



DemoSoc Seminars

“SOCIAL ORIGINS AND OVEREDUCATION AMONG SPANISH GRADUATES: IS THE ACCESS TO THE SERVICE CLASS MERITOCRATIC?”*

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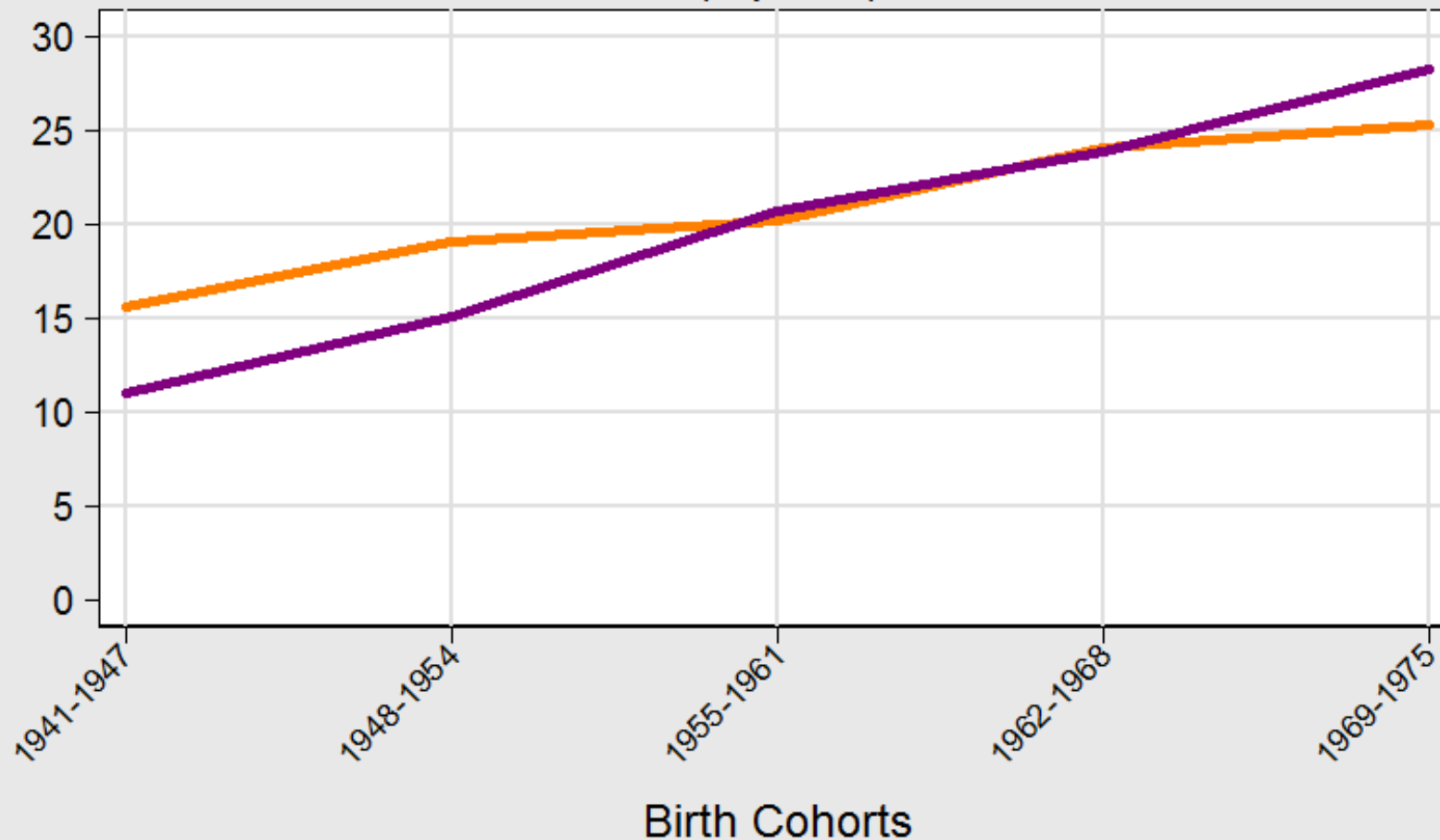
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OUTLINE

- JUSTIFICATION: THE SPANISH CASE
- THEORETICAL BACKGROUND & PREVIOUS RESEARCH
- HYPOTHESES AND MECHANISMS
- DATA AND METHODS
- INDIRECT EFFECT VIA FIELD OF STUDY
- MULTIVARIATE ANALYSIS: DIRECT EFFECT OF SOCIAL ORIGINS
- LIMITATIONS, CONCLUSIONS AND DISCUSSION

Education-Jobs Gap in Spain

% of Employed Population

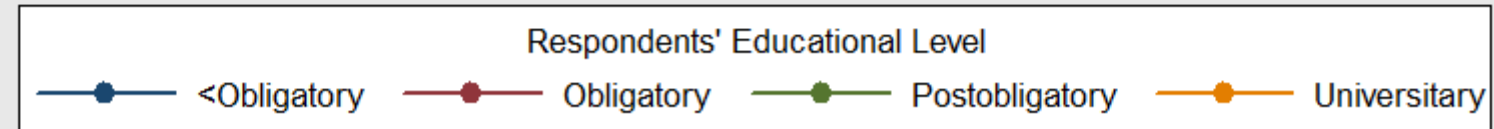
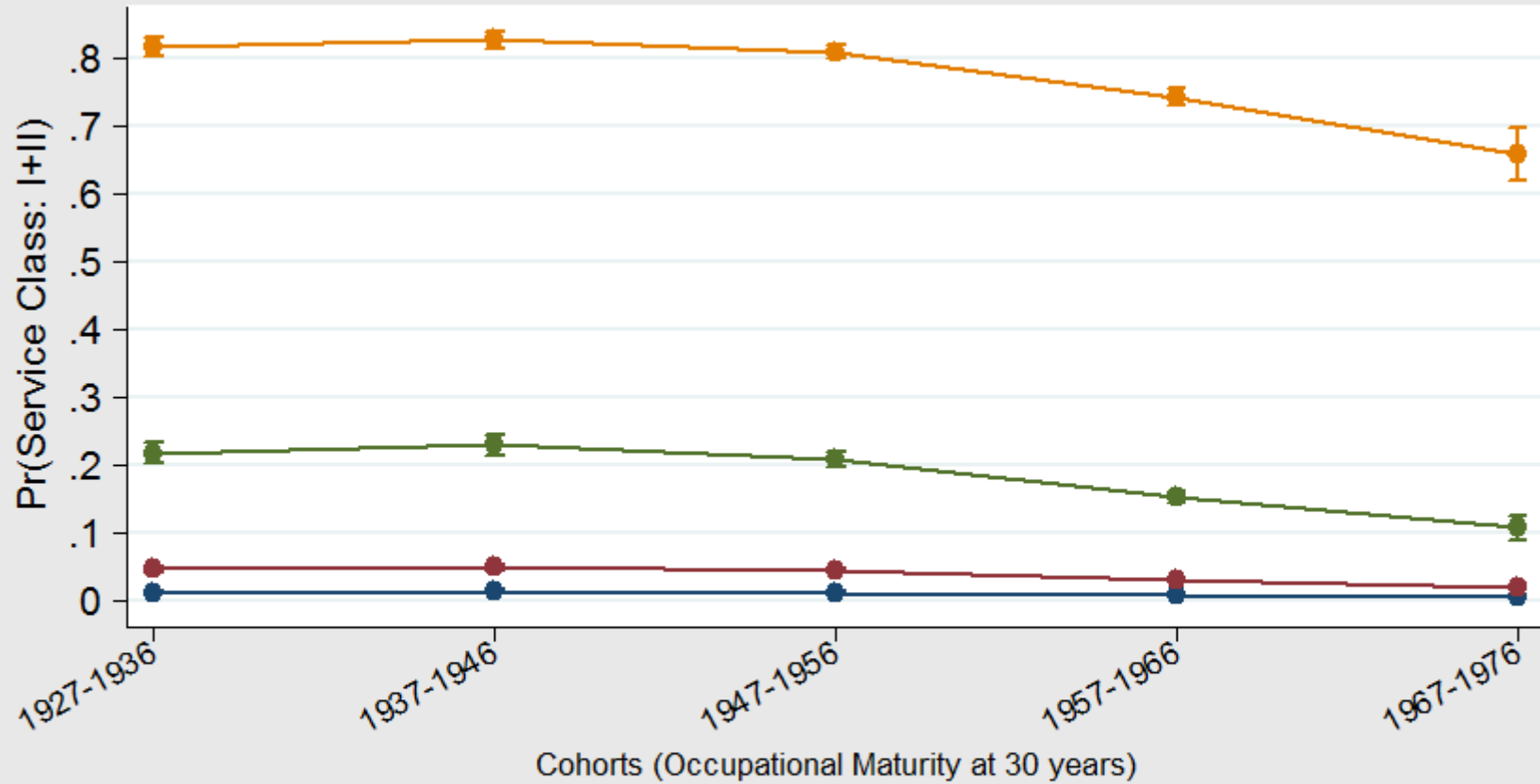


— % of EGP I+II (Service Class) — % of ISCED5a

Source: Survey on Social Classes and Social Structure [CIS 2634], CIS, 2006

Adjusted Predictions of Accessing to the Service Class by Education and Cohorts

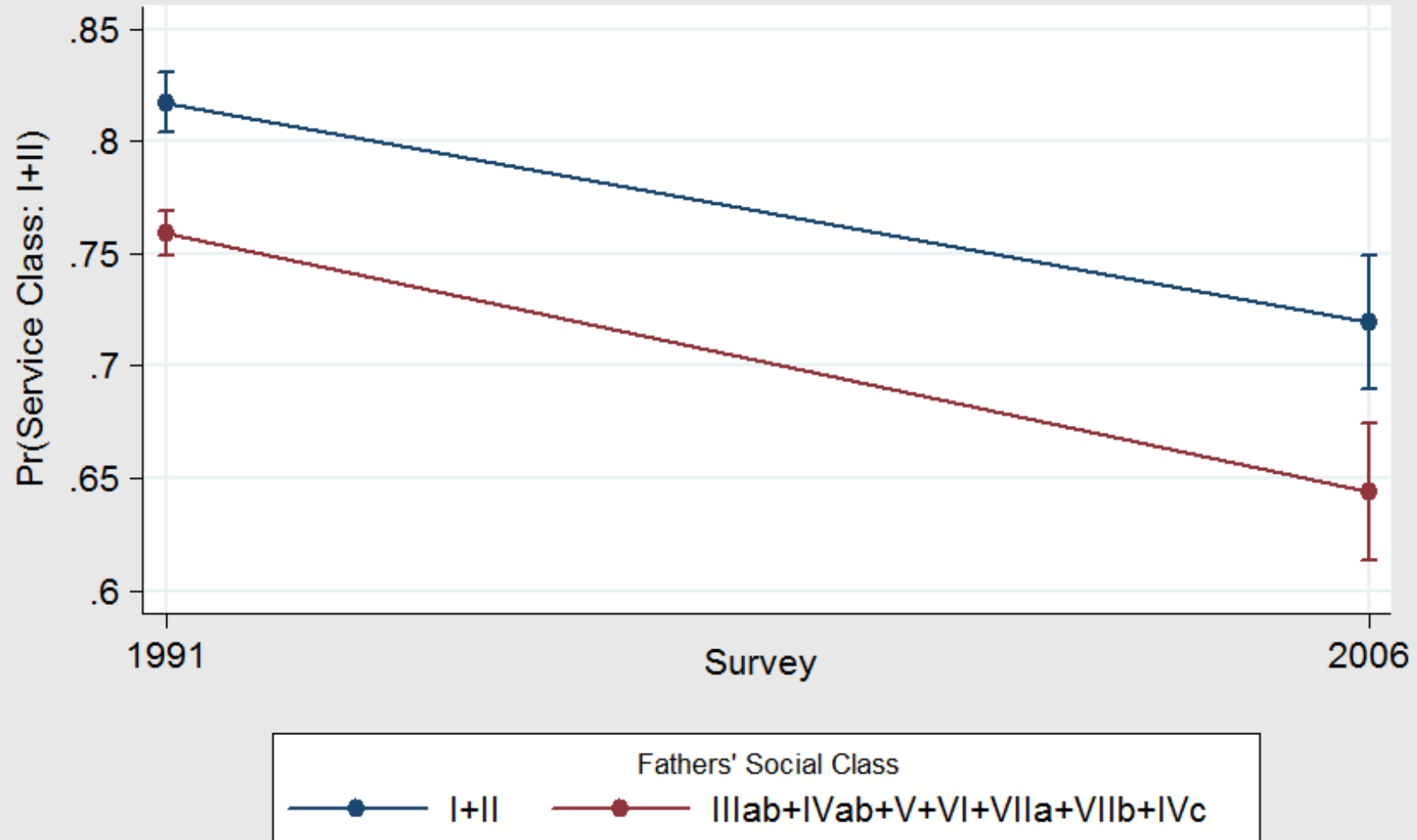
Spanish Men and Women aged ≥ 30



Source: ESD-1991 & CIS-2006

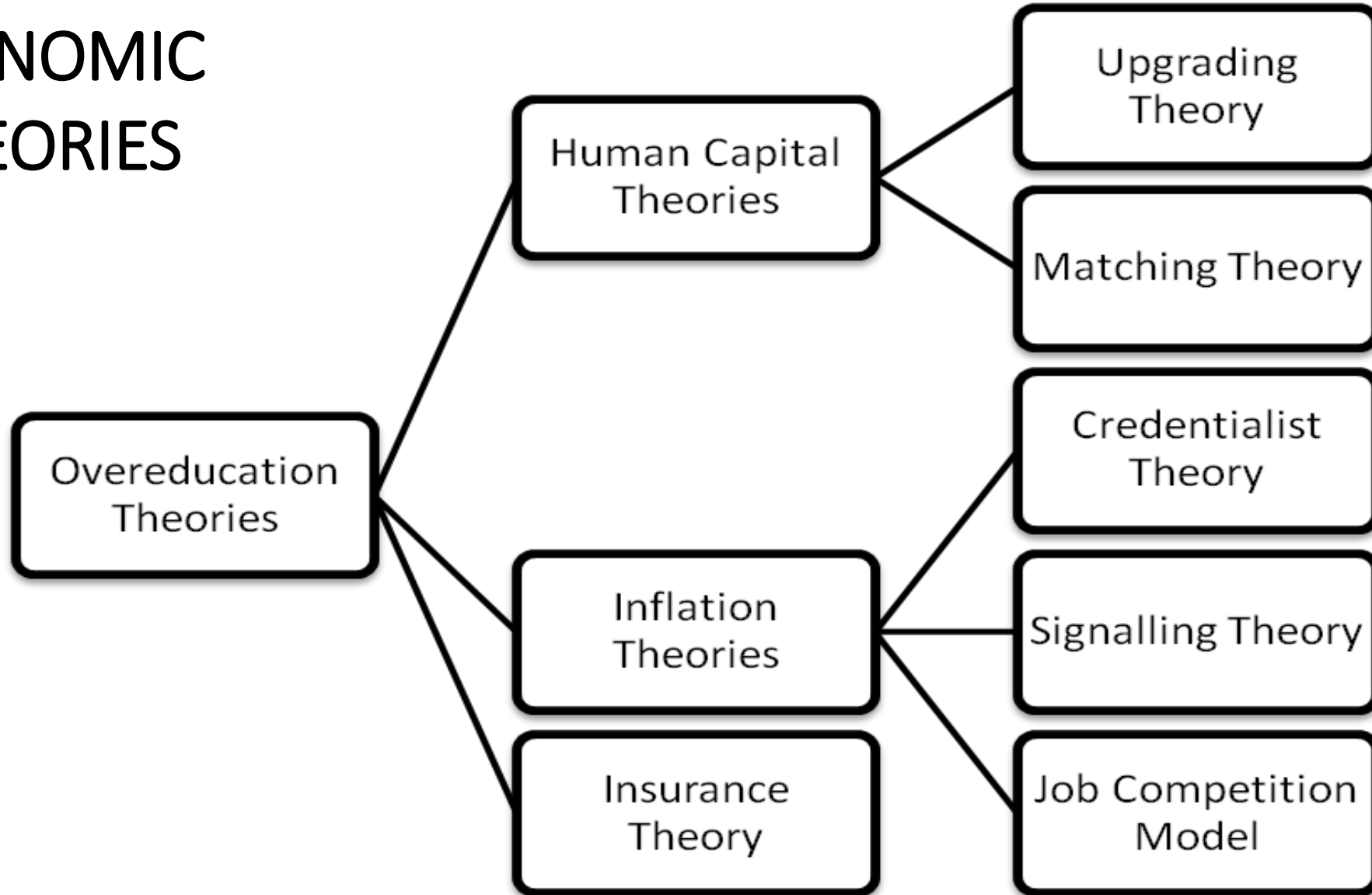
Predictive Margins of Accessing to the Service Class by Survey and Fathers' Class

University Graduates (Men and Women), controlling for age

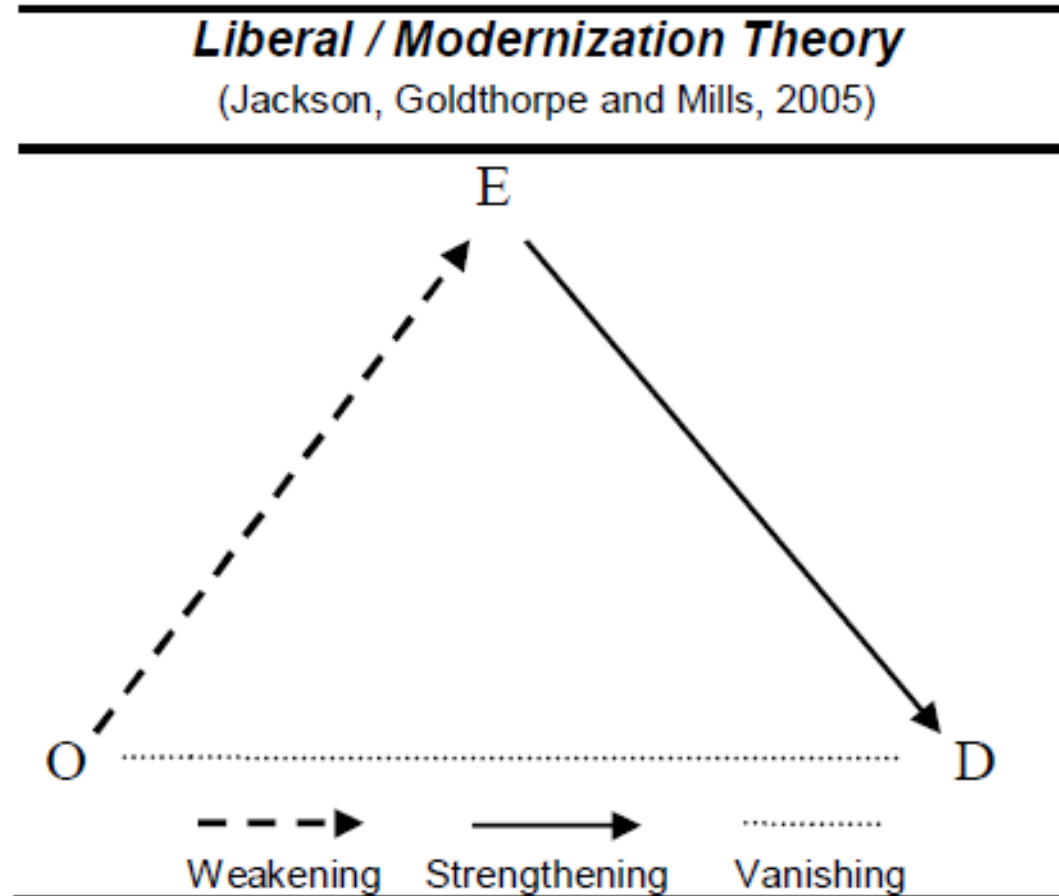


Source: ESD-1991 & CIS-2006

ECONOMIC THEORIES



DIRECT AND INDIRECT EFFECTS OF SOCIAL ORIGINS



Notes: O=Class Origins; E=Educational Attainment; D=Class Destination

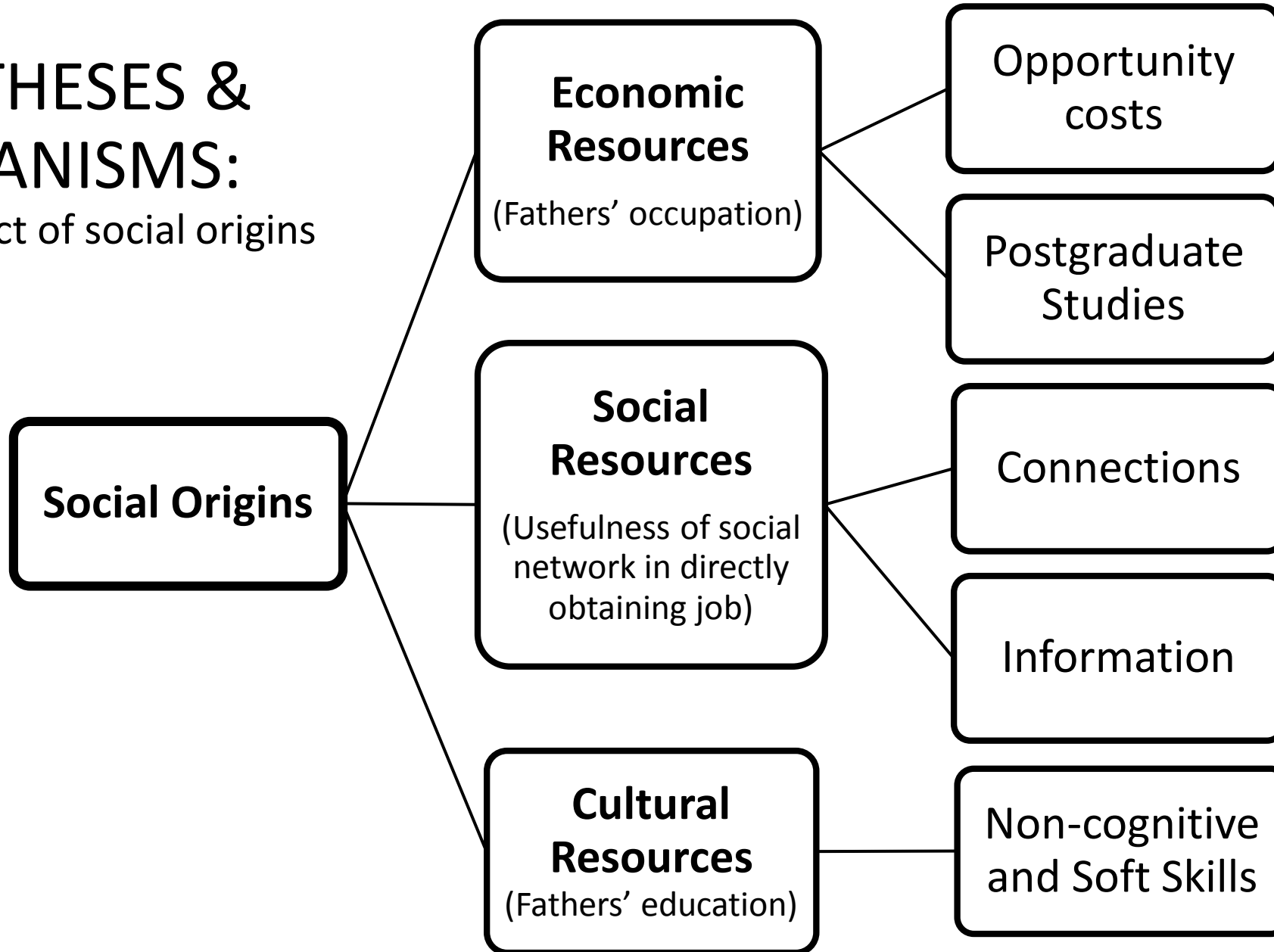
Ascription and Merit

- The labour market for university graduates is more meritocratic.
- Bureaucratization of organizations: universalism vs. particularism.
- Compositional effect of education (Hout 1988). More education, Less effect of origins.
- Educational Expansion -> Effect of social origins on later transitions from university to work could strengthen (Kucel 2011).
- New qualitative factors of distinction (Lucas 2001): Fields of study, postgraduate studies...
- Merit \neq Education/qualifications (Breen and Goldthorpe 2001; Jackson, Goldthorpe and Mills 2005) .
- The concept of merit is created *ad hoc* by employers according to their specific needs.
- Effect of social origins over and above education in many European countries.

ASCRPTION OR MERIT?	
Gender	Grade
Fathers' Education and Occupation	Occupational Experience
Social Network	Field of Study

HYPOTHESES & MECHANISMS:

Direct effect of social origins



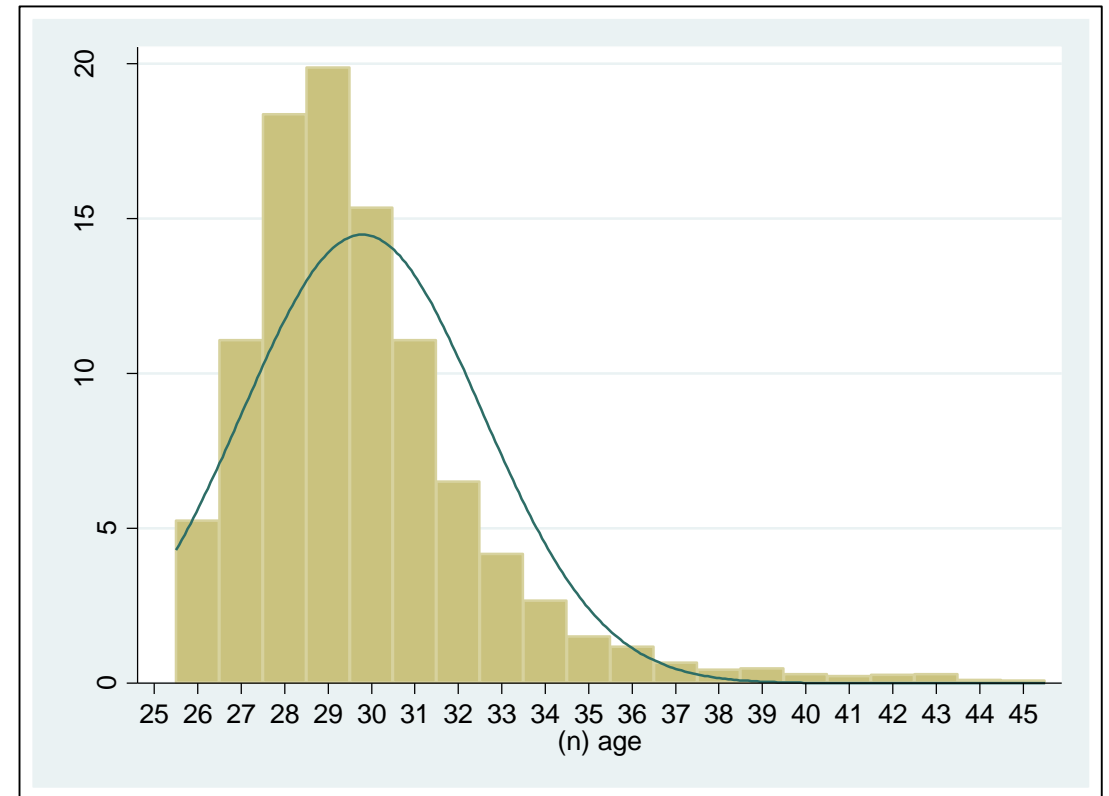
PREVIOUS RESEARCH

Social origins and occupational attainment among Spanish graduates

Authors	Outcome	Data	Methods	Results
2004. Carabaña	Social Class (EGP)	ESD-1991	Descriptive	NO
2008. Ortiz and Kucel	Overeducation	EULFS-2003-2005	Logit	YES
2011. Barone and Ortiz	Overeducation	REFLEX-2005	Logit	YES
2012. Bernardi	Access to the Service Class Avoid Unskilled Working ISEI Income	CIS-1988-1989-2006 ESD-1991 ASEP-1990-1999 EU-SILC-2005	-Linear Probability Models -OLS	YES
2013. Ballarino et. al	Access to the Service Class Avoid Unskilled Working	ESD-1991 CIS-2006	-Logit -LPM	YES
2013. Triventi	Access to Top Wage Occup. Access to Top ISEI Occup.	REFLEX-2005	-Logit -KHB	YES
2013. Martínez-García	Overeducation	PIAAC-2012	Descriptive	PARTIAL
2014. Fachelli et al.	Top Hourly Wage	ECV-2005	Logit	NO

DATA: REFLEX SURVEY (2005)

- European graduates (1999/2000)
- European Commission
- n=1498 (n=3916)
- Transition from University to Work
- PROS: Sample just for graduates
- CONS: Not panel data



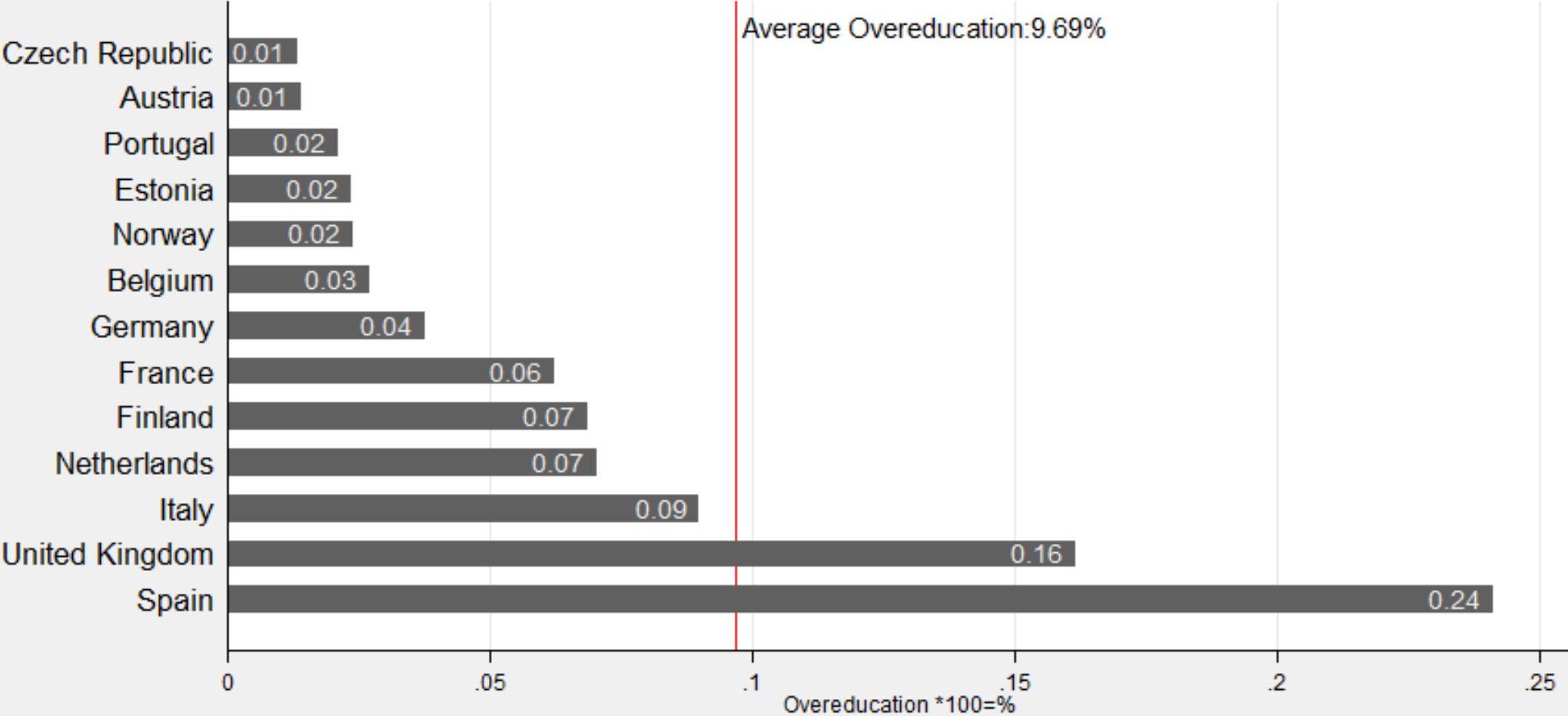
OVEREDUCATION: objective measure

$$\text{Logit (Y: OVEREDUCATION)} = \ln \left[\frac{P(Y=1) \text{ if } (ISCED97= 5A \text{ and } ISCO88 > 3480)}{1-P(Y=1) \text{ if } (ISCED97= 5A \text{ and } ISCO88 \leq 3480)} \right]$$

I+II Service Class	ISCO-88 major groups	Skill Level	ISCO-88 Skill Level	ISCED-97 groups
		1 - Managers, senior officials and legislators	3 + 4	4
	2 - Professionals	4	5a - First stage of tertiary education, 1st degree (medium duration)	
	3 - Technicians and associate professionals	3	5b - First stage of tertiary education (short or medium duration)	
	4 - Clerks 5 - Service and sales workers 6 - Skilled agricultural and fishery workers 7 - Craft and related trades workers 8 - Plant and machine operators, and assemblers	2	3	4 - Post-secondary, non-tertiary education 3 - Upper secondary level of education 2 - Lower secondary level of education
	9 - Elementary occupations	1	2	
	0 – Military occupations	1 + 4	1	1 - Primary level of education

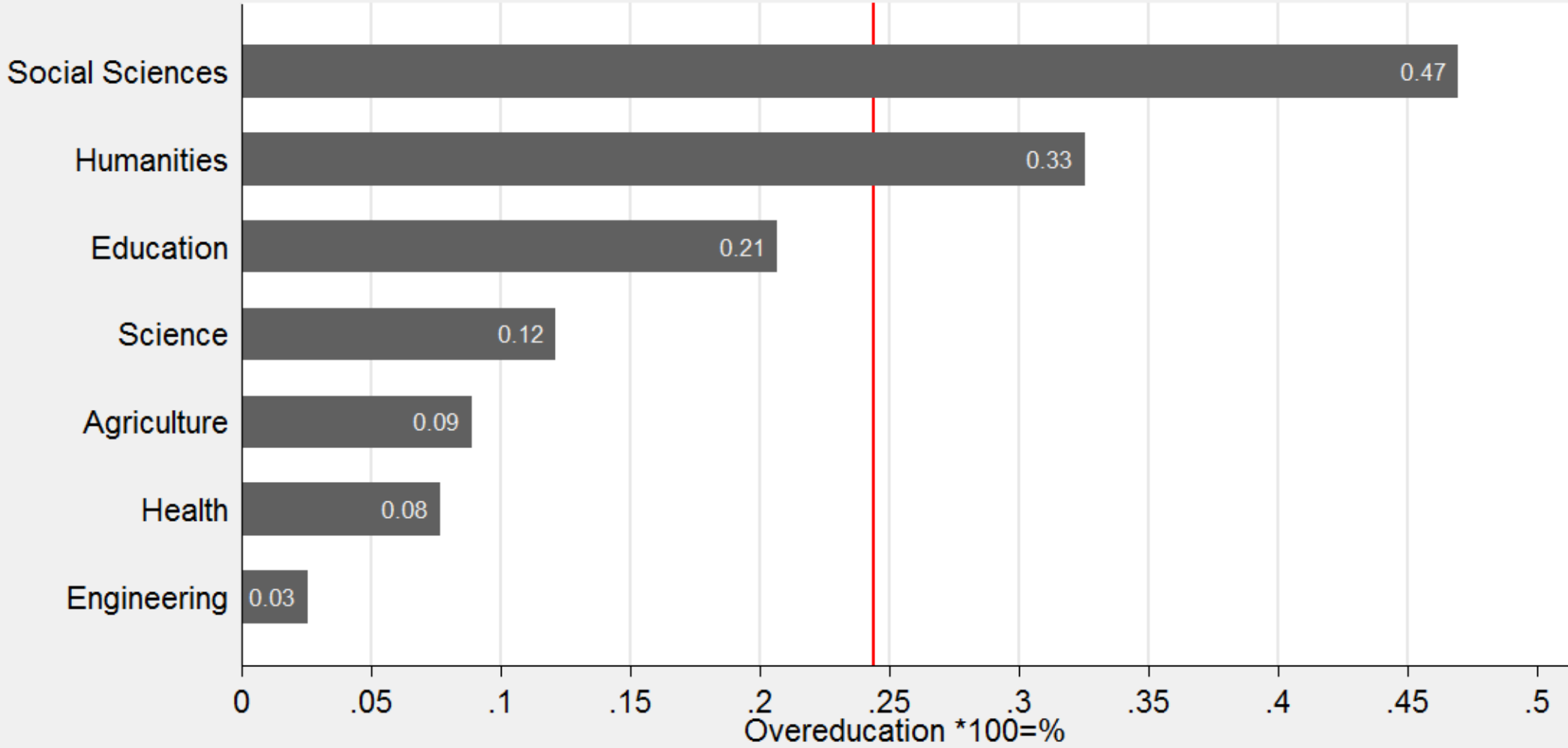
Source: International Labour Organization

Overeducation by Country



Source: Reflex Survey, 2005

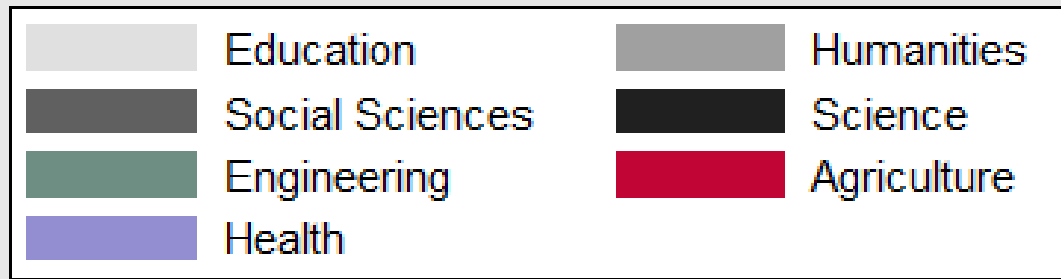
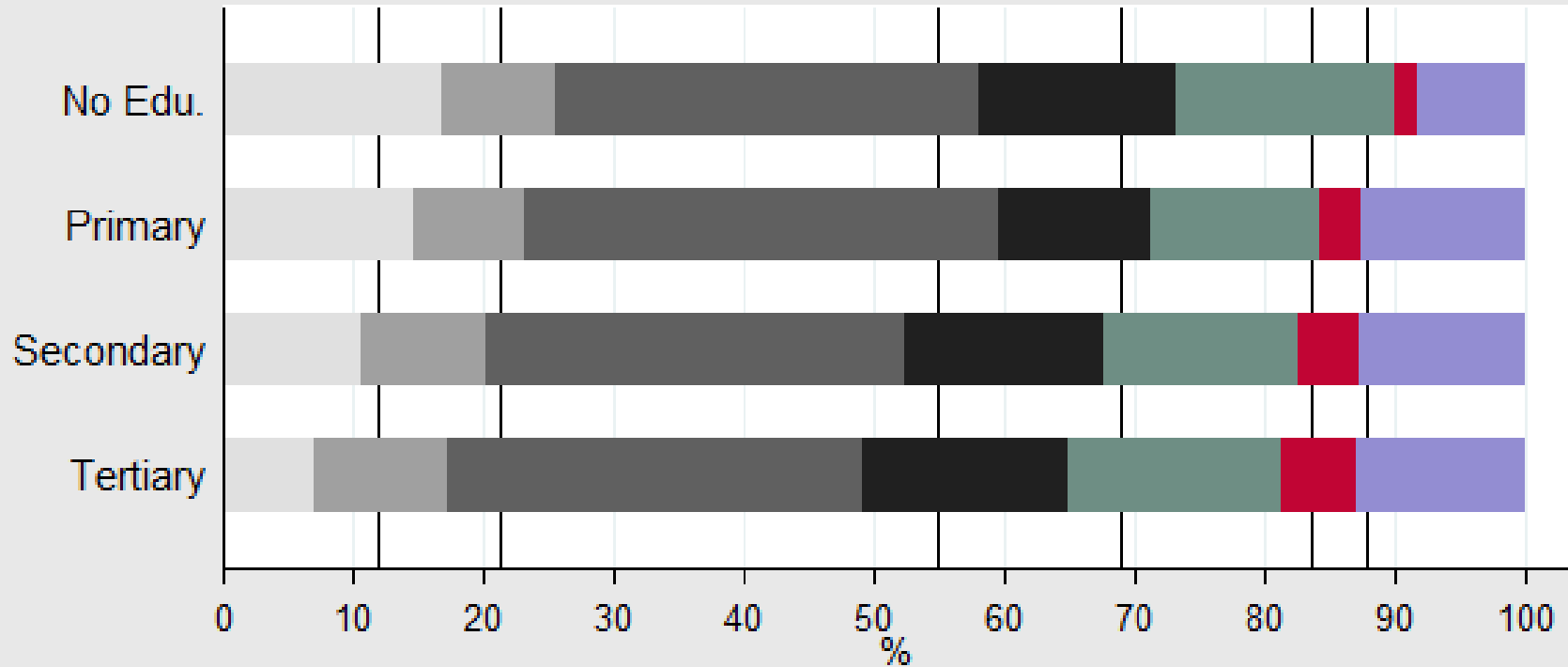
Overeducation by Fields of Study in Spain



Source: Reflex Survey, 2005

Field of Study by Fathers' Education

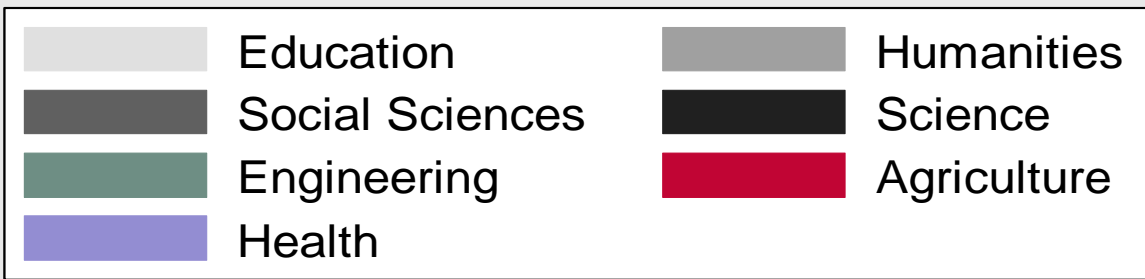
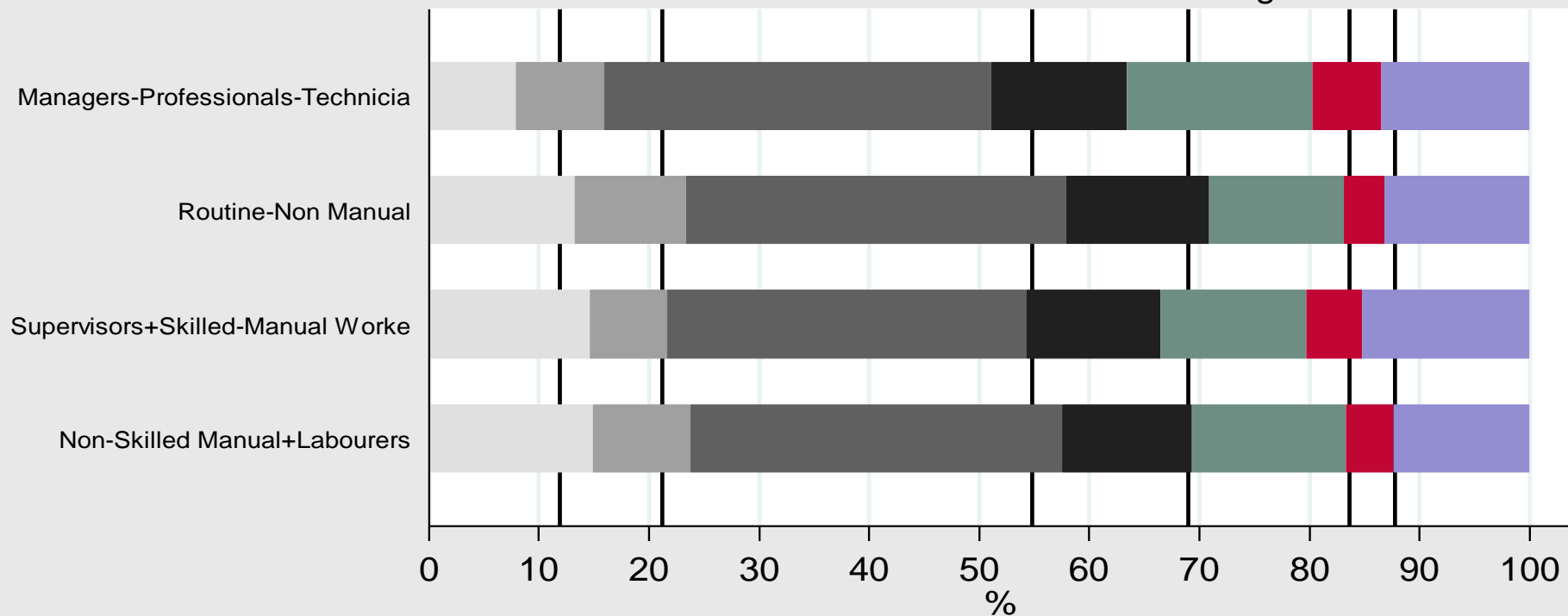
Black Vertical Lines: Overall Average



Source: Reflex Survey, 2005

Field of Study by Fathers' Occupation

Black Vertical Lines: Overall Average



Source: Reflex Survey, 2005

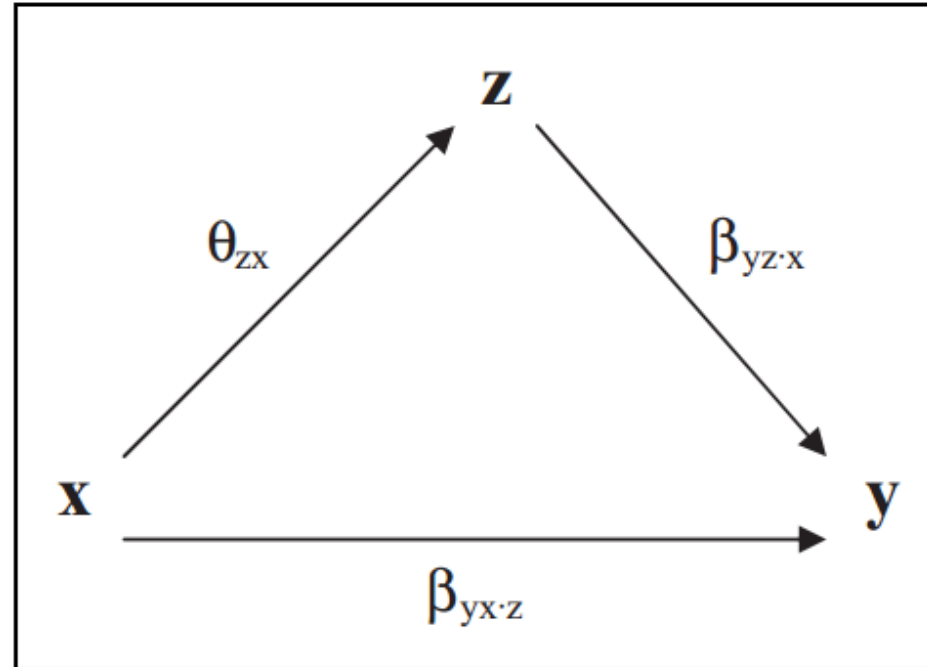
KHB DECOMPOSITION METHOD

(Breen *et al.* 2013; Triventi 2013)

$$\text{Direct : } b_{yx.z} = \frac{\beta_{yx.z}}{\sigma_e}$$

$$\text{Indirect : } \theta_{zx} b_{yz.x} = \frac{\theta_{zx} \times \beta_{yz.x}}{\sigma_e}$$

$$\text{Total : } \frac{\beta_{yx}}{\sigma_e} = \frac{\beta_{yx.z} + \theta_{zx} \times \beta_{yz.x}}{\sigma_e}$$



X₁ = Fathers' Educational Level

X₂ = Fathers' Occupational level

Z = Field of Study

Y = Overeducation

DECOMPOSITION OF SOCIAL ORIGINS: DIRECT AND INDIRECT EFFECTS

INDIRECT EFFECT VIA FIELD OF STUDY

DIRECT EFFECT NET OF FIELD OF STUDY

FATHERS' OCCUPATION

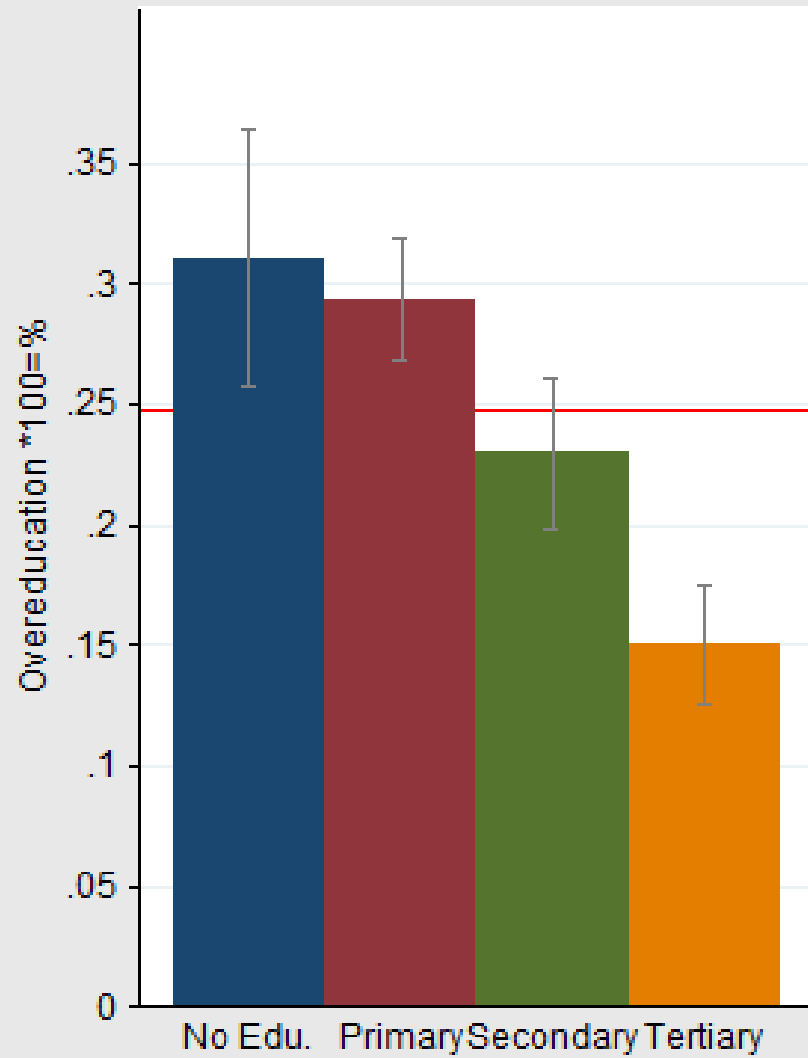
Y=P(OVEREDUCATION) (N=1496)	Coef.	Std. Err.	P> z	Indirect Effect %
Model 1: Fathers' Occupation (Managers, Professionals & Technicians)				
Routine Non-Manual Workers				29.31 %
Total Effect	0.751	0.244	0.002***	
Direct Effect	0.531	0.243	0.029**	
Indirect Effect	0.220	0.219	0.315	
Supervisors and Skilled Manual Workers				4.06 %
Total Effect	0.594	0.284	0.037**	
Direct Effect	0.570	0.285	0.046**	
Indirect Effect	0.024	0.219	0.912	
Non-Skilled Manual Workers and Labourers				14.94 %
Total Effect	0.444	0.272	0.103	
Direct Effect	0.377	0.273	0.167	
Indirect Effect	0.066	0.220	0.763	

FATHERS' EDUCATION

Y=P(OVEREDUCATION) (N=1496)	Coef.	Std. Err.	P> z	Indirect Effect %
Model 2: Fathers' Educational Level (Tertiary)				
No Education				19.42 %
Total Effect	1.184	0.391	0.002***	
Direct Effect	0.954	0.393	0.015**	
Indirect Effect	0.230	0.256	0.369	
Primary				35.78 %
Total Effect	0.855	0.269	0.001***	
Direct Effect	0.549	0.268	0.041**	
Indirect Effect	0.306	0.255	0.230	
Secondary				18.75 %
Total Effect	0.593	0.286	0.038**	
Direct Effect	0.482	0.284	0.090*	
Indirect Effect	0.111	0.254	0.661	

Overeducation by Fathers' Education

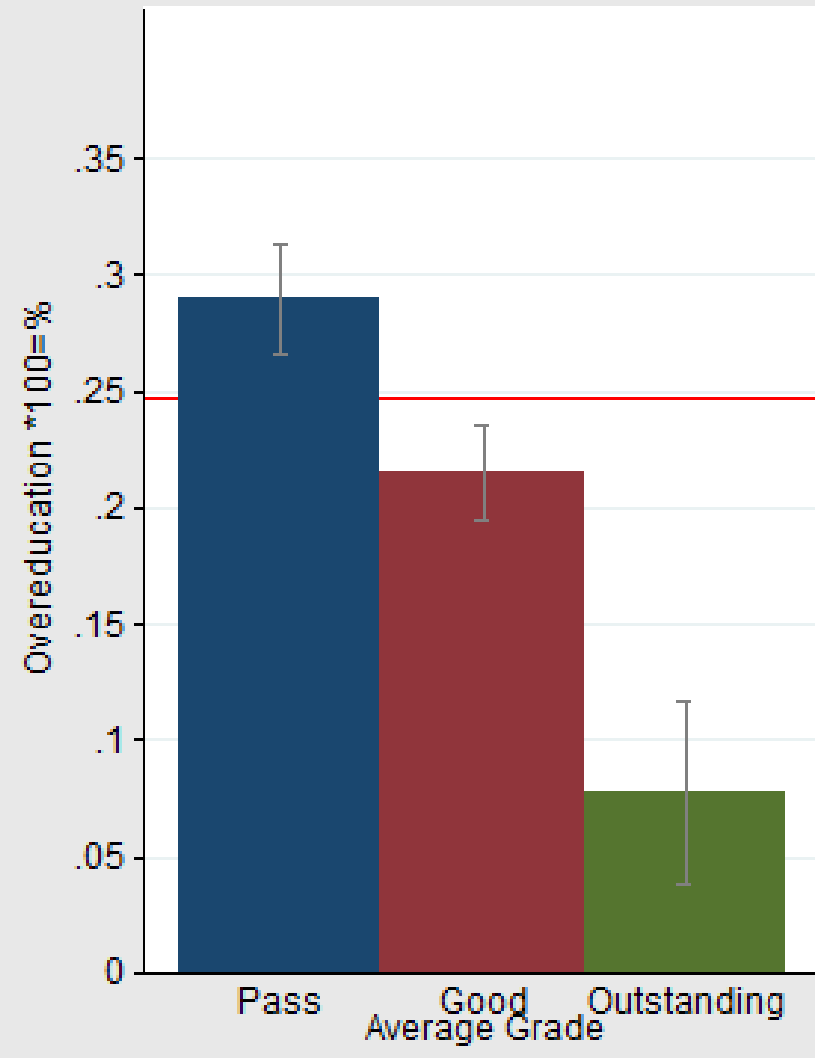
95% Confidence Intervals



Source: Reflex Survey, 2005

Overeducation by Average Grade

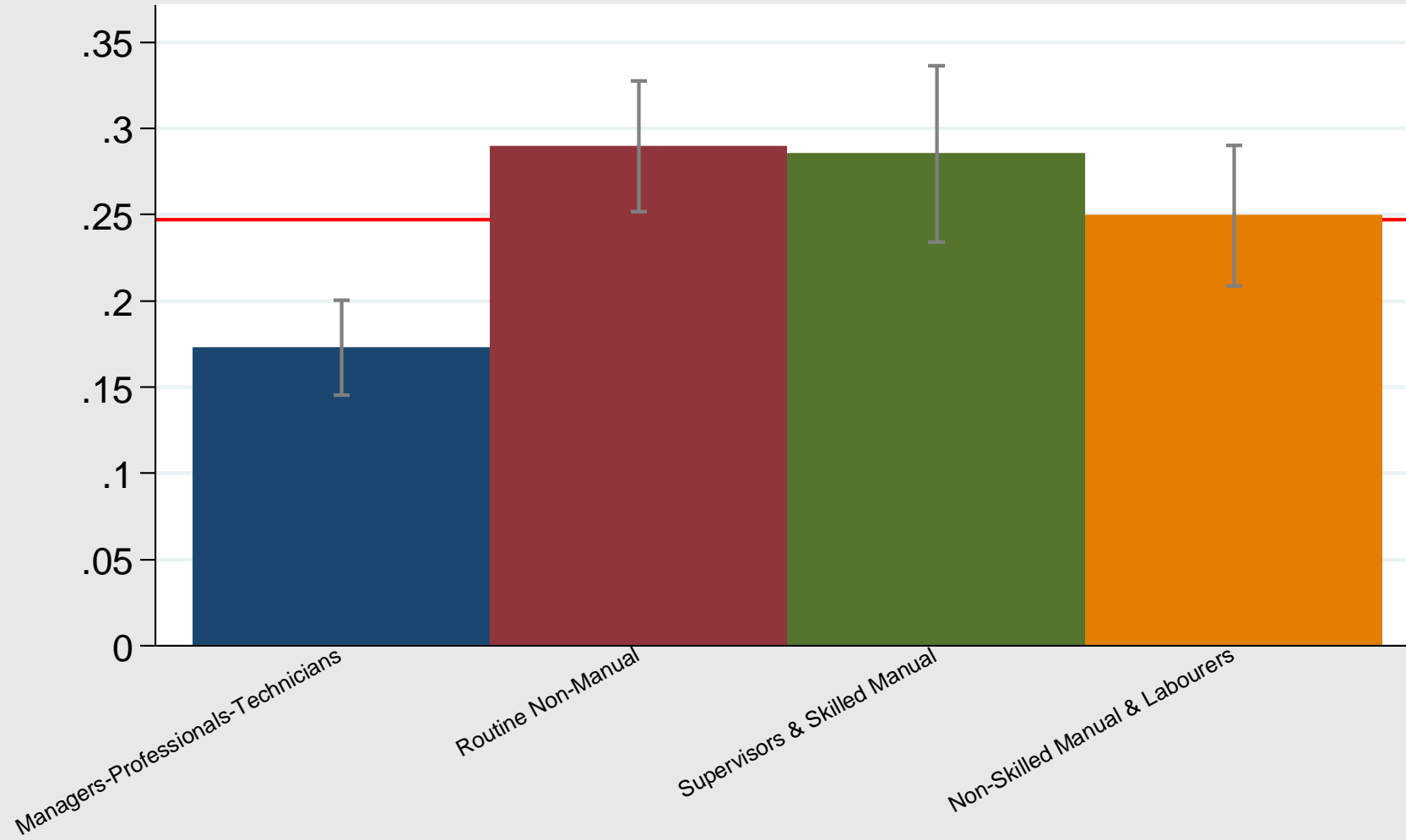
95% Confidence Intervals



Source: Reflex Survey, 2005

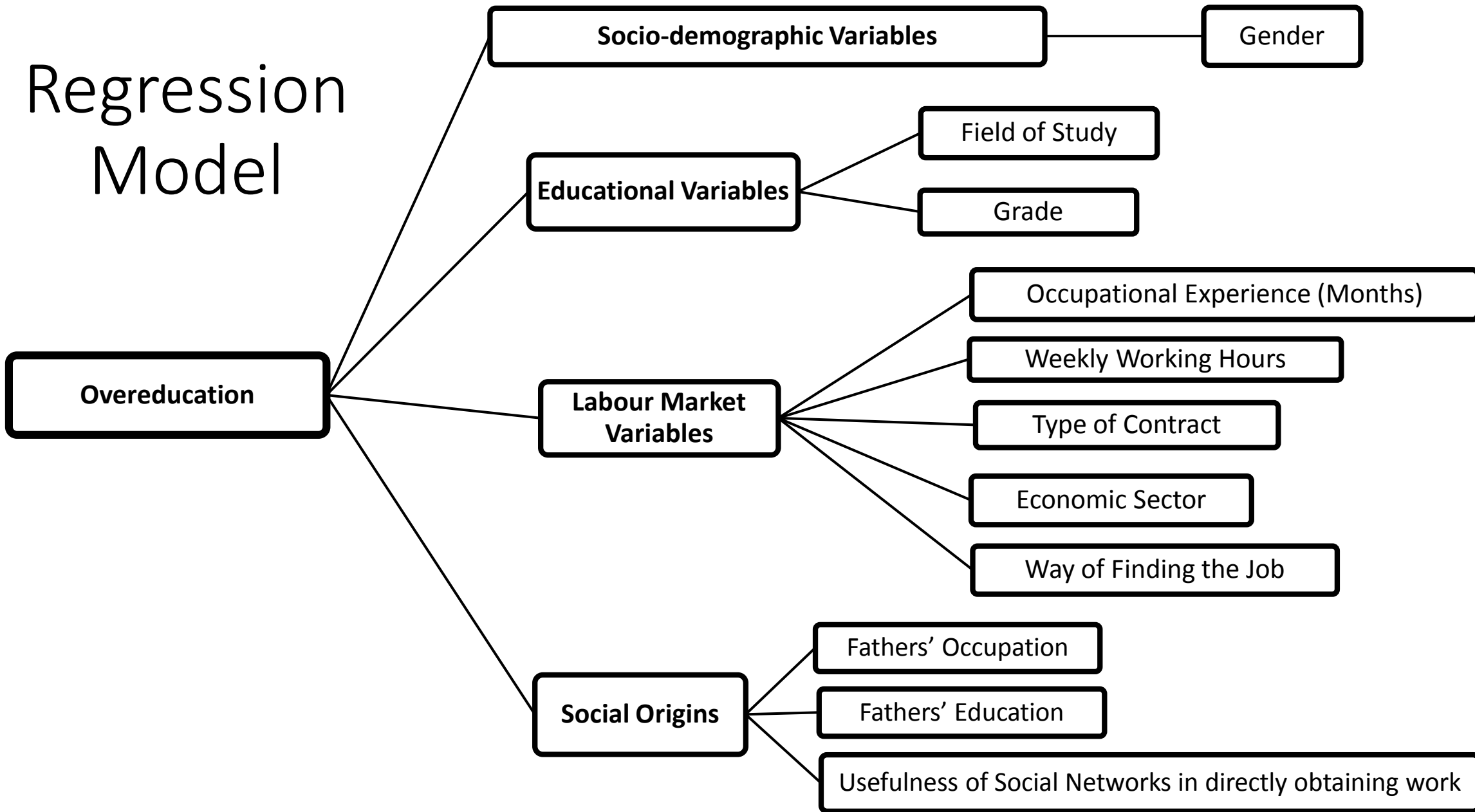
Overeducation by Fathers' Occupation

95% Confidence Intervals



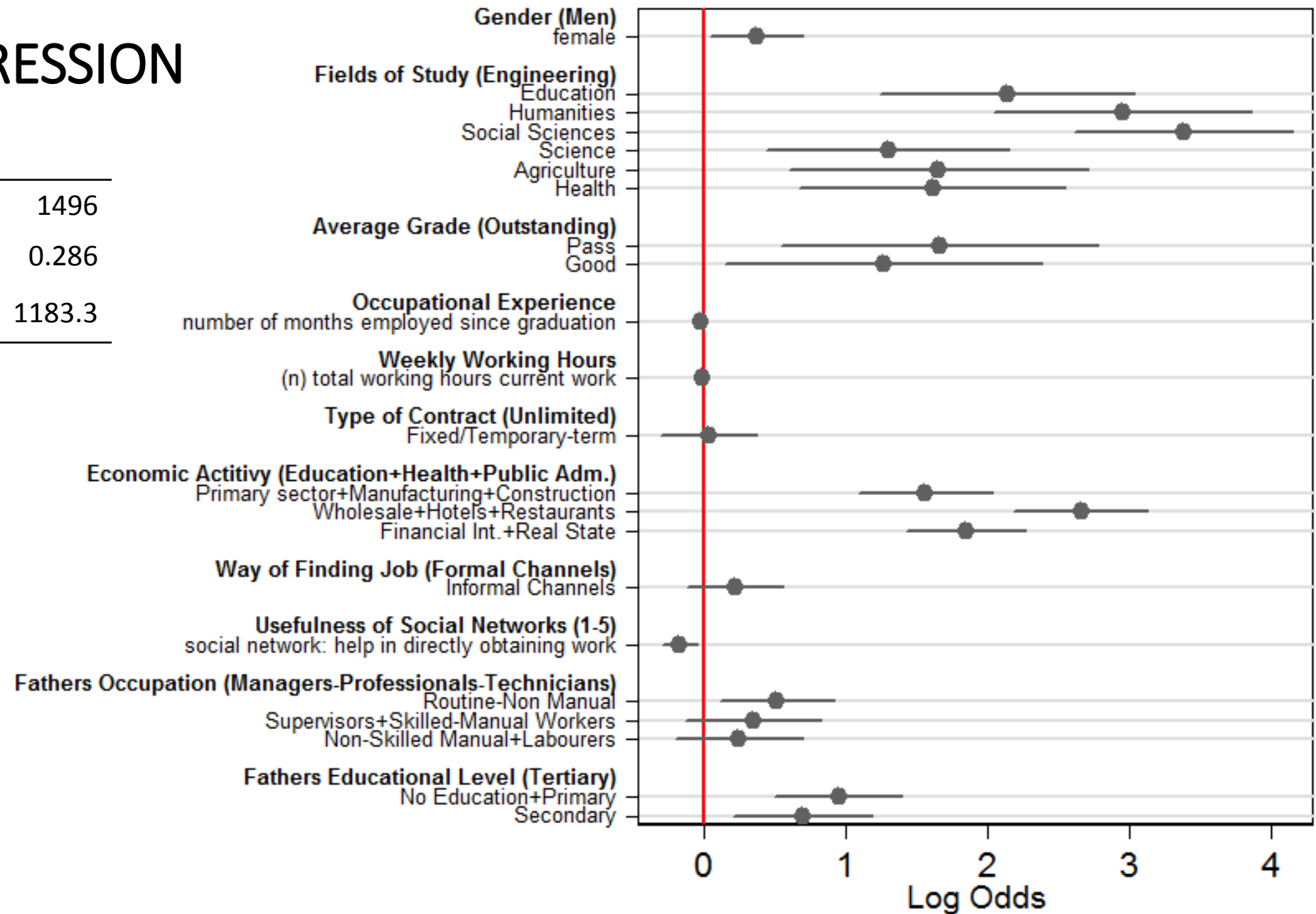
Source: Reflex Survey, 2005

Regression Model



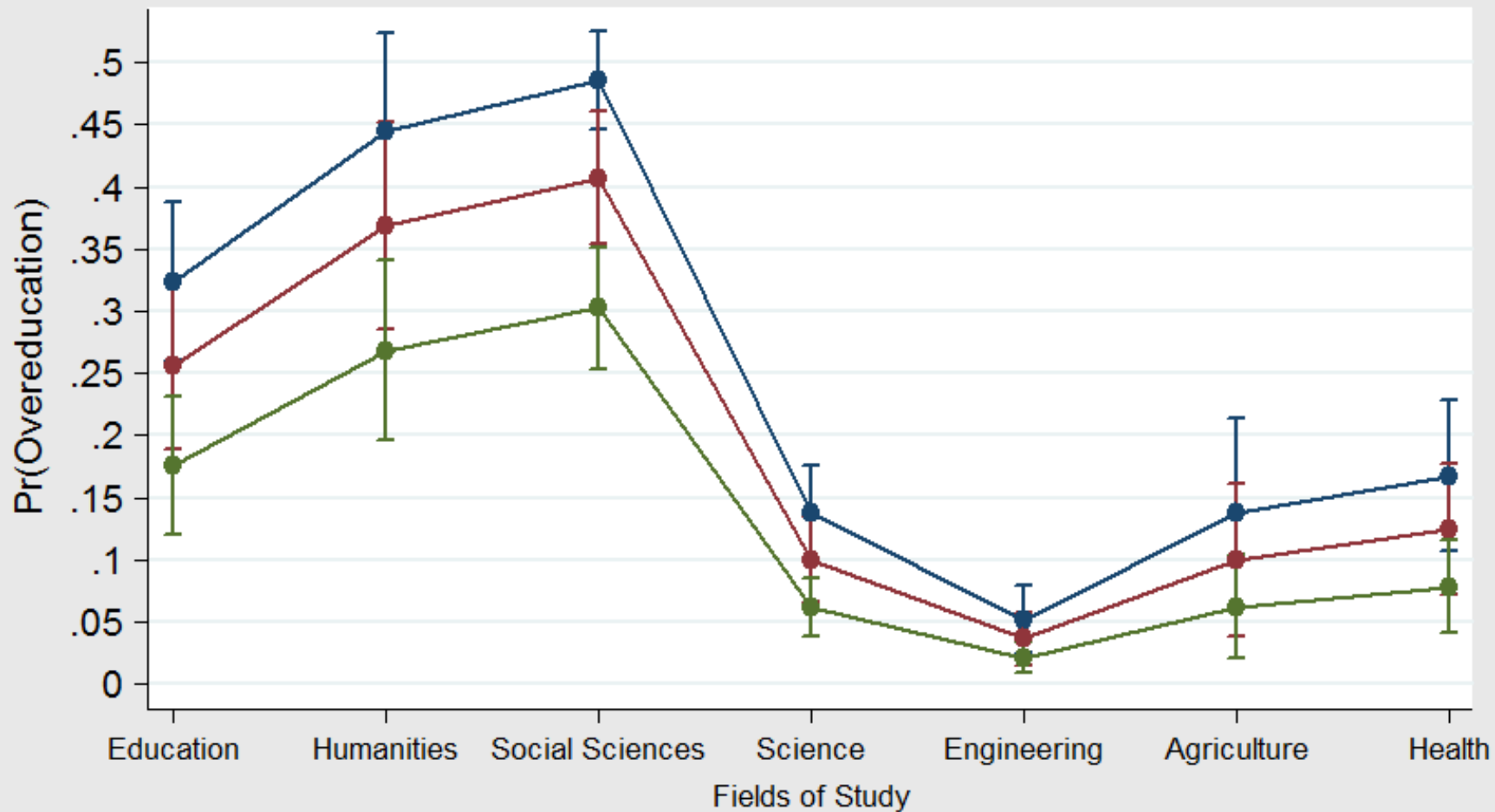
LOGIT REGRESSION MODEL

N	1496
McFadden's Adj. R^2	0.286
AIC	1183.3



Reference categories between parentheses; Source: REFLEX 2005

Predictive Margins of Overeducation by Fields and Fathers' Education

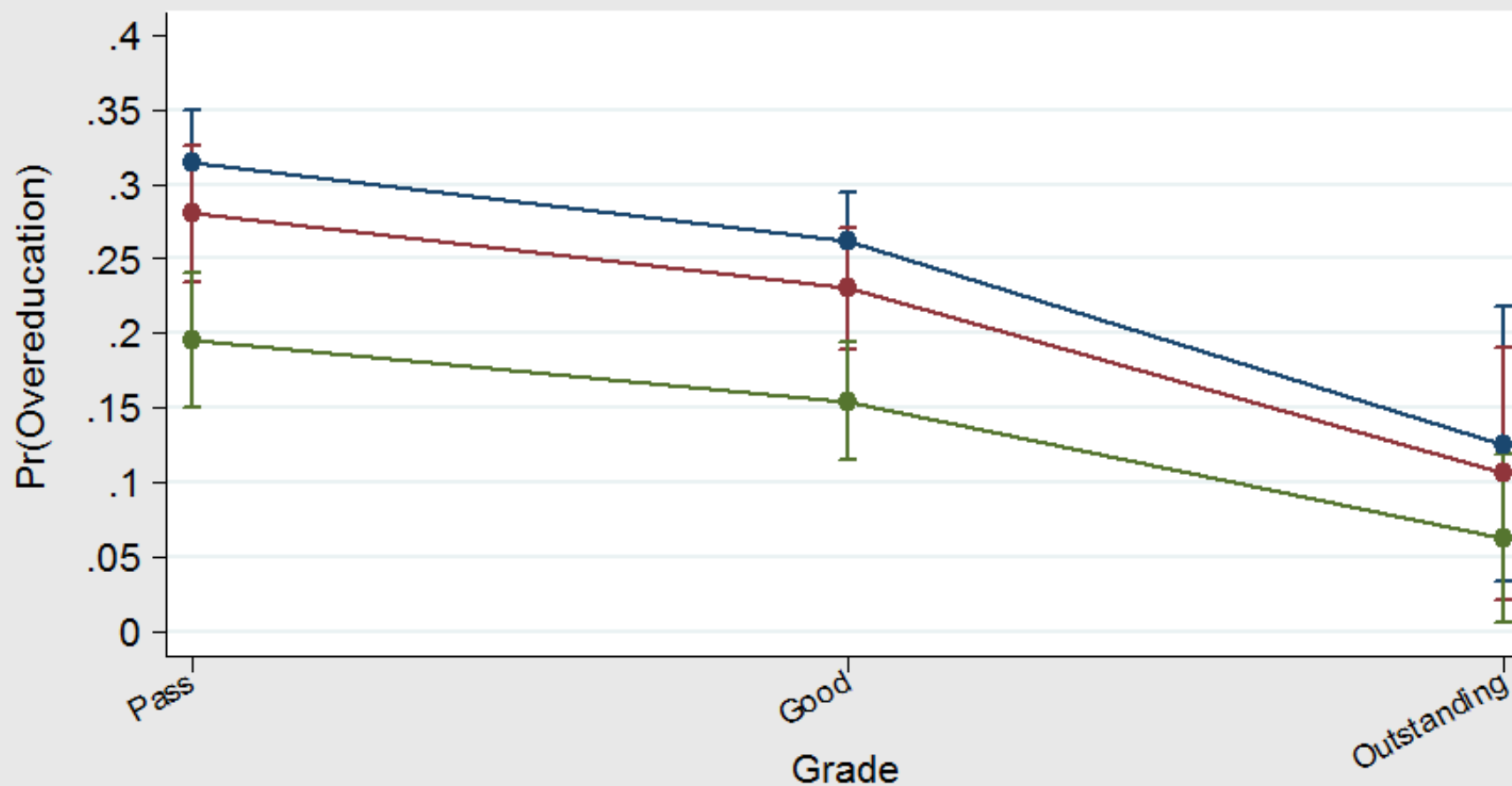


Fathers' Educational Level

- No Edu.+Primary
- Secondary
- Tertiary

Source: REFLEX-2005

Predictive Margins of Overeducation by Grade and Fathers' Education

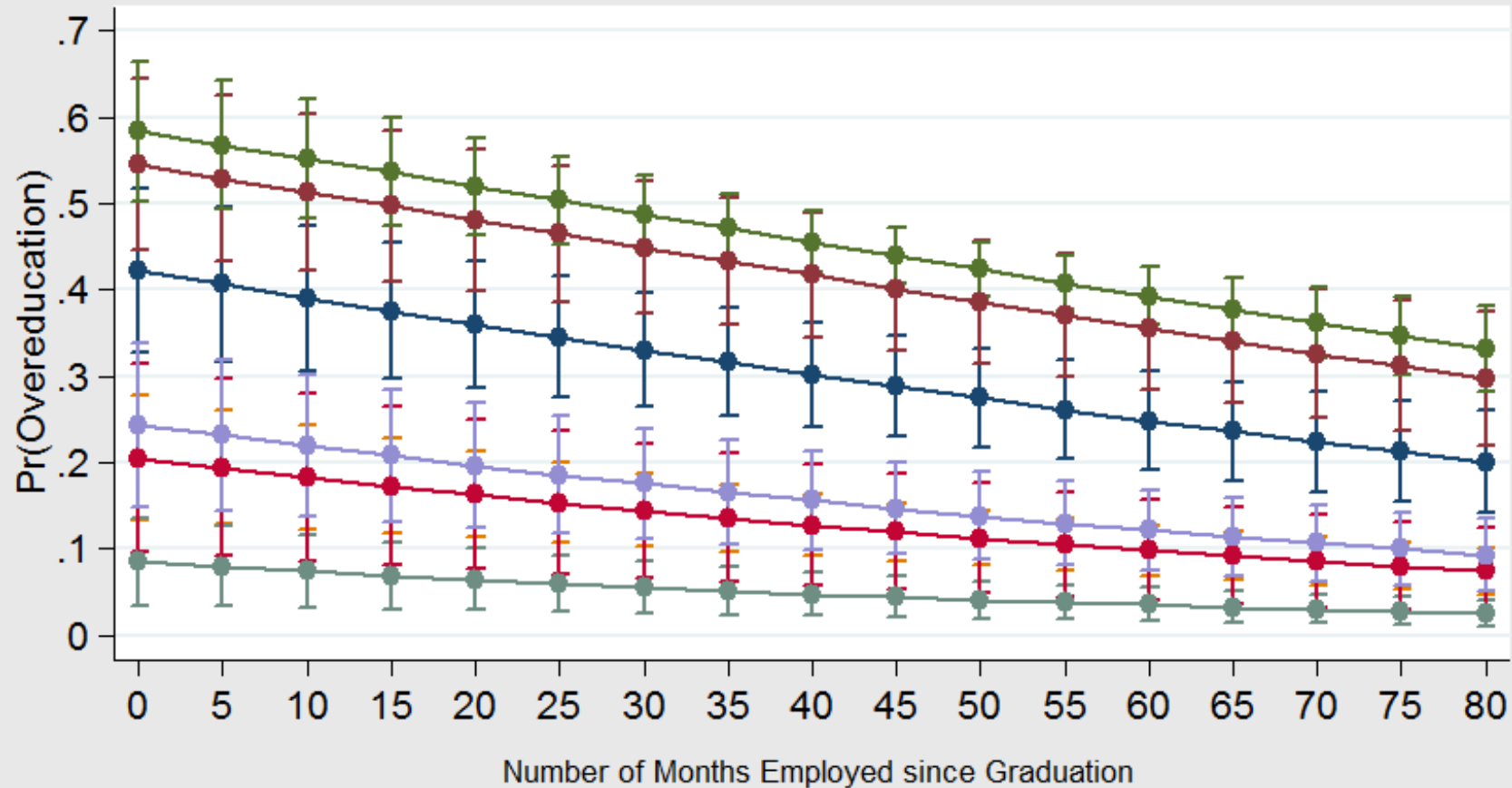


Fathers' Educational Level

- No Education+Primary
- Secondary
- Tertiary

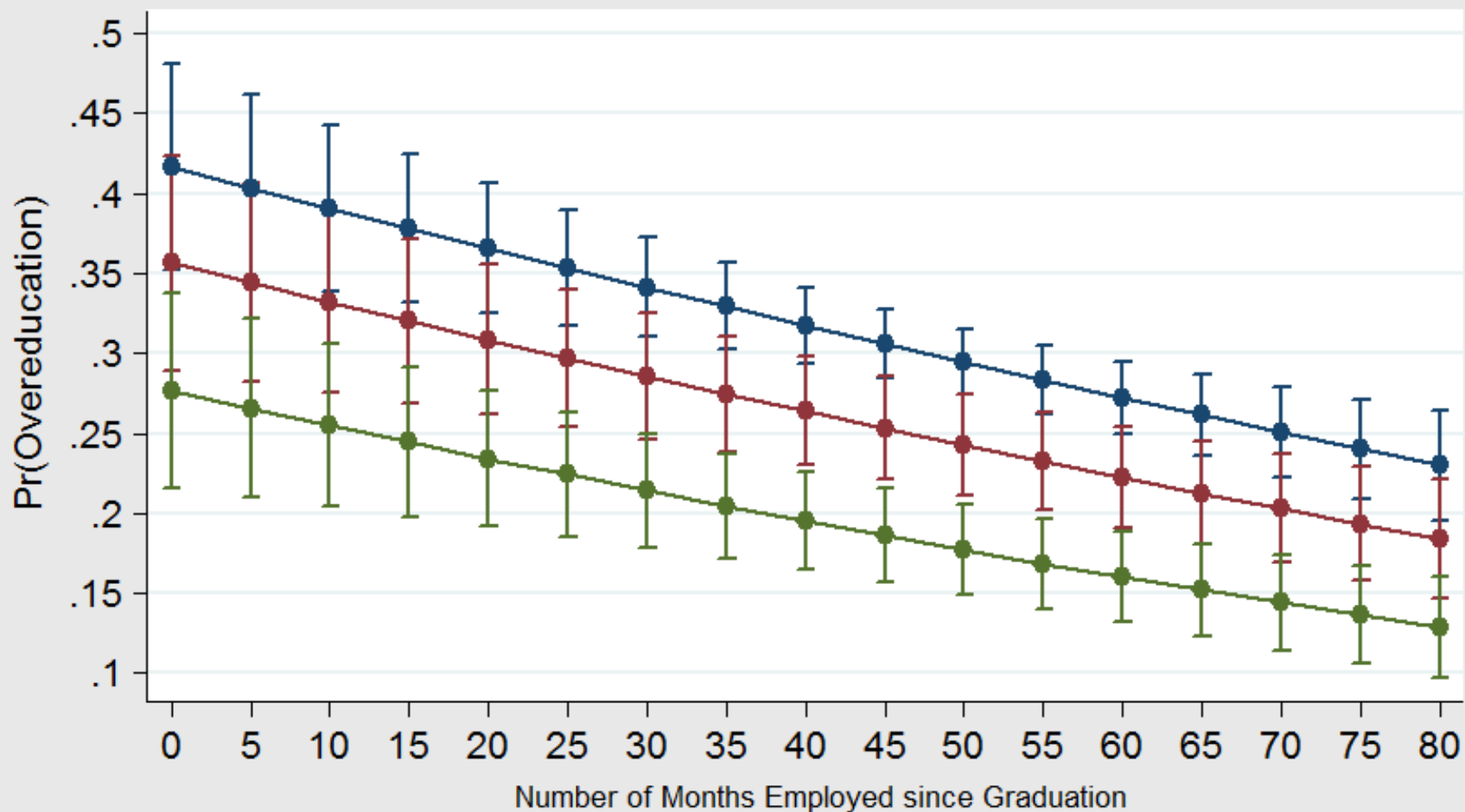
Source: REFLEX-2005

Predictive Margins of Overeducation by Occup. Experience and Fields



Source: REFLEX-2005

Predictive Margins of Overeducation by Occup. Experience & Fathers' Education

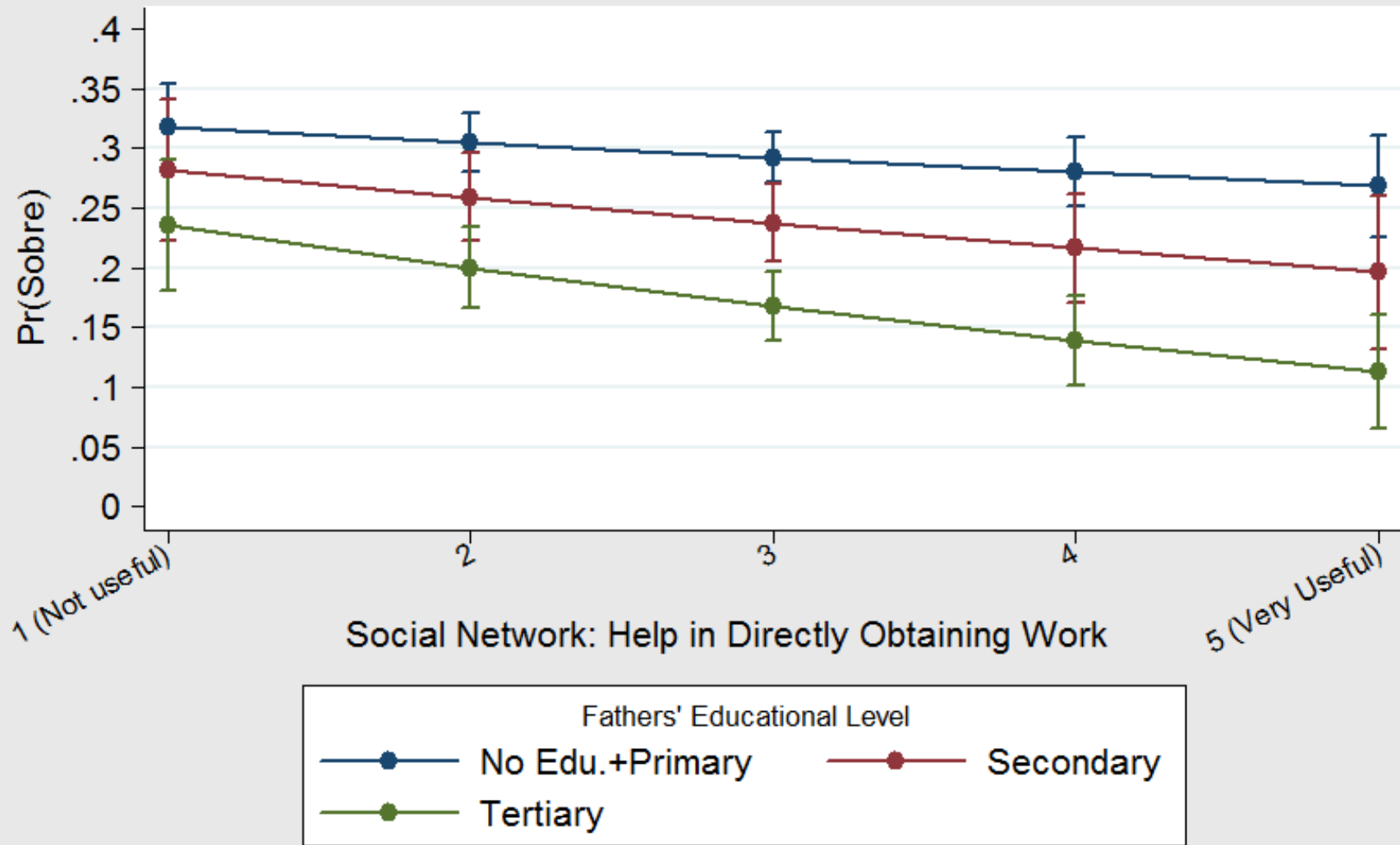


Fathers' Educational Level

- No Education+Primary
- Secondary
- Tertiary

Source: REFLEX-2005

Predictive Margins of Interaction Fathers'Edu*Social Network



Source: REFLEX-2005

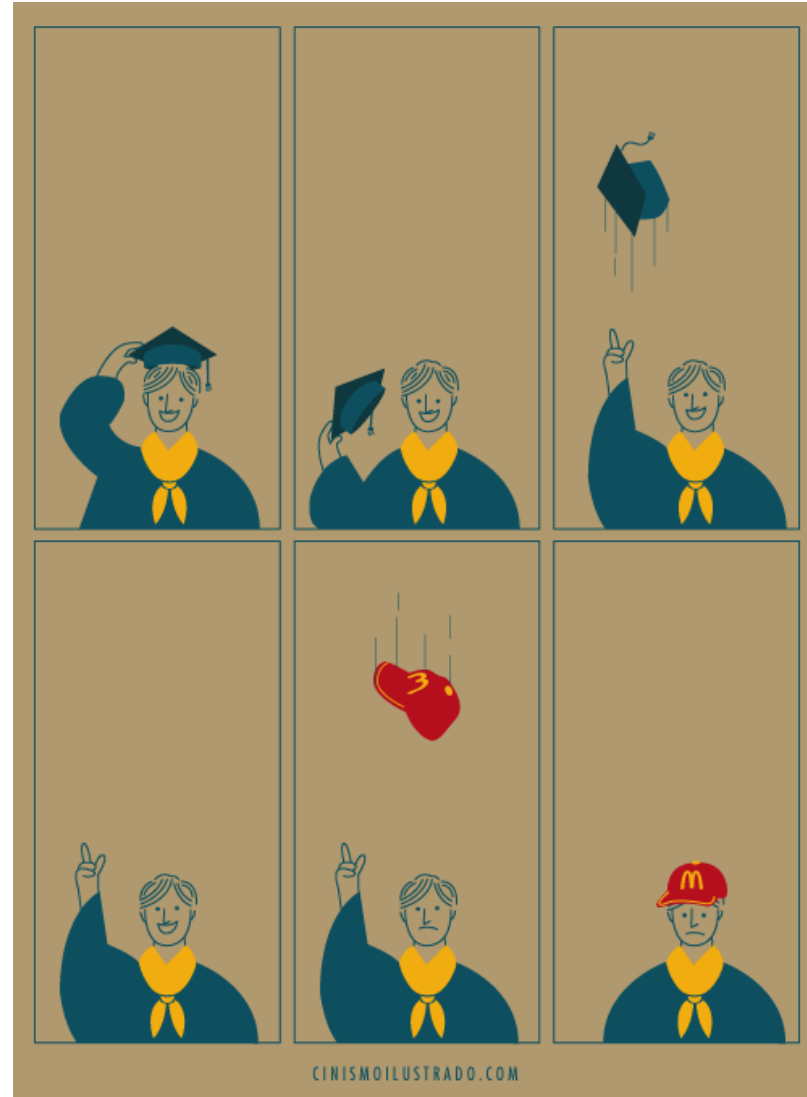
LIMITATIONS

- Is overeducation persistent or vanishes over time? **PANEL DATA NEEDED**
- Overeducation measure: **CONSERVATIVE; POSSIBLE UNDERESTIMATION**
- Variables on social background: **IMPERFECT PROXIES**
- **MOTHERS' BACKGROUND IN FUTURE RESEARCH**
- Non-significant effect of background via field of study: **AGGREGATION OF FIELDS?**
- Self-selection of low background graduates: **INEQUALITY OF EDUCATIONAL OPPORTUNITIES**
- Social networks: **WEAK OR STRONG TIES?**

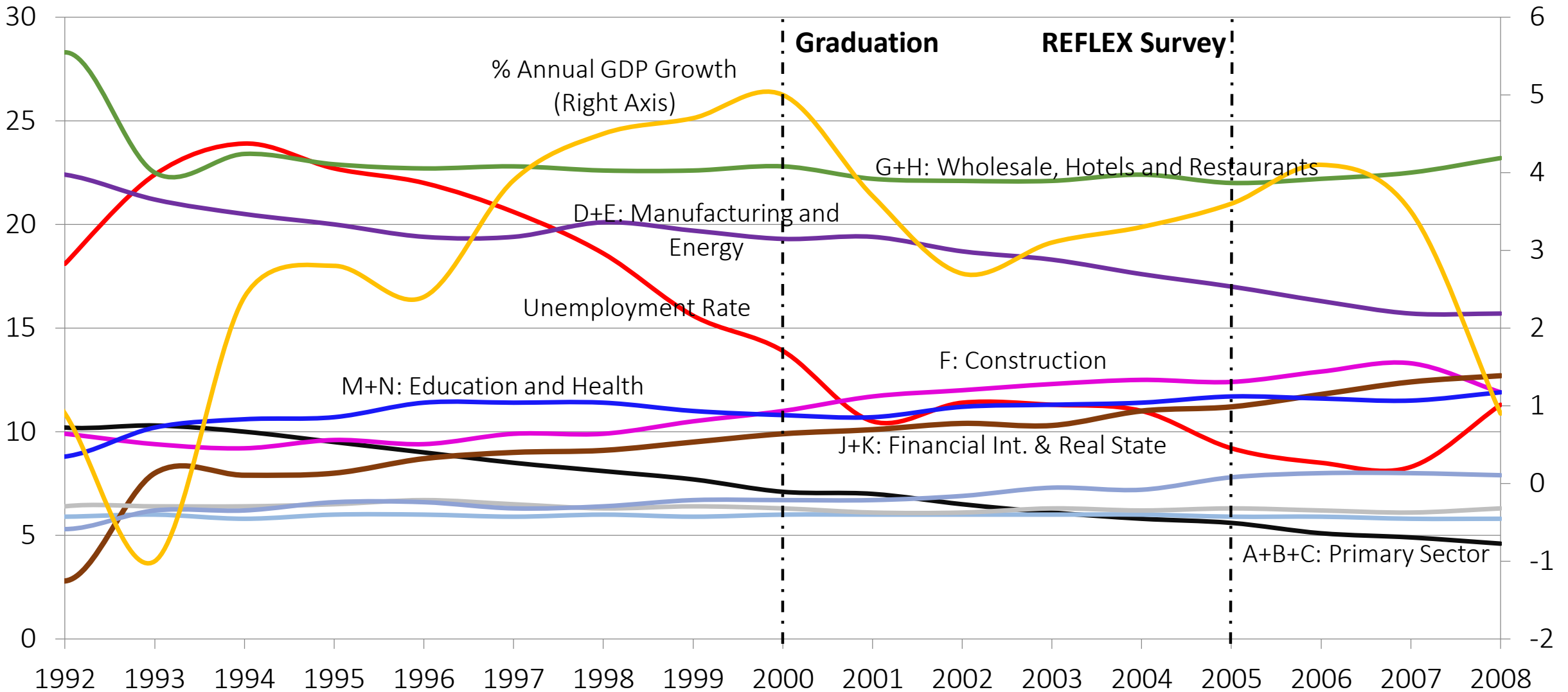
CONCLUSIONS & DISCUSSION

- Direct effect of social background over and above tracks, grade and occupational experience: **NON-MERITOCRATIC UNIVERSITY TO WORK TRANSITION**
- Overeducation strongly depends on the field of study: education, humanities and social sciences, but social background is not related to tracks' election. Fathers' education matters in these fields: **SOFT/NON-COGNITIVE SKILLS?**
- Graduates overeducated in Wholesale, hotels and restaurants sector and financial int. and real state at 30 years old working as clerks: **LONG-TERM TRAP OR TRANSITION EFFECT?** (Bernardi and Garrido, 2008).
- **OVEREDUCATION AS A LABOUR MARKET STRUCTURAL PROBLEM?:** “Educational expansion has grown at a faster rate than the creation of highly qualified jobs in the labour market (Bernardi 2012:7).”

THANK YOU!



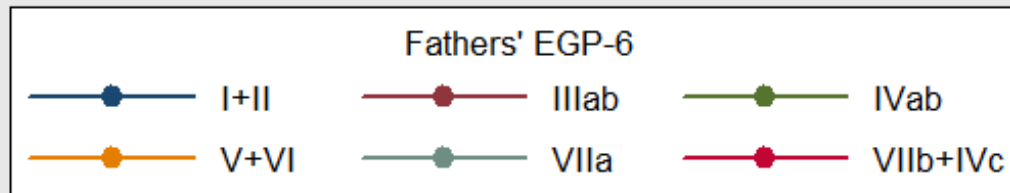
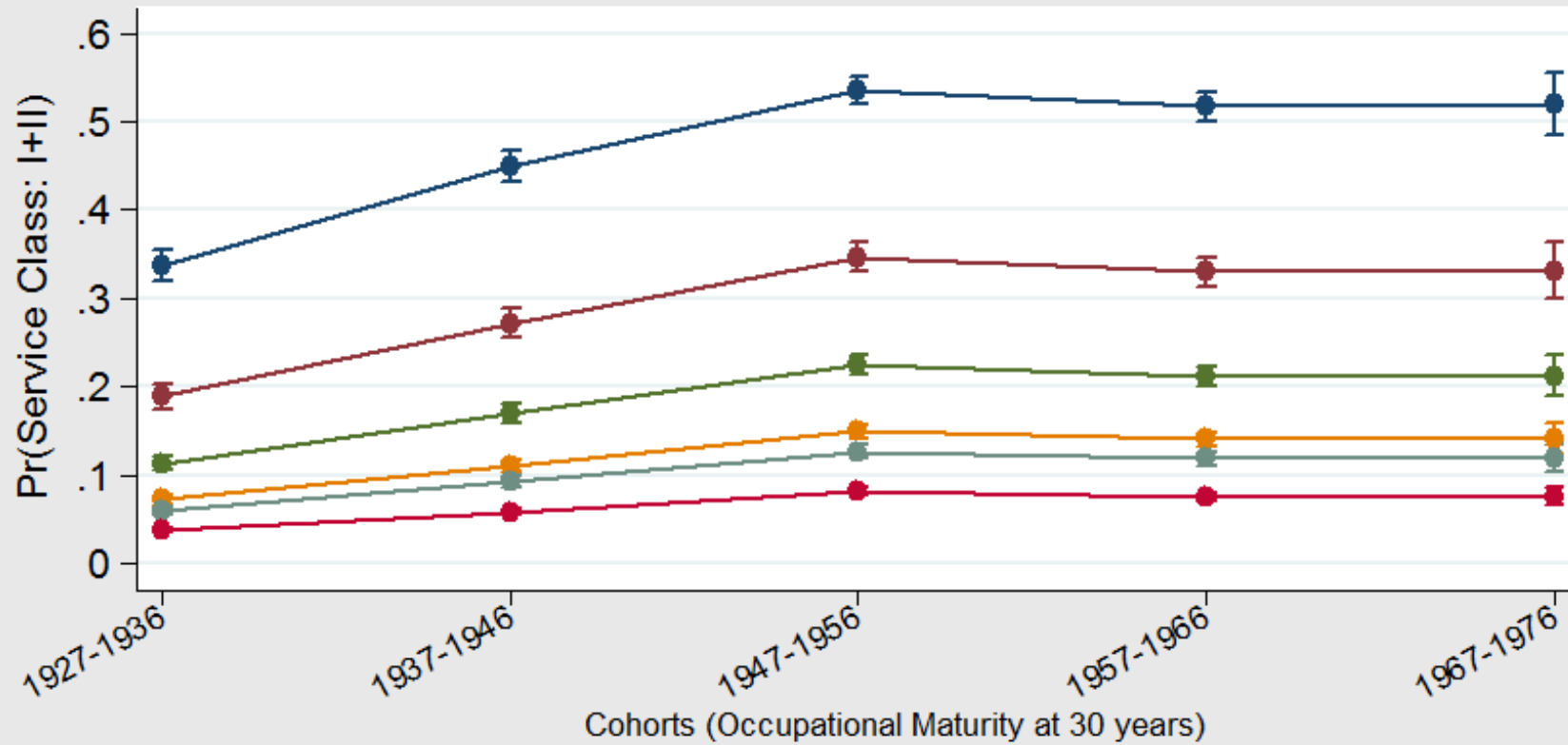
Spanish Labour Force by Economic Sectors (1992-2008)



Source: International Labour Organization

Adjusted Predictions of Accessing to the Service Class by Class origins and Cohorts

Spanish Men and Women aged ≥ 30



Source: ESD-1991 & CIS-2006