



# Commuting and Happiness

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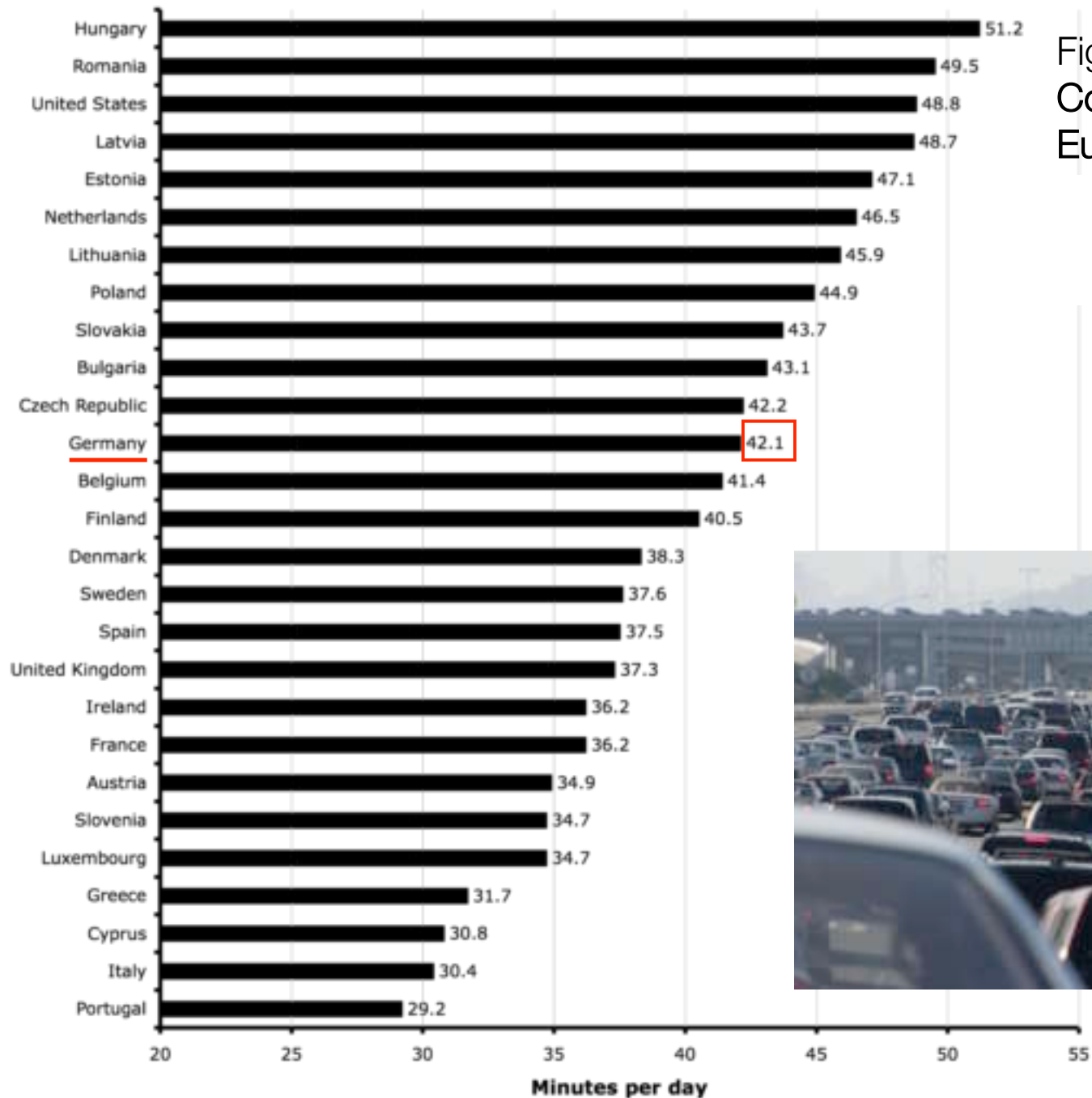


Fig. 1. Average Daily Commuting Time in Europe and the US



Data source: European survey on working conditions.

# Outline

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- Commuting is an important aspect of mobility in society
  - benefits and costs
    - aggregate level
    - individual level
      - economic perspective: compensation
- Empirical analysis
  - commuting and life satisfaction in Germany
- Concluding remarks

# Benefits and costs of commuting: aggregate level

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- Benefits
  - gains of trade
  - specialization
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- Benefits
  - gains of trade
  - specialization
  - increased productivity and individual welfare
- Social costs
  - individuals' optimization and externalities
  - “too much commuting”
  - congestion and pollution of the environment

# Benefits and costs of commuting: individual level

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- Costs (time, stress and out of pocket costs)
  - relative to other daily activities:  
lowest level of positive affect and relatively high level of negative affect (Kahneman et al. 2004)
  - current and delayed effects on health and family:  
raised blood pressure, lowered frustration tolerance, bad mood when arriving at work in the morning and coming home in the evening, increased lateness, absenteeism (Koslowsky et al. 1995)

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raised blood pressure, lowered frustration tolerance, bad mood when arriving at work in the morning and coming home in the evening, increased lateness, absenteeism (Koslowsky et al. 1995)
  - Compensation
    - superior or cheaper housing, higher salary etc.
- Equalization of individuals' utility over the housing and labor markets

# Does the stress of commuting pay?

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

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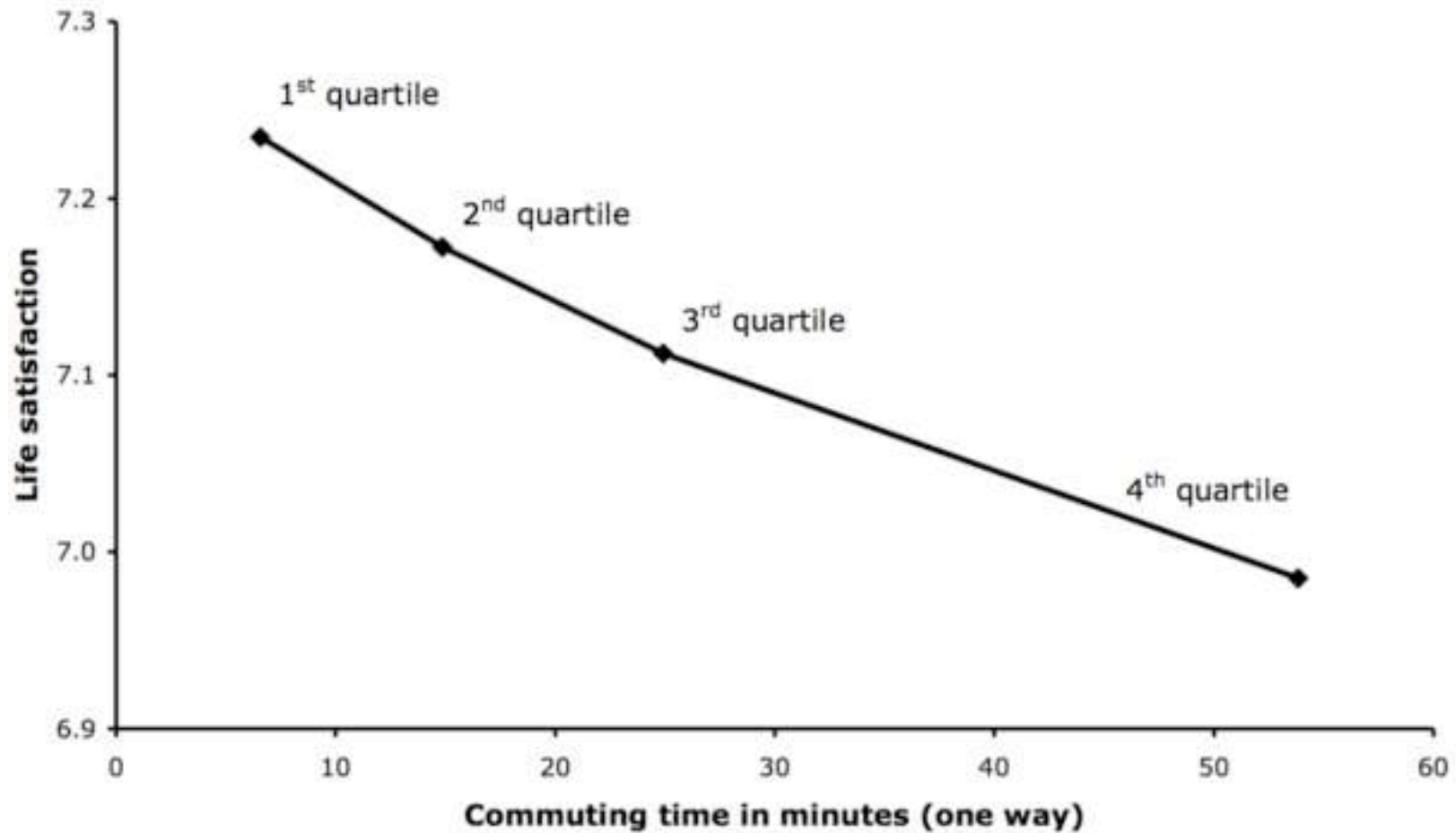
## Empirical analysis for Germany

Data: German Socio-Economic Panel (GSOEP)

- Seven waves between 1985 and 2003
- Commuting time  
*"How long does it normally take you to go all the way from your home to your place of work using the most direct route (one way only)?"*
- Reported subjective well-being  
*"How satisfied are you with your life, all things considered?"* [0-10]

# Commuting time and life satisfaction, Germany 1985-2003

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*Data source:* GSOEP.

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## 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)

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## Favored explanation

- Decision about the place of residence and the place of work involves a trade-off across significantly different life domains
  - material aspects: level of salary, size of house
  - social aspects: time for family, friends and hobbies

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## Favored explanation

- Decision about the place of residence and the place of work involves a trade-off across significantly different life domains
  - material aspects: level of salary, size of house
  - social aspects: time for family, friends and hobbies
- Prediction of utility is difficult
  - underestimation of adaptation
  - material aspects with strong adaptation are relatively overvalued in decisions

## Adaptation to Commuting and Labor Income

Full time employed or self-employed people in Germany, 1984-2005

Dependent variable: Satisfaction with life

	Coef.	SE	Coef.	SE
Commuting time t	-0.0020	0.56e <sup>-3</sup>	-0.0020	1.69e <sup>-3</sup>
t-1			-0.49e <sup>-3</sup>	1.99e <sup>-3</sup>
t-2			-0.10e <sup>-3</sup>	1.84e <sup>-3</sup>
t-3			0.10e <sup>-3</sup>	1.31e <sup>-3</sup>
Ln real labor income t	0.1828	0.015	0.1569	0.030
t-1			-0.0256	0.030
t-2			-0.0232	0.029
t-3			-0.0606	0.029
Working hours	in year t		in years t-3 to t	
Ind. characteristics	yes		yes	
Ind. fixed effects	yes		yes	
Year fixed effects	yes		yes	
No. of observations	85'332		37'368	

*Source:* GSOEP.

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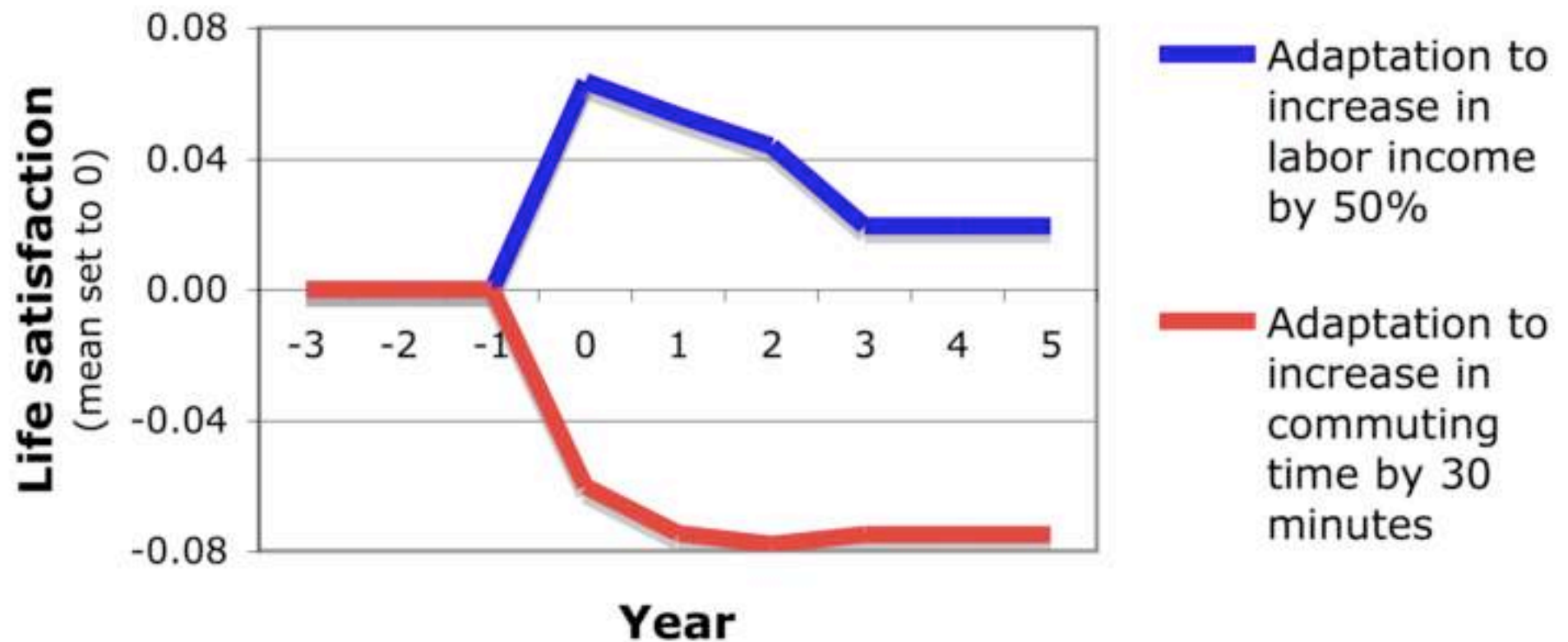
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## Adaptation to commuting and labor income

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.

# Concluding remarks

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- Decisions about individual mobility are difficult:
  - combination of individual optimization calculus from economics and insights from psychology
  - utility misprediction might lead to systematic misallocation of time in mobility choices and reduce individuals' well-being
- No traditional “consumption criticism”
  - what is “best” is evaluated according to individuals' subjective preferences
- No simple recipe for government intervention
  - tax deductibility signals that commuting costs are low



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