

Gender Pay Gap and Job Task Contents

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MOTIVATION

WHAT DO WE KNOW ABOUT THE GENDER PAY GAP?

- Gender Pay Gap has been closing since 1950s (Blau & Kahn `96).
- Traditional explanation: rising educational attainment of women (Fitzenberger & Wunderlich `00)

AT THE CORE – TECHNOLOGICAL PROGRESS:

- Rising usage of computer technology (Autor, Levy, Murnane `03)
- Higher labor force participation of women (Galor & Weil `96), declining occupational segregation (Blau & Kahn `00)
- Derived demand for qualified labor (Spitz-Oener `06, Lindley `12)

RESEARCH QUESTIONS

- How do job tasks contribute to the formation of the gender pay gap?
- What are the differences along the wage distribution?
- How do tasks evolve within occupations VS. sorting into occupations?

TASK-BASED APPROACH

- Jobs are bundles of tasks
- Tasks: Routine, Non-Routine Cognitive and Non-Routine Manual
- Demand & remuneration for NRC tasks are rising

CLASSIFICATION OF TASKS:

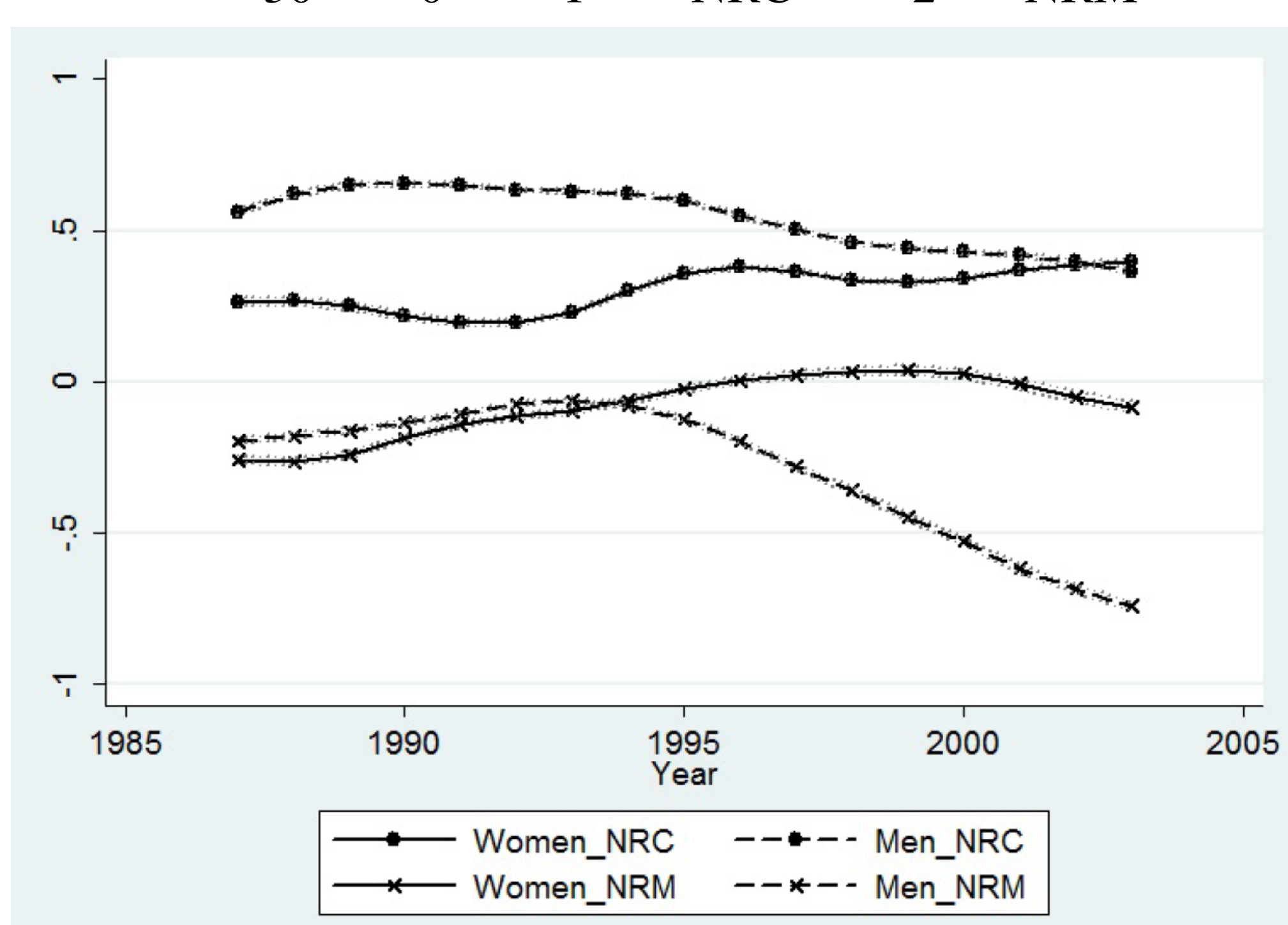
NRC: Human resources management; Research and development; Public relations; Management and organisation; Education

R: Accounting and controlling; Quality management; Production.

NRM: Maintenance; Construction; Hotel and restaurant; Other services

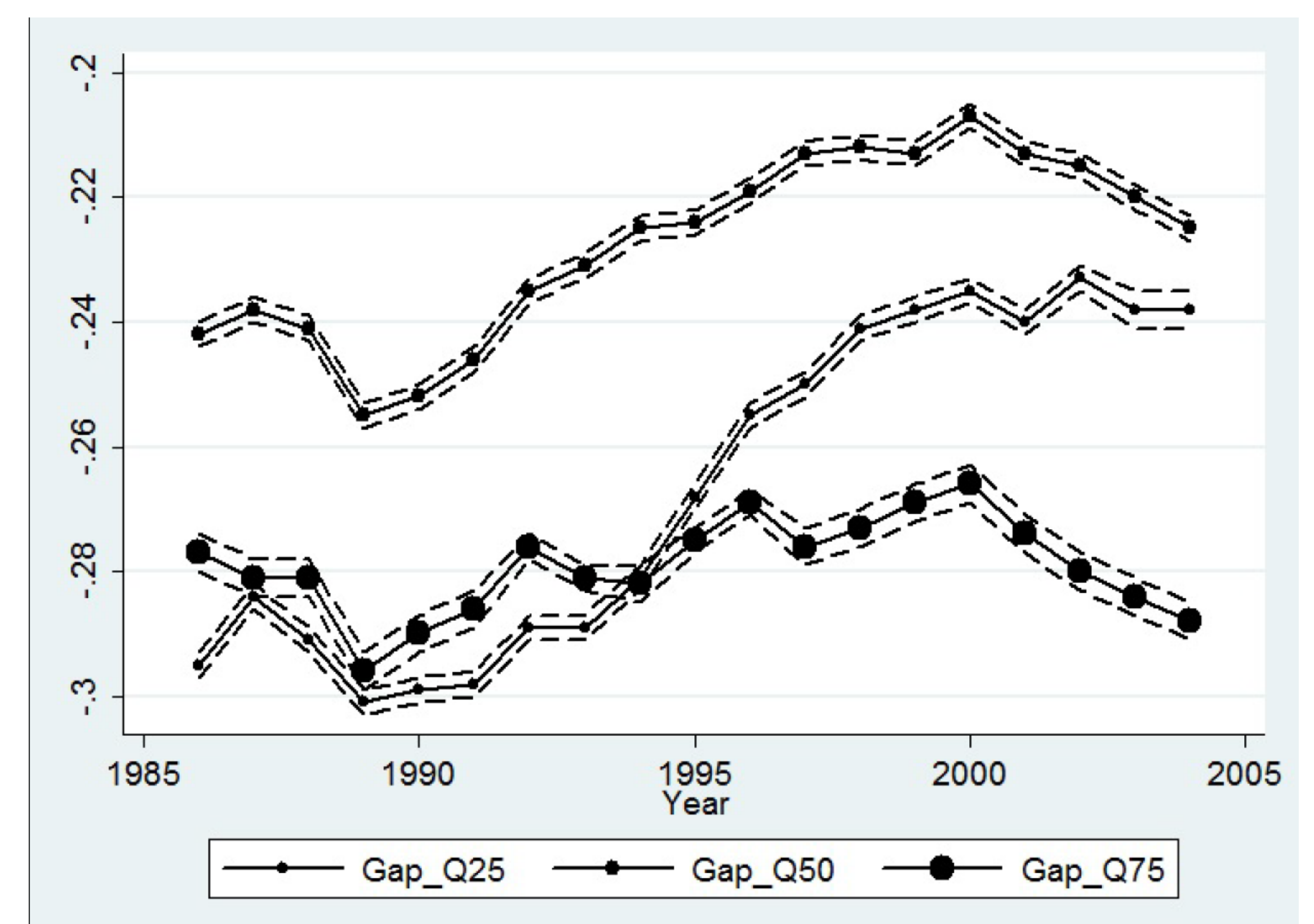
RELATIVE PRICES FOR TASKS:

$$RIF(\ln w, Q_{50}) = \beta_0 + \beta_1 TS_{NRC} + \beta_2 TS_{NRM} + \gamma X + \varepsilon$$



Relative Gender-Specific Prices for Tasks (relative to R)

GENDER PAY GAP IN GERMANY (1986-2004)



Gender Pay Gap at the 25th, 50th, 75th quantiles

IABS & QUALIFICATION AND CAREER SURVEY

IABS: administrative data on wages, occupations and personal characteristics

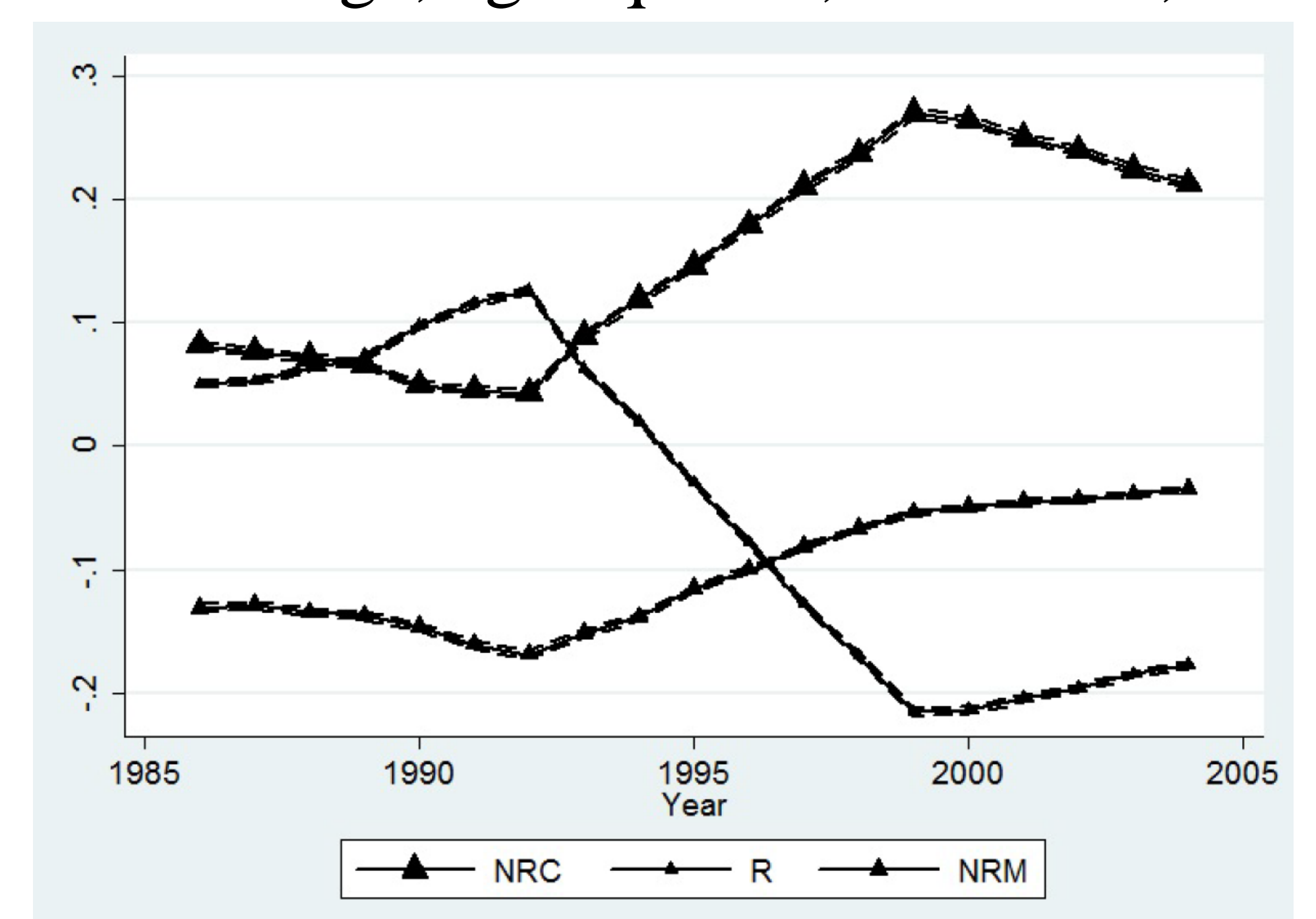
QCS: data used to construct *job task profiles* by occupation, gender, age, education.

SAMPLE RESTRICTIONS

Age 25-55, full-time, stable employment histories

EVOLUTION OF TASKS:

$TS_j = \beta_0 + \beta_1 \text{Female} + \gamma X + \varepsilon, j = \{NRC, R, NRM\}$,
where X contains age, age squared, education, tenure.



Gender Task Gap at the Median of the Wage Distribution

MAIN RESULTS

- Women experienced substantial increase in NRC tasks.
 - Contributions of tasks to formation of the gender pay gap is more substantial than contribution of education.
 - Trends in relative task profiles hold along the wage distribution.
 - Biggest contribution of NRC to the pay gap is for high earners.
 - Within occupations, men and women perform same task mix, but no convergence in prices is observed.
- Leading role of occupational sorting