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# Educational participation, „double status positions” and the transition to motherhood in four European countries

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# The basics

The essential link, the ‚classical' assotiation:

- Incompatibility of educational enrolment and parenthood (Hoem 1986, Blossfeld Huinink 1991)
  - Widely shared
  - Always stated (Liefbroer and Corijn 1999, Andersson 2000, Kantorova 2004, Lappegard and Ronsen 2005, Balbo et al. 2013, etc.)
- Enrolment: as full time, and exclusive status

# Motivations – prevalence and expansion

## Number of full-time and part-time enrolled in Hungary, 1991–2012

**Vertical axis (left):**

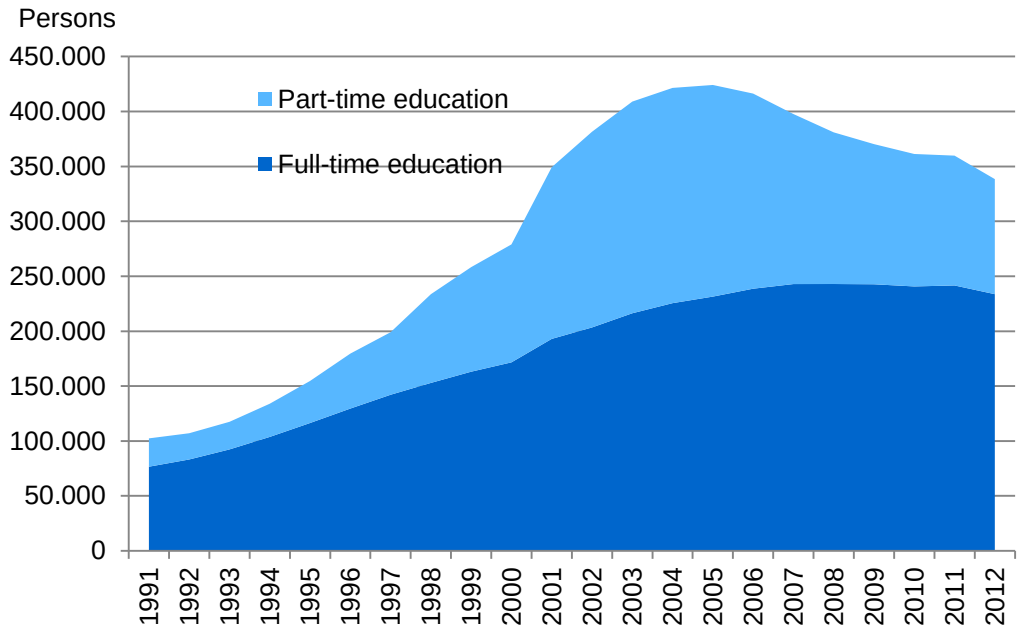
**number of people participating in education**

**Light blue: part-time**

**Dark blue: full-time**

*Source:*

Official Educational Statistics, Vital statstitics




Expansion of part-time education goes hand-in-hand with the expansion of **double status** positions (Róbert, Saar 2012)

**Double status = enrolled and employed at the same time**

# Motivations and The research question

- There are also signs of prevalence and diffusion of double-status position in ***Western*** countries, strongly depending on educational system (Wolbers 2003)
  - Due to increasing cost of the study
  - Growing dependence

- Research question:

What is the association between double status and parenthood/ transition to parenthood?

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## Constructing new hypotheses:
## Identifying factors shaping the classical enrolment and tarnation to parenthood link

- **Mechanism/ factors of the enrolment and parenthood link identified by previous research (**Blossfeld Huinink 1991, Huinink 1995, Rindfuss and Brewster 1996,Gustafsson 2001, Kantorova 2004)
  - Societal nature:
    - sequencing norms, role incompatibility
  - Economic nature:
    - opportunity cost
    - net direct expenditures
    - forgone human capital

| **Education** | **Job** | |
|---|---|---|
| | Employed | Not employed |
| Enrolled | **Double status** | **Enrolled only** |
| Not enrolled | **Employed** | **Inactive** |

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# Constructing new hypotheses: How the Identified factors shape double status and tarnation to parenthood link

- **Mechanism/ factors of the enrolment and parenthood link identified by previous research (**Blossfeld Huinink 1991, Huinink 1995, Rindfuss and Brewster 1996,Gustafsson 2001, Kantorova 2004)
  - Societal nature:
    - sequencing norms, role incompatibility,
  - Economic nature:
    - opportunity cost
    - net direct expenditures
    - forgone human capital

| | **social aspects** | | **economic aspects** | | |
|---|---|---|---|---|---|
| | sequencing norms | role incompatibility | opportunity costs | net direct expenditure | forgone return of human capital |
| **enrolled** | ++ | + | 0 | + | +++ |
| **employed** | 0 | + | + | + | + |
| **enrolled and employed** | 0 | +++ | + | + | ++(?) |

# Hypotheses

- H1 The **multiple role conflict** hypothesis: The transition rate to motherhood among women in double status positions is lower than the transition rate among students and that among employees.
- H2 The **mitigated role conflict** hypothesis: The transition rate to motherhood among women in double status positions is higher than the transition rate among students, but is lower that the transition rate among employees.
- H3 The **job status dominance** hypothesis*:* The transition rate to motherhood among women in double status positions is higher than the transition rate among students, but is the same as the transition rate among employees.

# Data and sample selection

- Second wave of the GGS, retrospective birth, employment and educational histories
- Selected countries: France, Austria, Hungary and Georgia
- Selected individuals: women born 1961-1980
- Person-month dataset: risk period starts when turning 16
- Selected time window: 1977-2008 (available for all four countries)

# % distribution of current status, education and age

| | FR | AT | HU | GE |
|---|---|---|---|---|
| **Status** | | | | |
| **double status** | 9.7 | 27.4 | 6.6 | 3.5 |
| **employed only** | 52.7 | 65.9 | 53.8 | 35.0 |
| **enrolled only** | 27.0 | 3.2 | 28.4 | 32.6 |
| **inactive** | 10.6 | 3.5 | 11.2 | 28.9 |
| | | | | |
| **Educational attainment** | | | | |
| **lower secondary or lower** | 54.3 | 35.6 | 46.1 | 40.9 |
| **upper secondary** | 25.9 | 53.7 | 40.8 | 18.5 |
| **higher** | 19.8 | 10.7 | 13.1 | 40.6 |
| **Age** | | | | |
| **16-20** | 38.6 | 37.3 | 46.6 | 47.2 |
| **21-25** | 31.5 | 29.8 | 29.1 | 25.2 |
| **26-30** | 16.6 | 18.1 | 15.5 | 14.1 |
| **31-49** | 13.3 | 14.8 | 8.8 | 13.5 |
| | | | | |

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Weighted estimates using the person-month dataset

# Net status differences. The baseline model

- Method: logistic regression using the person-month dataset
  - estimated separately for the four countries
  - weights that compensate for selective nonresponse in second wave
- Variables (defining our baseline model)
  - joint employment-enrolment status categories
    - **„double status" (enrolled & employed)**
    - **enrolled only**
    - **employed only**
    - **inactive**
  - educational attainment (below upper secondary; upper secondary; tertiary)
  - age + age-squared
  - year
  - birth cohort categories (1961-65, …, 1976-80)
- Explanatory variables are time-varying with the exception of birth cohort

# Results (1): Logistic regression estimates of the model without interaction effects

| | FR | AT | HU | GE |
|---|---|---|---|---|
| Enrolment-employment status | | | | |
| double status | 0 | 0 | 0 | 0 |
| employed only | 0.755*** | 1.084*** | 0.458*** | 0.405* |
| enrolled only | -0.700*** | 0.192 | -1.158*** | -0.203 |
| inactive | 0.902*** | 1.100*** | 0.258* | 0.887*** |
| Additional control variables | | | | |
| Constant | -5.371*** | -6.074*** | -4.571*** | -5.003*** |

***Additional control variables:*** level of education, age, age-squared, year, and cohort.

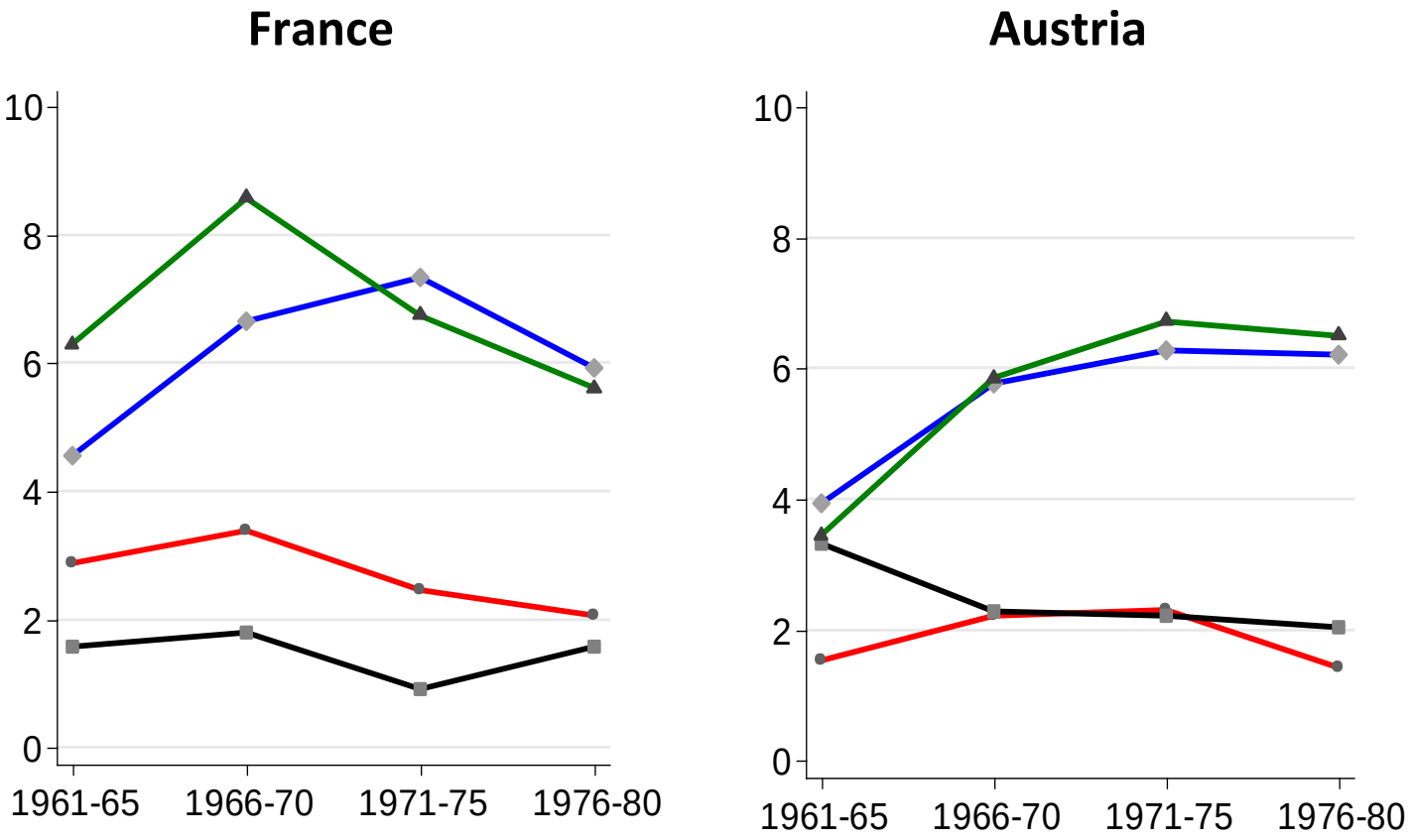
# Do period and cohort interactions affect the observed status differences?

- We estimate two additional models for each countries
  - Baseline model + status X year interactions
  - Baseline model + status X cohort categories interactions added
- Analytical strategy remains the same

# Results (2)

- We estimate two additional models for each countries
  - Baseline model + status X year interactions
  - √
  - Baseline model + status X cohort categories interactions added
  - ? √
- Analytical strategy remains the same

# Result (2a)
# Number of predicted monthly births per 1000 women, 1977-2008, based on extended model

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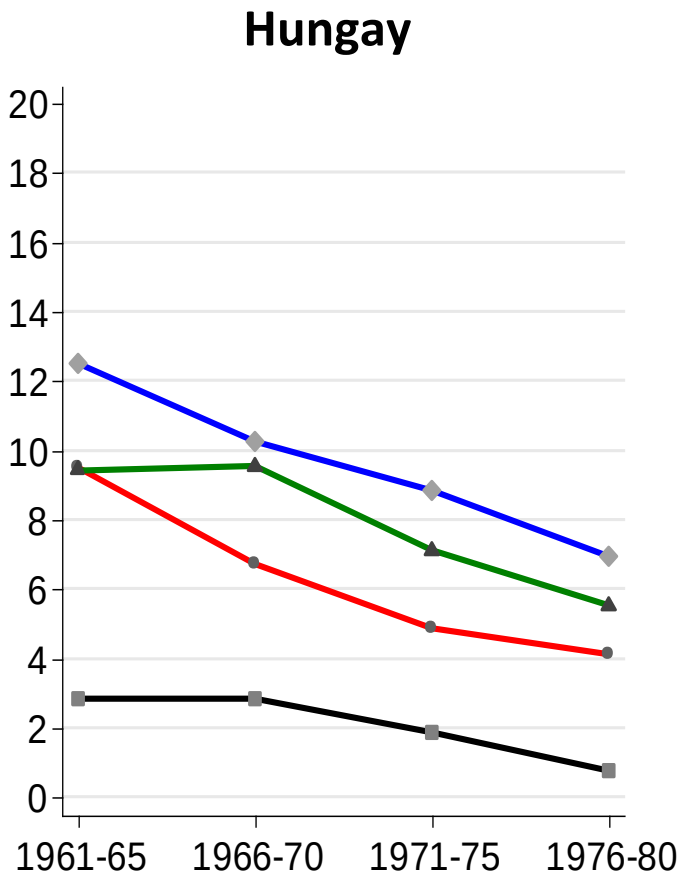
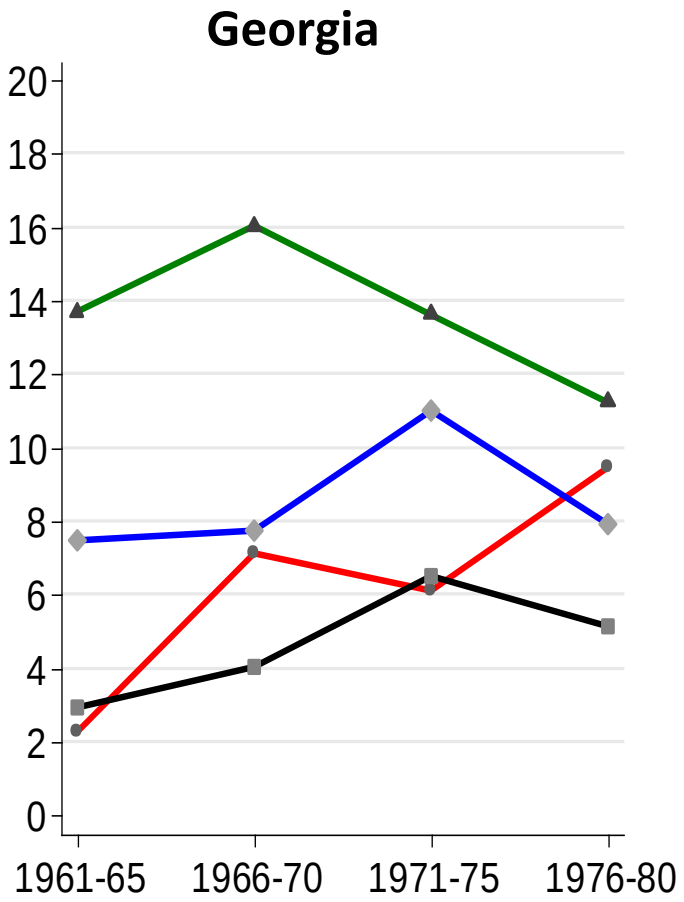
Legend: Double status – employment only – enrolment only – inactive

# Number of predicted monthly births per 1000 women, 1977-2008

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**Legend: Double status – employment only – enrolment only – inactive**

# Summary

- Conclusion of the comparison:
  - (A) The ***mitigated conflict*** hypothesis **(H2)** supported in ***France and Hungary***
  - (B) In ***Austria and Georgia*** the effect of enrolled only and double status do not differ regarding transition to parenthood, what support the validity of the ***classical assumption*** (Blossfeld, Huinink 1991) ***without any limitation***
- Need of further studies:
  - More accurate inclusion of the enrolment status!
  - More elaboration on the educational system!
- Generally: the importance to consider double or parallel positions/roles!

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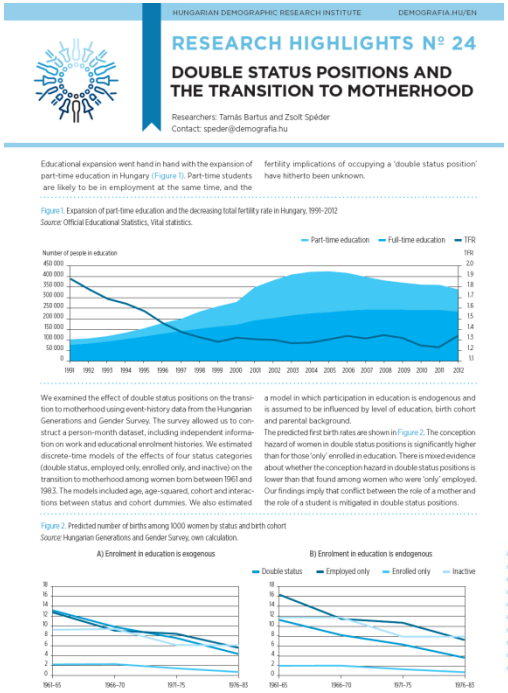

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RESEARCH HIGHLIGHTS Nº 24

DOUBLE STATUS POSITIONS AND THE TRANSITION TO MOTHERHOOD

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Educational expansion went hand in hand with the expansion of part-time education in Hungary (Figure 1). Part-time students are likely to be in employment at the same time, and the fertility implications of occupying a 'double status position' have hitherto been unknown.

Figure 1. Expansion of part-time education and the decreasing total fertility rate in Hungary, 1991–2012
Source: Official Educational Statistics, Vital statistics.

Part-time education Full-time education TFR

Number of people in education

TFR

We examined the effect of double status positions on the transition to motherhood using event-history data from the Hungarian Generations and Gender Survey. The survey allowed us to construct a person-month dataset, including independent information on work and educational enrolment histories. We estimated discrete-time models of the effects of four status categories (double status, employed only, enrolled only, and inactive) on the transition to motherhood among women born between 1961 and 1983. The models included age, age-squared, cohort and interactions between status and cohort dummies. We also estimated a model in which participation in education is endogenous and is assumed to be influenced by level of education, birth cohort and parental background.

The predicted first birth rates are shown in Figure 2. The conception hazard of women in double status positions is significantly higher than for those 'only' enrolled in education. There is mixed evidence about whether the conception hazard in double status positions is lower than that found among women who were 'only' employed. Our findings imply that conflict between the role of a mother and the role of a student is mitigated in double status positions.

Figure 2. Predicted number of births among 1000 women by status and birth cohort
Source: Hungarian Generations and Gender Survey, own calculation.

A) Enrolment in education is exogenous

B) Enrolment in education is endogenous

Double status Employed only Enrolled only Inactive

1961–65 1966–70 1971–75 1976–83

# Thank you for your attention!