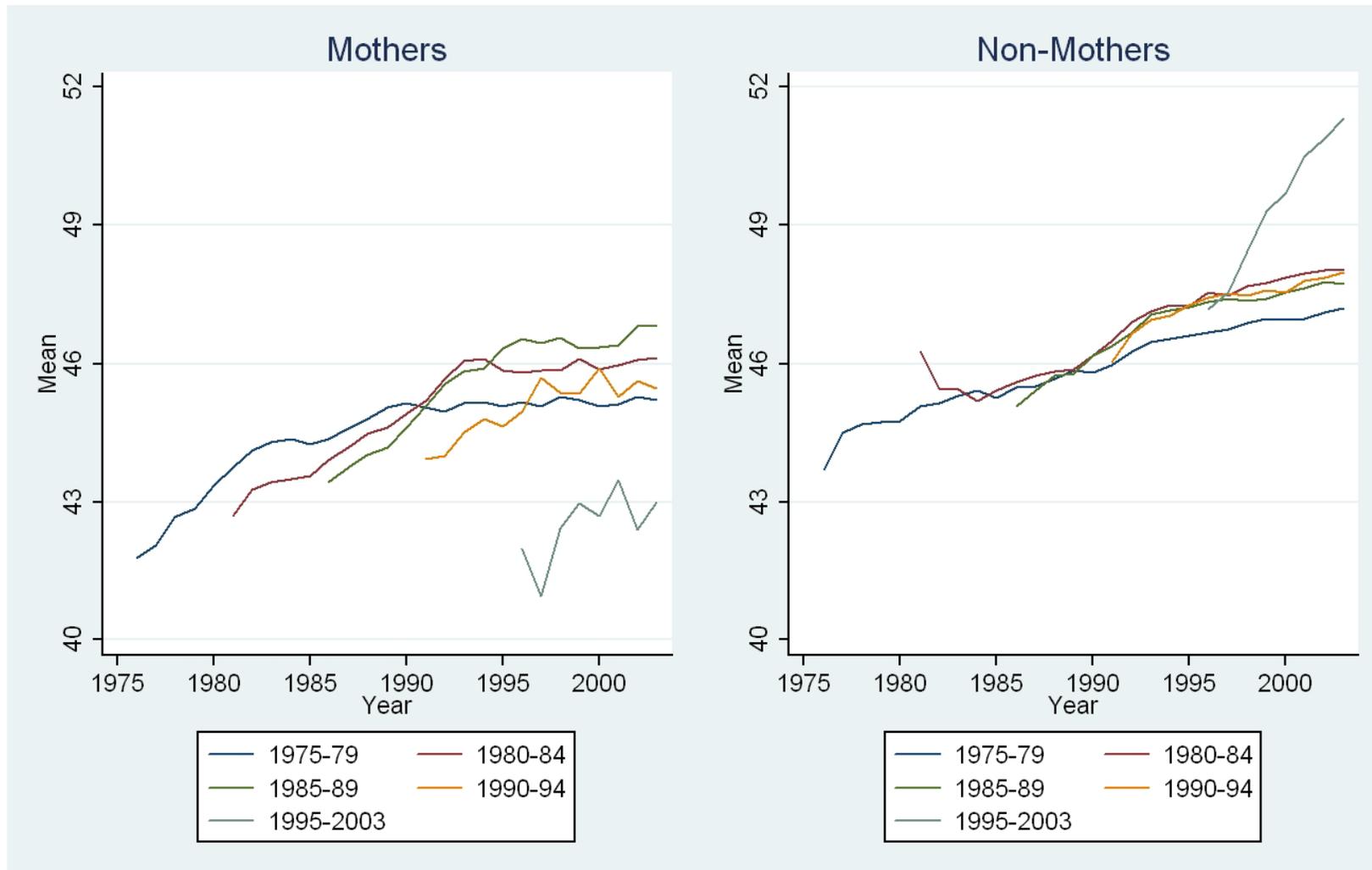


N= 74.260

N= 21.829



Average Prestige of Women on June 30th by Entry Cohorts

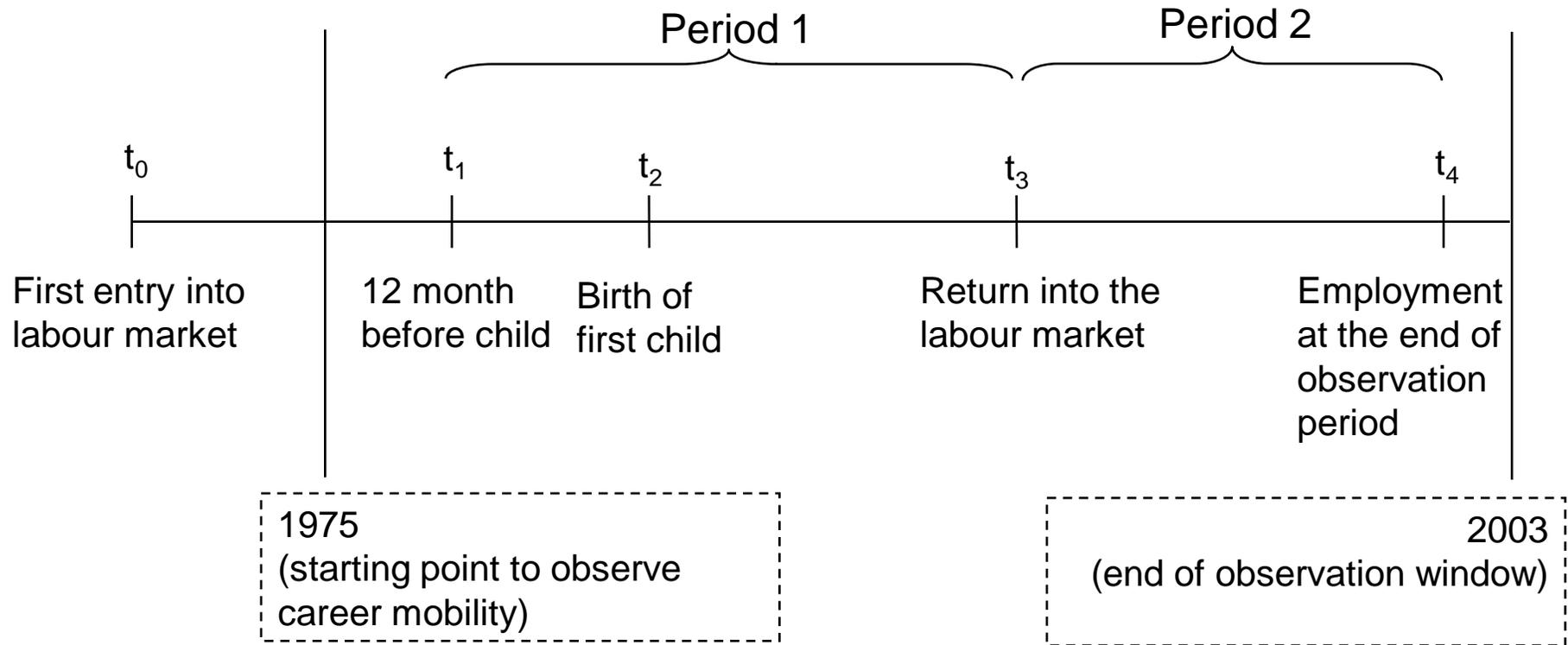


N= 36.465

N= 15.663



Time period for mothers



Variables

Mobility	1 (downward mobility), 2 (no mobility), 3 (upward mobility); period 1 and 2 (10% differences)
Entry cohorts	1 (<1969), 2 (1970-1974), 3 (1975-1979), 4 (1980-1984), 5 (1985-1989), 6 (1990-1999)
Education	1 (lower degree without vocational training), 2 (lower degree with educational training), 3 (higher degree (Abitur) with and without vocational training), 4 (university)
Age at first childbirth	1 (<24), 2 (25-29), 3 (30-34), 4 (>35)
Prestige/prestige ²	At the end of each period
Job experience	At the beginning of each period (in years)
Times without employment	within period 1 and 2 (in years)
Employment	within period 1 and 2 (in years)
Duration until re-enter	1 (< 1 year), 2 (1-3 years), 3 (3 years and more)
Full-time/Part-time	1 (full-time), 2 (part-time less than half of full-time), 3 (part-time more than half of full-time); at the end of period 1 and period 2
Number of children	1 (1), 2 (2), 3 (3 and more)
Firm change	0 (no firm change), 1 (firm change); at the end of each period
Firm: occupational segregation	1 (men dominated), 2 (female dominated), 3 (mixed); at the end of each period
Establishment size	1 (small (<49)), 2 (medium (50-499)), 3 (large (500>)); at the end of each period

Mobility in percent (col)

Return into the labour market after childbirth (period 1)	Employment at the end of observation period (period 2)		
	Downward mobility	No mobility	Upward mobility
Downward mobility	6%	7%	34%
No mobility	66%	86%	58%
Upward mobility	28%	6%	8%

Note: rounded results, N=4.148



Results



Reference cat.		Downward mobility (+)		Upward mobility (+)	
		Odds		Odds	
Job cohort <69	Job cohort 70-74	0.713	-	0.838	
	Job cohort 75-79	0.753		1.030	
	Job cohort 80-84	0.559	---	0.921	
	Job cohort 85-89	0.550	--	1.038	
	Job cohort 90-99	0.439	---	1.048	
Lower education	Lower education with vocational T.	0.342	---	2.380	+++
	Secondary education	0.232	---	3.491	+++
	University	0.143	---	7.297	+++
	Prestige	1.003		0.961	
	Prestige ²	1.001	+	0.999	-
	Job experience	0.917	---	0.956	---
	Times without employment	1.025	+	1.031	+
	Employment	0.984		1.053	+++

+/- p<.05; ++/-- p<.01; +++/--- p<.001

Results



Reference cat.		Downward mobility (+)	Upward mobility (+)
		Odds	Odds
Return > 3 year	Return into labour market < 1 year; period 1	0.650 -	1.043
	Return into labour market 1-3 years; period 1	0.798	0.998
Full-time	Part-time (less than half of full-time) period 1	1.645 ++	1.489 +
	Part-time (more than half of full-time) period 1	1.075	1.257
No firm change	Firm change	14.090 +++	9.927 +++
Male dominated firm	Female dominated firm	1.523 ++	0.501 ---
	Mixed	1.064	0.735 -
Small firms	Medium firms	1.465 ---	0.854
	Large firms	1.114	0.912
Number of persons		4148	4148
Pseudo-R2		0.249	0.327

Included but not significant: age at first birth, number of children

+/- p<.05; +/- p<.01; +++/--- p<.001

Summary

- 86% of mothers had no occupational mobility
- Most important determinants education, job experience and firm change
- Further analysis about:
 - upward mobility of non-mothers during the time of family formation
 - how long it takes for an upward mobility if childbirth has led to a lower occupational prestige
 - which mothers do not return into the labour market

Thank you!

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