The Connection between Job Satisfaction and Relative Pay Revisited

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Motivation

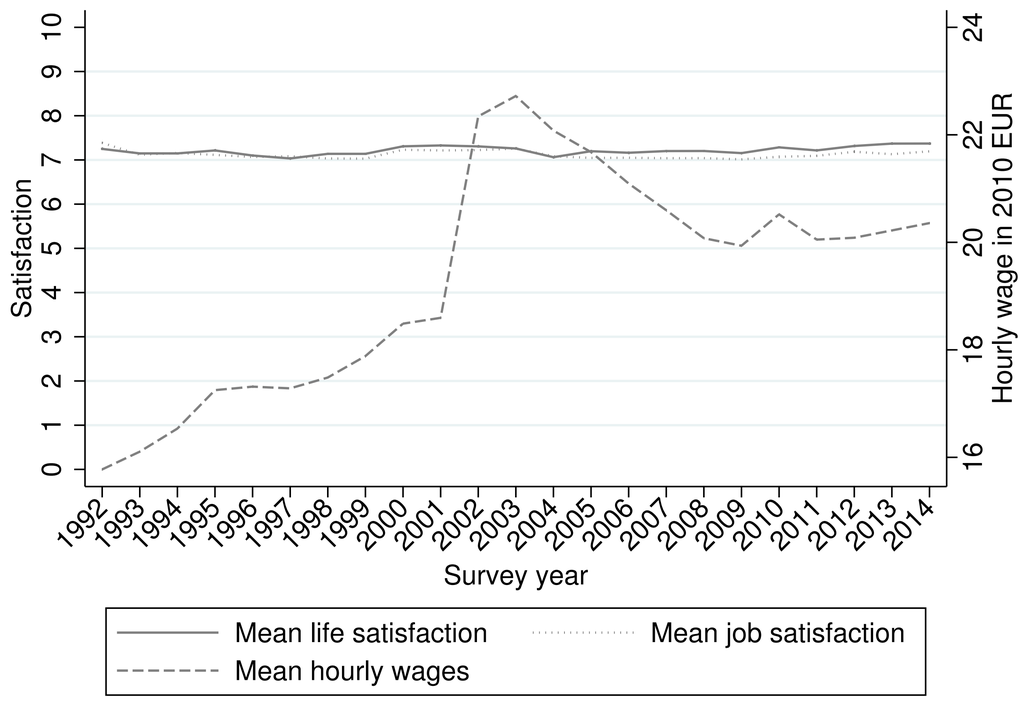
- Easterlin Paradox: despite large gains in average income since the 1950s, there is no significant increase in happiness
- A large body of literature sees this as a result of social comparison: if individuals gain happiness in comparisons to peers, average income gains will amount to a zero-sum game in terms of happiness
- Empirical results support this notion (e.g. Kifle 2014 JoHS, Collischon forthcoming JoHS) using panel regression methods
- However, are these findings causal? We argue that time-constant individual factors such as motivation affect

(i) levels of job satisfaction (which is accounted for using FE)

(ii) individual trajectories of job satisfaction (which FE does not rule out)

→ Fixed Effects are not enough to obtain the causal link between relative pay and job satisfaction (Brüderl and Ludwig 2015); solution: **Fixed Effects Individual Slopes (FEIS)**

The Easterlin Paradox



Source: SOEP v31 1992–2014, own calculations.

Data: Socio-Economic Panel Study (Germany)

- Pooled waves from 1984-2015; 96,113 observations for 9,884 individuals (individuals with at least 4 participations)
- Dependent variable: Job satisfaction (self-assessed, 11-point scale)
- Measure for social comparison: rank of hourly wage within the reference group (based on survey year, industry and occupation)

$$Rank_i = (I-1)/(N-1)$$

where I is the number of individuals with wages less than the respondent and N is the number of observations within the reference group

- Controls: children, married, full-time employment, tenure, working hours, labor market experience, age, occupation (2-digit ISCO), industry (NACE top groups)
- Sample restricted to observations with at least 10 respondents in the reference group, individuals aged 19 to 65

Method: Fixed Effects Individual Slopes (FEIS)

- FE accounts for selection on levels due to unobserved heterogeneity
- FE does not account for differences in individual trends due to unobserved, time-constant heterogeneity
- We assume that individuals who are on a relatively steep wage (and thus rank) trajectory over time also experience a slower decline in job satisfaction over time (e.g. through intrinsic motivation)
- We estimate the following regression model:

$$Jobsat_{it} = z_{it}\alpha_i + \beta Rank_{it} + \gamma ln(wage)_{it} + \delta x_{it} + u_{it}$$

where $z_{it}\alpha_i$ are individual-specific slopes (in our case: age, age squared and full-time experience) and the fixed effect, β is the effect of individual rank on job satisfaction, x_{it} is a set of controls and u_{it} is the time-varying error term

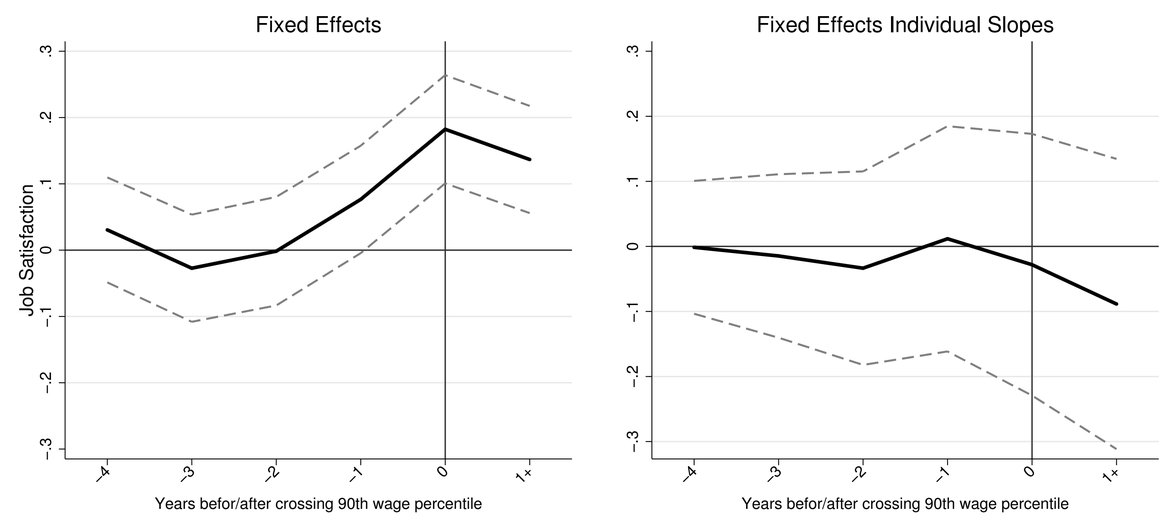
- We investigate differences between short- and long-term effects using first differencing

Results

	POLS	FE	FEIS	FD	FDIS
Rank (β)	0.204^{***}	0.194^{***}	0.067	0.124^{+}	0.071
	(0.062)	(0.051)	(0.060)	(0.068)	(0.075)
ln(wage) (γ)	0.255^{***}	0.204^{***}	0.305^{***}	0.225^{***}	0.248^{***}
	(0.041)	(0.037)	(0.049)	(0.057)	(0.064)

Significance levels: $^{+}$ $p<0.10$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$; N∗t=96,113.

Is FEIS necessary?



Source: SOEP v32 1984–2015.

Impact dummies show an upward trend before the event of interest that disappears in FEIS

Robustness

- Effects hold for reference group based on gender, education and age
- Effects hold for subsamples by employment status and gender
- Effects hold for life satisfaction as the outcome

Conclusion

- Our results show no causal link between relative pay and job satisfaction; the estimation results are not driven by larger standard errors
- We show the importance of accounting for the effect of unobserved heterogeneity on individual wage trajectories
- Individual pay gains seem to increase job satisfaction, even when accounting for individual trends in job satisfaction
- **To Do:** replicate the results with the PASS-ADIAB to have more reliable information on wages

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