Work and Happiness

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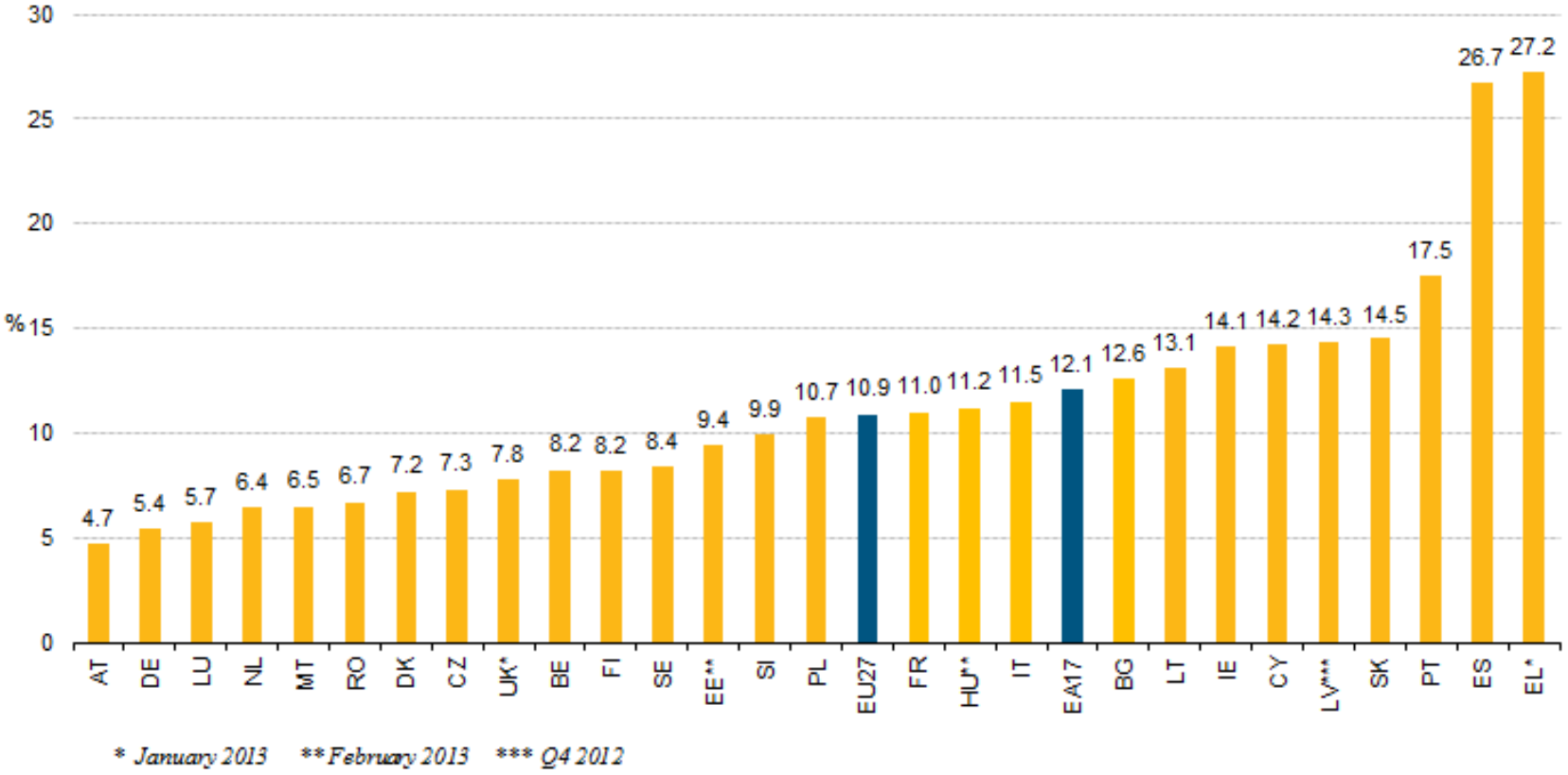
2013 Conference on Happiness and Well Being at Work

CRESS & HMC, London, June 21, 2013

Unemployment rates in Europe
(seasonally adjusted, March 2013)



Source: Eurostat.

Outline

Part I. Setting the Stage

- Previous findings on unemployment and people's well-being

Part II. Current Research

- Economic shocks, insurance and individual well-being

Part III. Future Research

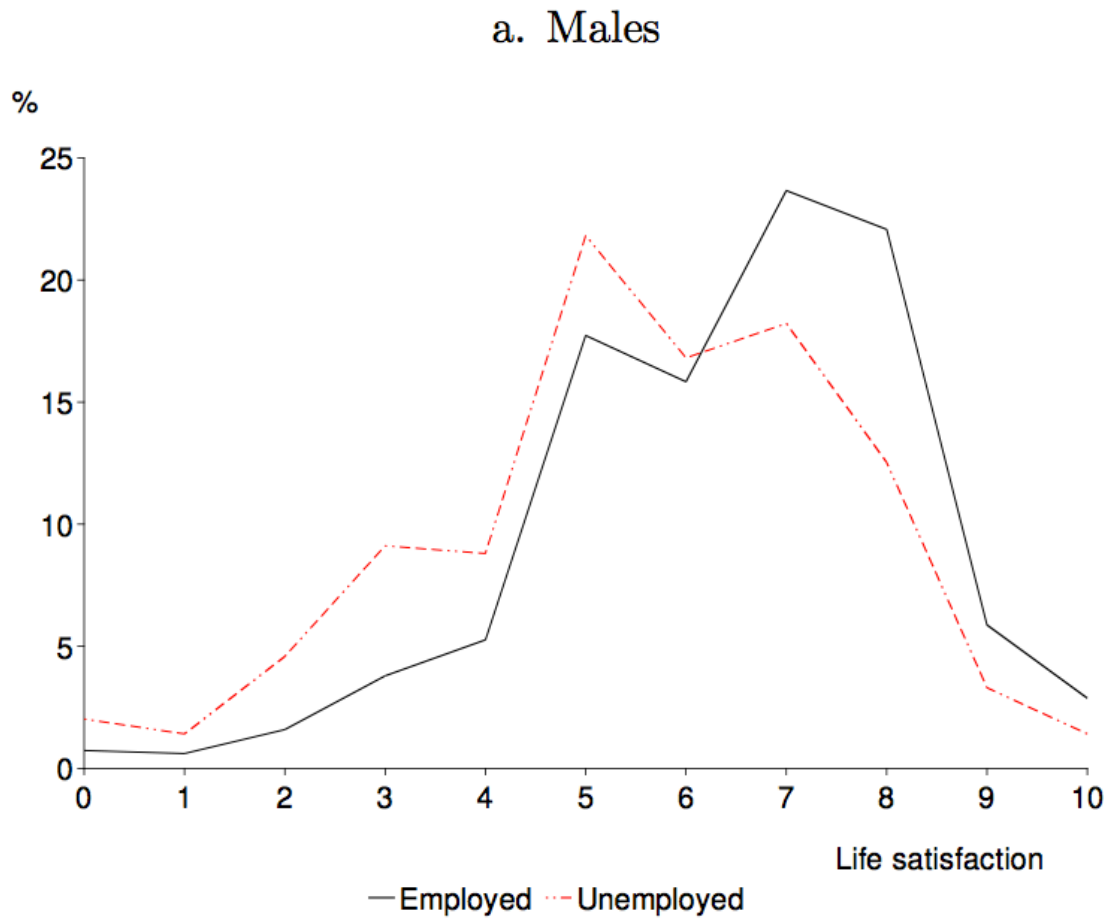
- Mispredicting the material benefits of work

Part I. Setting the Stage

Previous findings: Unemployment and subjective well-being

- Is employment a burden or is unemployment even worse?
- Two views on unemployment
  - Involuntary
  - Voluntary
    - Unemployed people live fine on unemployment benefits
    - Unemployment is only temporary
      - New classical macroeconomics
    - Officially unemployed people work in the shadow economy

Life satisfaction of unemployed workers in GER
(when employed and unemployed)



Source: Gielen and van Ours (2012) based on GSOEP.

Unemployment and subjective well-being

- On average, unemployment reduces life satisfaction substantially
  - Effects cannot be explained by lower net income

    (Clark and Oswald 1994, Winkelmann and Winkelmann 1998)
- Unemployment involves psychic costs
  - due to a loss of status, self-esteem, personal relationships and a disciplining time structure
  - that are related to social work norms

    (Clark 2003, Stutzer and Lalive 2004)
  - that reduce SWB even after re-employment (= scarring effects)

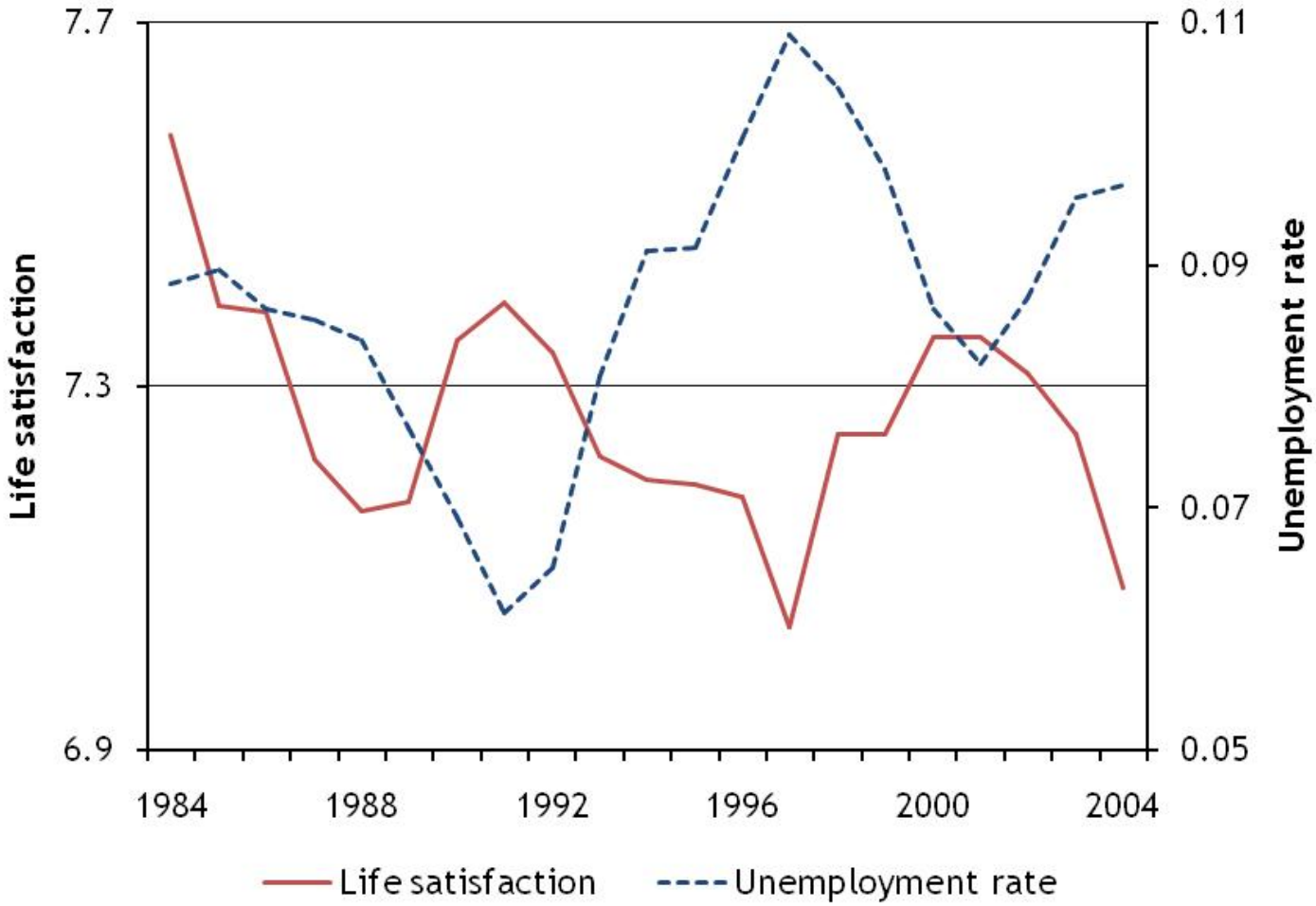
    (Clark et al. 2001, Knabe and Rätzel 2011)

Unemployment and subjective well-being

- Negative consequences of unemployment on *employed* people
  - Negative correlation between the level of unemployment and the SWB of employed people

    (Di Tella, MacCulloch and Oswald 2003)

Unemployment and SWB of employed people in West Germany



Source: German Socio-Economic Panel.

Why does unemployment hurt the employed?

- General effects of unemployment on society
  - Increase in crime (e.g. Gould et al. 2002)
  - Fiscal consequences
  - Empathy
- Workplace related effects
  - Downward pressure on wages (Blanchflower and Oswald 1990)
  - Upward pressure on working hours (Stewart and Swaffield 1997)
  - **Reduced economic/job security**

Empirical strategy to identify insecurity
(Lüchinger, Meier and Stutzer 2010, *JHR*)

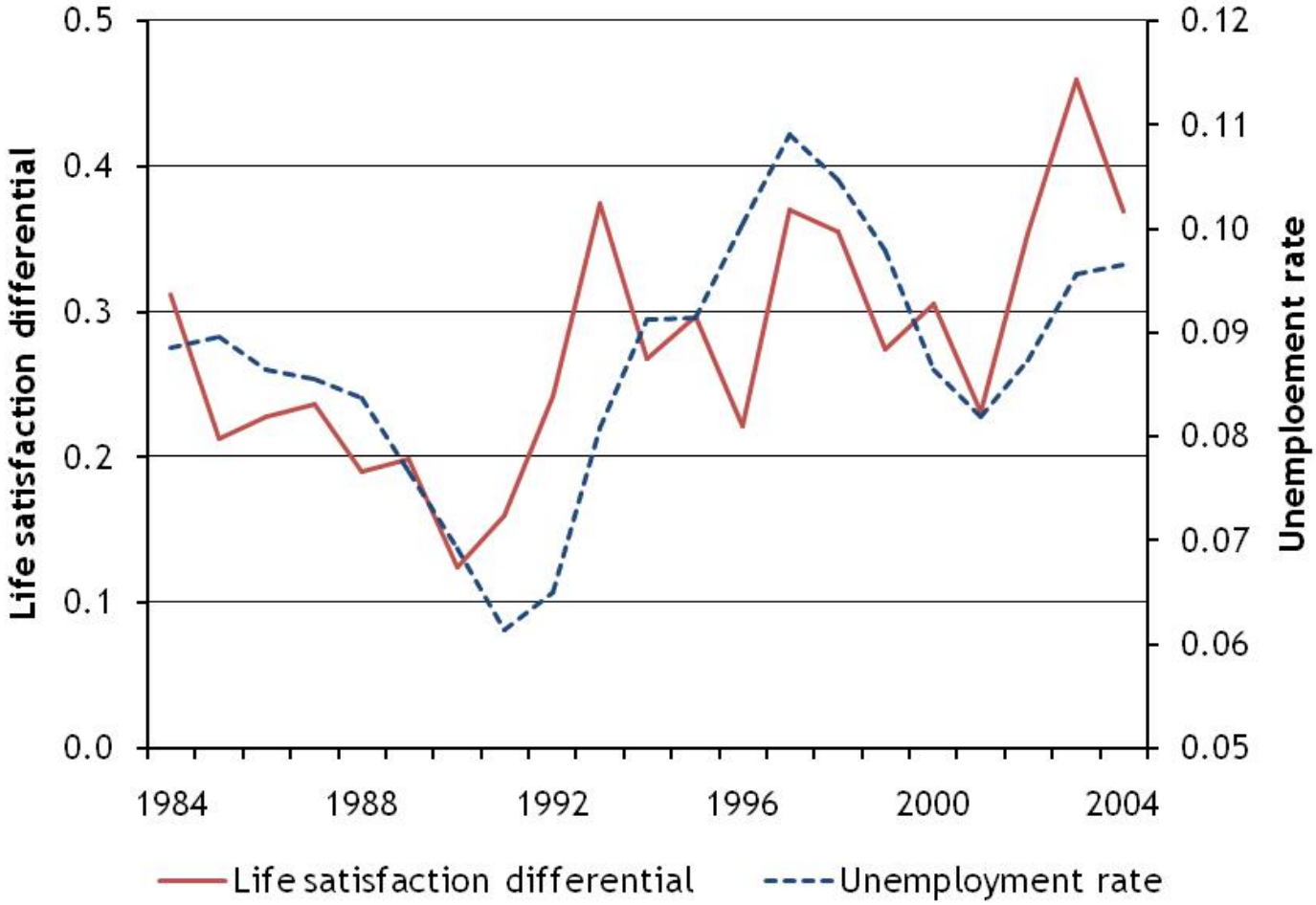
Comparison of the SWB of public and private sector employees over the business cycle

- Large differences in objective job security
  - Dismissal protection
  - No/low risk of bankruptcy and downsizing
- Similar exposure to general societal effects

  → Work place related effect versus general societal effects
- Control for income and working hours

  → Economic/job security versus workplace specific effects

SWB differential (public – private) and unemployment rate in West Germany



Source: German Socio-Economic Panel.

Interim conclusions

1. Unemployed people, on avg., suffer psychic costs.
2. Employed people experience lower subjective well-being when unemployment is high.
3. Employees in the institutional framework of the public sector are less affected by fluctuations in regional unemployment.

   Our interpretation:

   Anticipatory feelings of economic insecurity matter for individual welfare.

Economic insecurity

= anxiety produced by a perceived economic threat

- Anticipatory feeling

  → emotional state

- Possible future hazard

  → subjective estimation of the probability and the cost of the loss

≠ risk (loss aversion)

- Anticipated feelings (i.e., outcomes generate utility)

Relevance of economic insecurity (EI)

- *EI* drives the demand for the social insurance programs of the welfare state.
  - social stability
- *EI* affects individual behavior.
  - investments in social relations (at the workplace, in the neighborhood) ↘
  - investments in job specific human capital ↘
  - job changes ↘
- *EI* reduces individual welfare.

Part II. Current Research

Economic shocks, insurance and individual well-being

(with Rafael Lalive, U of Lausanne)

Motivation

- How do aggregate economic shocks and institutions that offer protection against shocks affect well-being?

- Specifically
  - How do shocks (strong increases in unemployment) affect well-being?
  - Does unemployment insurance mitigate these effects?
  - Who is hurt most by shocks and who benefits most from insurance protection?
  - Do the benefits of unemployment insurance vary over the business cycle?

Unemployment insurance: basic trade-offs

- Unemployment benefit system insures against risks that cannot easily be dealt with individually and for which markets fail.
- Drawback: disincentive effects for job search (Bailey 1978)

Previous evidence

- Many insights on the disincentive effects of UI ...
  - Macro
    - Nickell (1997), Blanchard and Wolfers (2000), Nickell, Nunziata and Ochel (2005)
  - Micro
    - Microeconometric evaluation studies: Katz and Meyer (1990), Hunt (1995), Lalive (2008), etc.

Unemployment insurance: basic trade-offs

... but much less is known on the positive welfare consequences

- Insurance value
  - consumption smoothing (e.g. Gruber 1997 on food expenditure)
    - see also recent work on liquidity constraints (e.g. Chetty 2008)
- Matching gains
  - UI as subsidy for searching longer and improving matches (Marimon and Zilibotti 1999, Acemoglu 2001)

➢ Large potential contribution of the economic analysis of subjective well-being

Hypotheses:
UI and individual well-being

Employed people

More generous unemployment benefits

- improve job matches
- reduce economic insecurity (as potential economic hardship is reduced)
- increase tax burden (due to higher social security contributions)

➢ Net effect on employed people's well-being?

Hypotheses:
UI and individual well-being

Unemployed people

More generous unemployment benefits

- improve income situation
- reduce economic insecurity
  - in particular in an economic downturn

➢ Positive net effect on well-being

Data

- Reported satisfaction with life [1-4]

  Ø=3.07, s.d.=0.73

  Sample: people in the work force from **12 European countries** between **1975 and 2007/10**

  n=319'968 (76.3% employed, 12.9% self-employed, 10.9% unemployed)

  Source: Eurobarometer 1975-2010.

- Economic shocks

  Change in the rate of unemployment

  Min.=-2.47, max.=4.63, Ø=0.02, s.d.=1.03

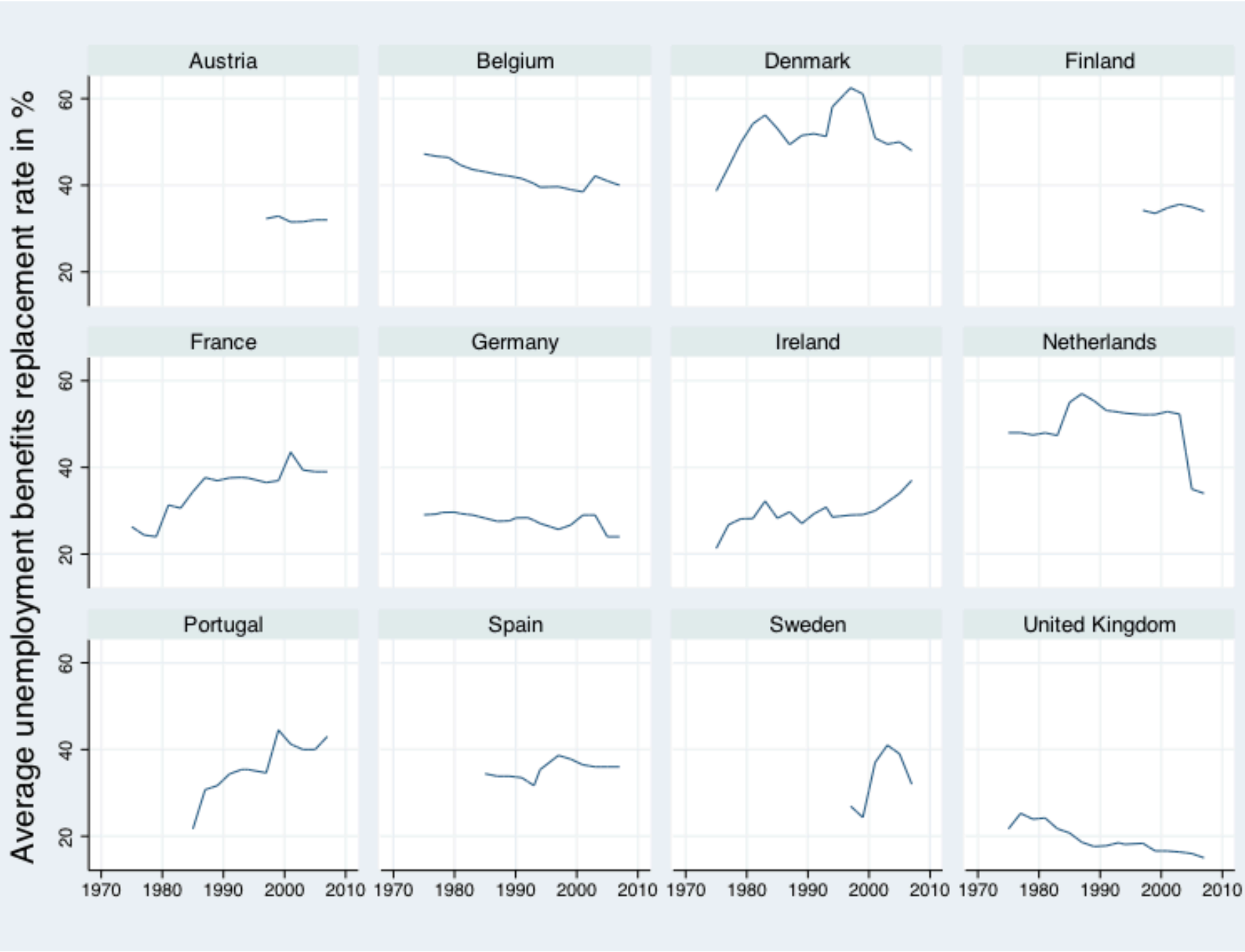
  Source: OECD.

Data

- Average unemployment benefit replacement rate
  Ø=0.36, s.d.=0.11, min.=0.15, max.=0.65

Source: OECD.

"The OECD summary measure is defined as the average of the gross unemployment benefit replacement rates for two earnings levels, three family situations and three durations of unemployment. For further details, see OECD (1994), The OECD Jobs Study (chapter 8) and Martin J. (1996), "Measures of Replacement Rates for the Purpose of International Comparisons: A Note", OECD Economic Studies, No. 26. Pre-2003 data have been revised."


Average unemployment benefits replacement rate in %
Austria
Belgium
Denmark
Finland
France
Germany
Ireland
Netherlands
Portugal
Spain
Sweden
United Kingdom
20
40
60
1970
1980
1990
2000
2010

Presentation of main results

- Tab. 1. Employment shocks and reported life satisfaction
- Tab. 2. Composition effect?
- Tab. 3. a) Shocks mitigated by UI?

  b) Differential effects for (un)employed people?

Table 1: Unemployment shocks and the subjective well-being of the working age population in 12 European countries, 1975-2010

Dependent variable: life satisfaction				
	(1)	(2)	(3)	(4)
Unemployment shock	–0.028***	–0.024***	–0.024***	–0.028***
	(–6.92)	(–5.17)	(–5.31)	(–5.92)
UR prev. year	–0.013***	–0.008***	–0.011***	–0.013***
	(–6.14)	(–2.69)	(–3.72)	(–4.08)
GDP per capita		0.296**	0.329**	0.385***
		(2.00)	(2.28)	(2.60)
Inflation			–0.009***	–0.010***
			(–3.90)	(–4.35)
Individual charact.	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Country specific TT	Yes	Yes	Yes	Yes
Wave FE	Yes	Yes	Yes	Yes
No. of obs.	553,960	553,960	553,960	369,441
No. of clusters	326	326	326	326
R^2	0.15	0.15	0.15	0.16
F	240.69	246.99	249.45	246.82

Change in the rate of unemployment in percentage points

Notes: OLS estimations. Unemployment shock measures the change in the rate of unemployment in percentage points. T-values in parentheses. Standard errors are clustered at the country x year level. Sample selection: est. (1) to (3) refer to the working age population, est. (4) refers to the work force.
Significance levels: * $.05 < p < .1$, ** $.01 < p < .05$, *** $p < .01$.

Table 3: Unemployment shocks, benefits from unemployment insurance and subjective well-being in 12 European countries, 1975-2007

	(1)	(2)	(3)	(4)
Unemployment shock	–0.029***	–0.030***	–0.023***	–0.023***
	(–4.91)	(–4.96)	(–3.45)	(–3.59)
Unemployment rate prev. year	–0.005	–0.006	–0.001	–0.002
	(–1.15)	(–1.36)	(–0.20)	(–0.36)
Benefits from UI	0.544***	0.797***	0.787***	0.897***
	(4.73)	(4.83)	(4.79)	(5.33)
Unemployment shock		0.038	0.032	0.014
x benefits from UI		(1.13)	(0.94)	(0.39)
Unemployment rate prev. year		–0.031*	–0.036**	–0.053***
x benefits from UI		(–1.87)	(–2.18)	(–3.15)
Unemployed (U)			–0.295***	–0.345***
			(–8.90)	(–11.49)
U x unemployment shock			–0.028**	–0.018
			(–2.09)	(–1.43)
U x unempl. rate prev. year			–0.010**	–0.002
			(–2.43)	(–0.46)
U x benefits from UI			0.569***	–1.187***
			(6.60)	(–4.56)
U x unemployment shock				0.247***
x benefits from UI				(2.81)
U x unempl. rate prev. year				0.240***
x benefits from UI				(6.87)
No. of obs.	319968	319968	319968	319968
R^2	0.15	0.15	0.17	0.17

Employed people

Δ for unemployed people

Notes: OLS estimations. Individual charact., country FE, country specific TT, year FE, GDP per capita and inflation incl.

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Work force

Employed people

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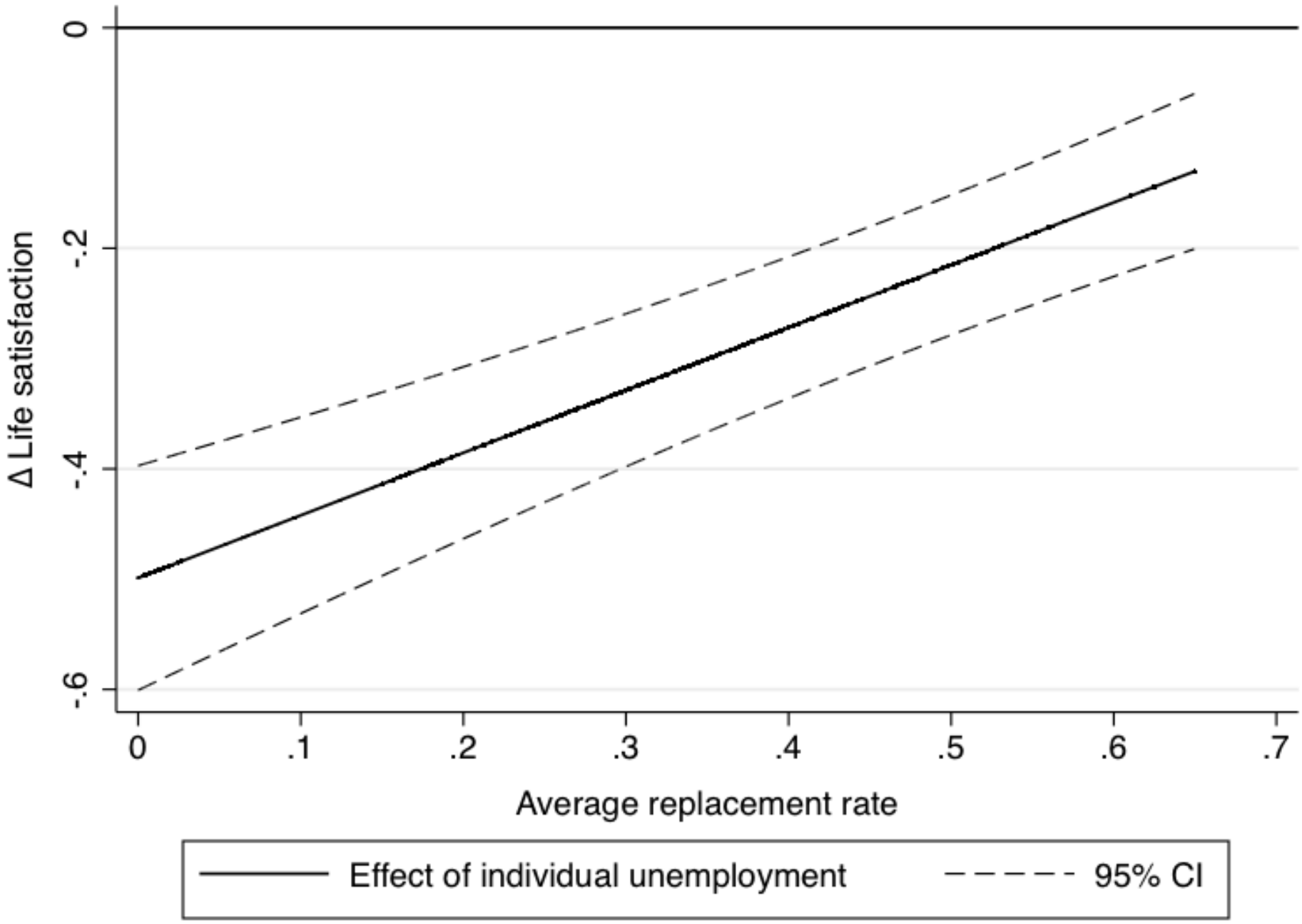

0
-.2
-.4
-.6
Δ Life satisfaction
0
.1
.2
.3
.4
.5
.6
.7
Average replacement rate
Effect of individual unemployment
95% CI

Table 5: Benefits from unemployment insurance of different groups of unemployed people

Dependent variable: life satisfaction				
	Woman	Men	Age<50	Age≥50
	(1)	(2)	(3)	(4)
Unemployment shock	−0.046***	−0.046***	−0.054***	−0.020
	(−4.29)	(−3.11)	(−4.66)	(−1.13)
UR prev. year	−0.016*	−0.012	−0.020**	0.006
	(−1.85)	(−1.00)	(−2.15)	(0.39)
Unemployment benefits (UB)	0.729*	1.198***	0.772**	1.564***
	(1.75)	(2.67)	(2.12)	(2.88)
Unemployment shock x UB	0.034	−0.034	0.023	0.019
	(0.40)	(−0.36)	(0.30)	(0.19)
U rate prev. year x UB	−0.031	−0.068*	−0.038	−0.062
	(−0.78)	(−1.73)	(−1.17)	(−1.14)
Conrol variables[1]	Yes	Yes	Yes	Yes
R^2	0.17	0.11	0.14	0.15
F	88.05	34.33	81.06	27.43

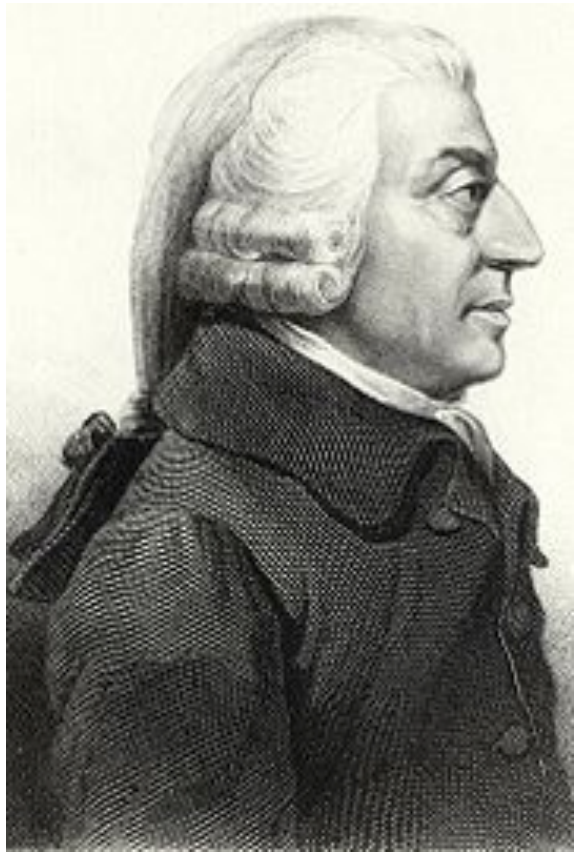
Interim conclusions

- Economic shocks reduce reported satisfaction with life.
- More generous UI are positively related to avg. reported subjective well-being ceteris paribus.
  - However, this effect is smaller if disincentive effects increase the rate of unemployment.
- Unemployed people are hurt more from economic shocks than employed people.
- Unemployed people suffer less with more generous UI.
  - Insurance value is larger for men and older people.

Part III. Future Research

Mispredicting the material benefits of work

Inspiration from Adam Smith



THE

THEORY

OF

MORAL SENTIMENTS.

By ADAM SMITH,
Professor of Moral Philosophy in the
Univerſity of Glasgow.

The SECOND EDITION.

Adam Smith:
Theory of moral sentiments (1759)

The great source of both the misery and disorders of human life, seems to arise from over-rating the difference between one permanent situation and another. Avarice over-rates the difference between poverty and riches: ambition, that between a private and a public station: vain-glory, that between obscurity and extensive reputation. The person under the influence of any of those extravagant passions, is not only miserable in his actual situation, but is often disposed to disturb the peace of society, in order to arrive at that which he so foolishly admires.

(III.I.73)

Systematic misprediction of utility from future consumption (Frey and Stutzer 2013)

- Standard economics
  - Utility prediction is no problem (constant preferences)
- Economics and psychology
  - People hold sometimes incorrect intuitive theories about the determinants of happiness (Loewenstein et al. 1999, Wilson and Gilbert 2003)
- Reasons for the relative overvaluation of choice options
  - Adaptation is underestimated
  - …

Systematic misprediction of utility from future consumption

- Economic consequences of biased assessments of trade-offs

  "In a better paid job (that is also more burdensome) I would be happier."

  "If I were to work more (but have less leisure time), I could afford a holiday home."

- Related decision: commuting

Does the stress of commuting pay?

(Stutzer und Frey 2008, Scand. J. Econ.)

Difficult trade-off

- A longer commute for a higher salary and/or a bigger house versus
- a shorter commute, a lower salary and/or a smaller house

➢ Economic prediction

  - "People get it right" (on average)
  - Market forces lead to a compensation of the burden of commuting

    → Equalization of utility differentials across space

Empirical test for Germany based on GSOEP

Does the stress of commuting pay?

(Stutzer und Frey 2008, Scand. J. Econ.)

Findings

- Multiple regression analysis with individual fixed effects:

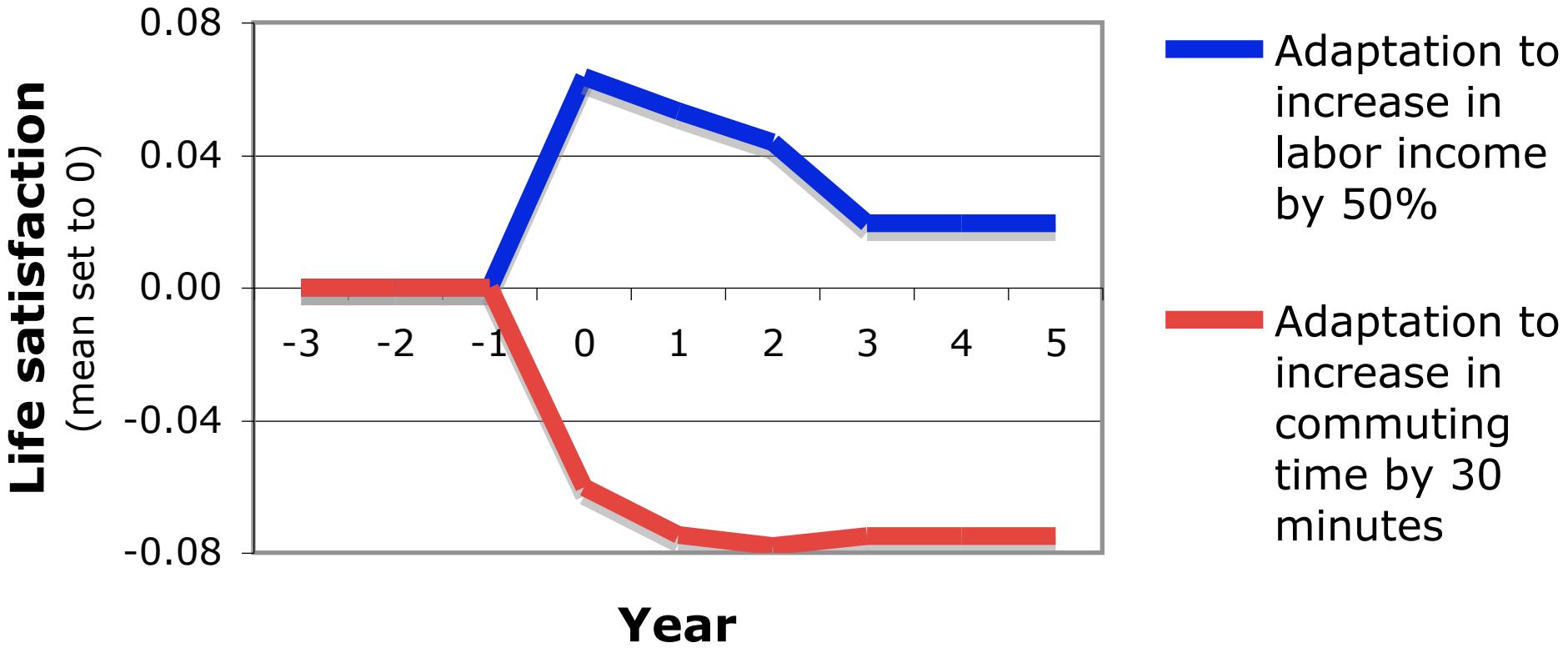
  People who spend more time commuting report, on average, lower satisfaction with life.

  ➔ Longer commutes are not fully compensated by other advantages.

- Robustness tests:
  - Spouses do not benefit
  - No compensation in specific domains (job, housing)

Adaptation to commuting and labor income

Full time employed and self-employed people in Germany



People may endure miserable commutes out of an inability to weigh their general well-being against quantifiable material gains.

Source: The New Yorker, April 16, 2007.

Interim conclusion

Decisions about work and commuting are difficult:

- Combination of individual optimization calculus from economics and insights from psychology
- Utility misprediction might lead to systematic misallocation of time in work and mobility choices and thus reduce individuals' well-being
  - Possible approach to study the phenomenon of the "overworked"

Concluding remarks

1. Welfare consequences of “work” can be directly measured based on data on reported subjective well-being
2. Unemployment reduces reported satisfaction with life.
3. Economic insecurity is a relevant source of reduced subjective well-being
4. Data on SWB offer new possibilities to evaluate the effectiveness of labor market *institutions* in contributing to individual welfare, e.g., by reducing economic insecurity
5. Decisions about work are difficult and potentially misguided by people’s intuitive theories of happiness

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