Educational Pairings and Fertility Across Europe: How Do the Low Educated Fare?

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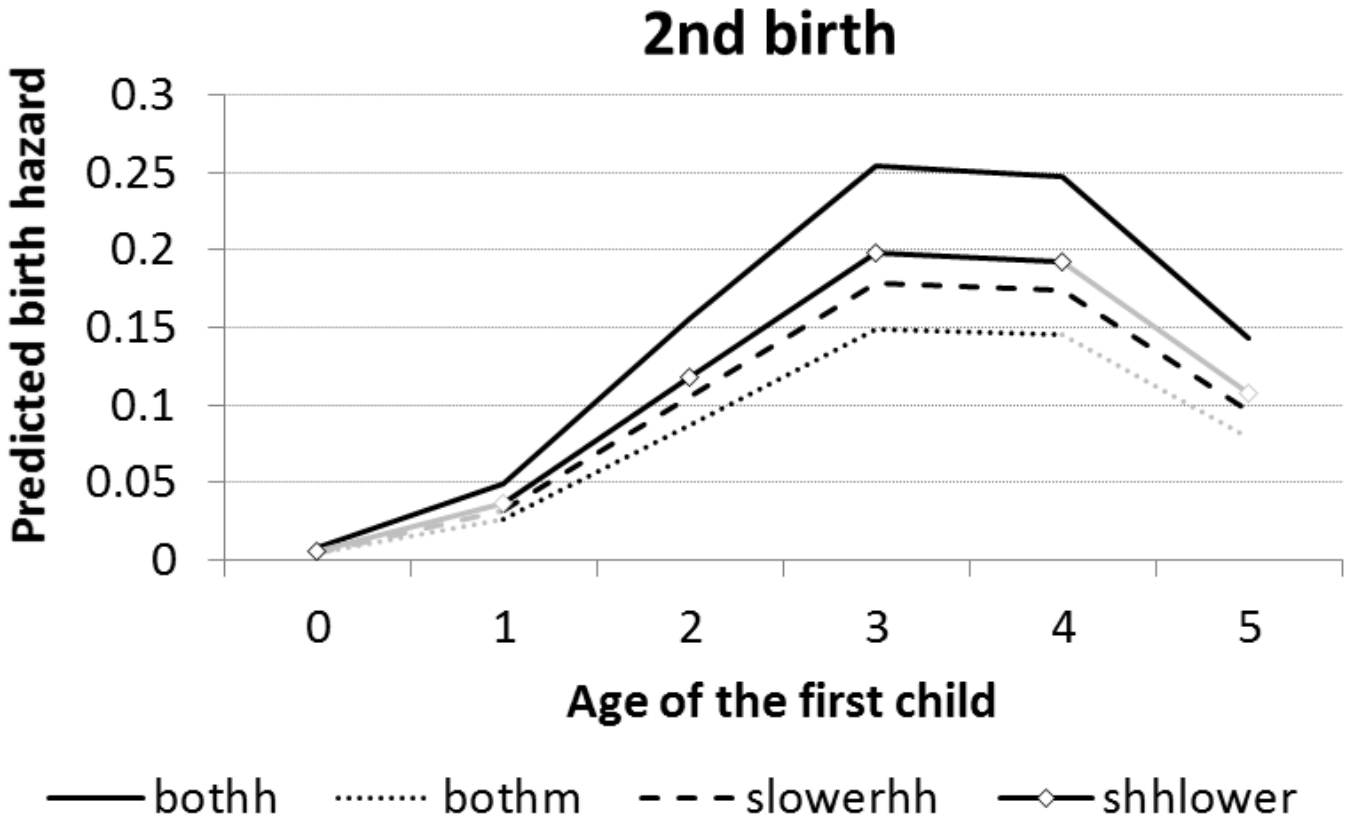
Motivation—Educational Pairings and Fertility

- Education is one of the most well studied predictors of childbearing in the developed world today

- Higher opportunity costs for spending time away from the labor market and careers among highly educated women have been one of the chief motivators for investigating how the male partner's resources may relate to work-family conflict for women → increasingly studies investigate couples' joint educational resources

- The combined effect of her and his education on fertility is addressed in a couple of single country studies (e.g. Corijn et al. 1996, Kreyenfeld 2002, Bauer and Jacob 2010, Dribe and Stanfors 2010), no (multi-country) study on the low educated yet

Motivation—Our Previous Findings on Couples with One or Two Highly Educated Partners



Data: EU-SILC 2004-12, 24 European countries pooled, predicted birth hazards for couples by educational pairings

BUT: ***Not much is known on how couple dynamics operate among those couples with lower cumulative education in relating to their childbearing behavior.***

Relevance—How Do the Low Educated Fare?

- Recent studies suggest that lower educated individuals may increasingly display distinct patterns in the family formation process:
  - Low educated men are now remaining childless more often than their more highly educated counterparts in Finland and Norway (Nisen et al 2014, Kravdal and Rindfuss 2008)
  - The incidence of early childbearing appears to even have significantly increased among recent cohorts of low educated women across most of Europe (Raymo et al. 2015)
- Given educational expansion, the group of those with low educational attainment is becoming ever smaller and more select (OECD 2011)
- Parental education consequential for children's life outcomes, and increasingly so leading to "Diverging Destinies" (McLanahan 2004, Davis Kean 2005)
- It is thus timely and relevant to investigate whether the coupling of two low educated partners may be associated with distinct patterns of childbearing behavior

Focus & Question

- Our focus is on couples and partners' educational pairings and their effects on (first), second, and third and higher order births
- Focus on couples with at least one partner with low educational attainment
- We apply recent panel data (EU-SILC 2004-2012) and an international perspective
- Descriptive explorative study
- ***Are there differences in 2nd and 3rd birth progressions between couples with two low educated partners versus couples with one low and one higher educated partner? How do couples with low educated partners fare compared to couples with highly educated partners?***

Hypothesis: *Resource Pooling*

- Oppenheimer (1988, 1994, 1997): The pooling of resources has become essential for families' welfare
- It would make a difference for the fertility of low educated women whether or not she has partnered with a man with more education/more earning potential.

→ **It could be expected that couples with *two low educated partners display the lowest birth transition rates* to either parity as they have the fewest combined resources at their disposal**

Our Data

- EU-SILC longitudinal sample (Survey on Income & Living Conditions):
  - Launched in 2003 throughout Europe, ongoing
  - Usually 4-year household panel
  - No full fertility, partnership, educational or employment histories: focus on persons in unions and their observed births during the panel
  - 8/2014 release, covering 2012 as last year

- Sample: 24 countries, clustered in 4 groups
  - Nordic, Western, Southern, Eastern

Analytic Strategy

- Discrete time event history models with random effects
- Separate samples & models by parity (2^{nd} 3^{rd} +) & country cluster (North, West, South, East)

- Covariates:
  - All combinations of his/her high, medium & low education (lagged): ***both low, she low he higher, he low she higher,*** both medium, both high, she high he medium, he high she medium
  - Her enrollment (lagged)
  - Married/cohabiting
  - Partners' age difference
  - Her age at first birth, age of youngest child (squared)
  - Calendar year indicator controls

Sample: Exposure and Events by Educational Pairing—2nd Births

		Nordic	Western	Southern	East
both high	exposure t %	*29.94*	*27.32*	*9.72*	*17.14*
	events N	223	355	55	164
she high he medium	exposure t %	*20.81*	*15.78*	*8.38*	*17.09*
	events N	157	167	47	123
she medium he high	exposure t %	*7.59*	*9.05*	*4.62*	*5.92*
	events N	47	98	25	42
both medium	exposure t %	*27.85*	*28.5*	*30.54*	*45.83*
	events N	203	284	139	335
she low he higher	exposure t %	*5.26*	*5.93*	*8.4*	*4.06*
	events N	38	57	31	42
he low she higher	exposure t %	*5.39*	*7.27*	*16.38*	*5.65*
	events N	28	64	62	42
both low	exposure t %	*3.16*	*6.15*	*21.96*	*4.31*
	events N	11	57	96	23

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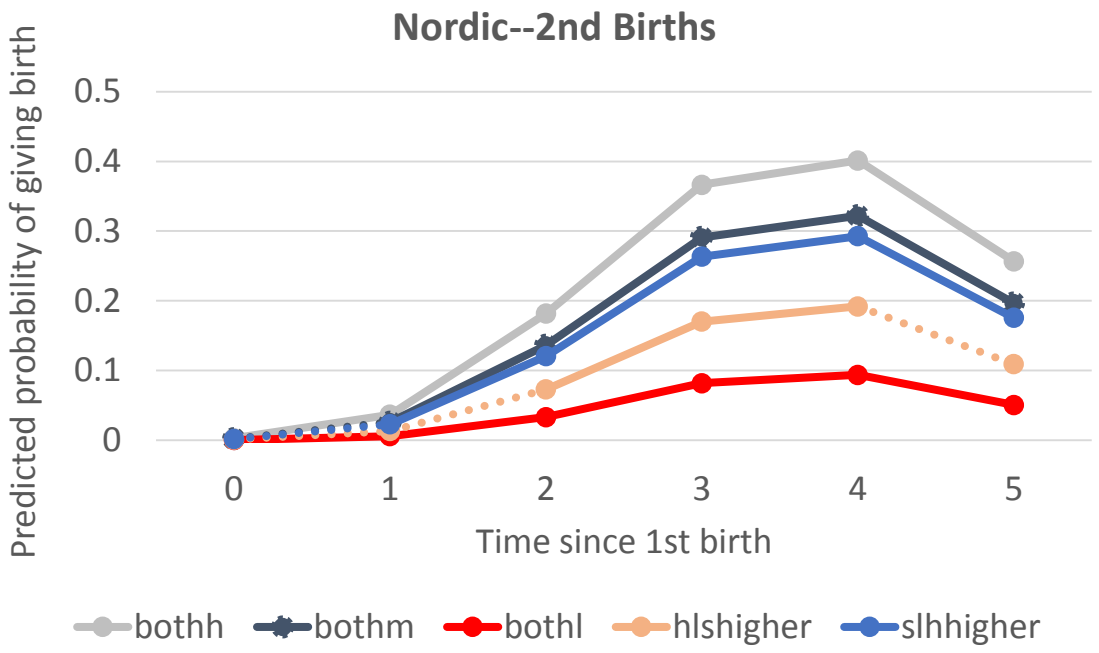
Nordic--2nd Births
Predicted probability of giving birth
0.5
0.4
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Time since 1st birth
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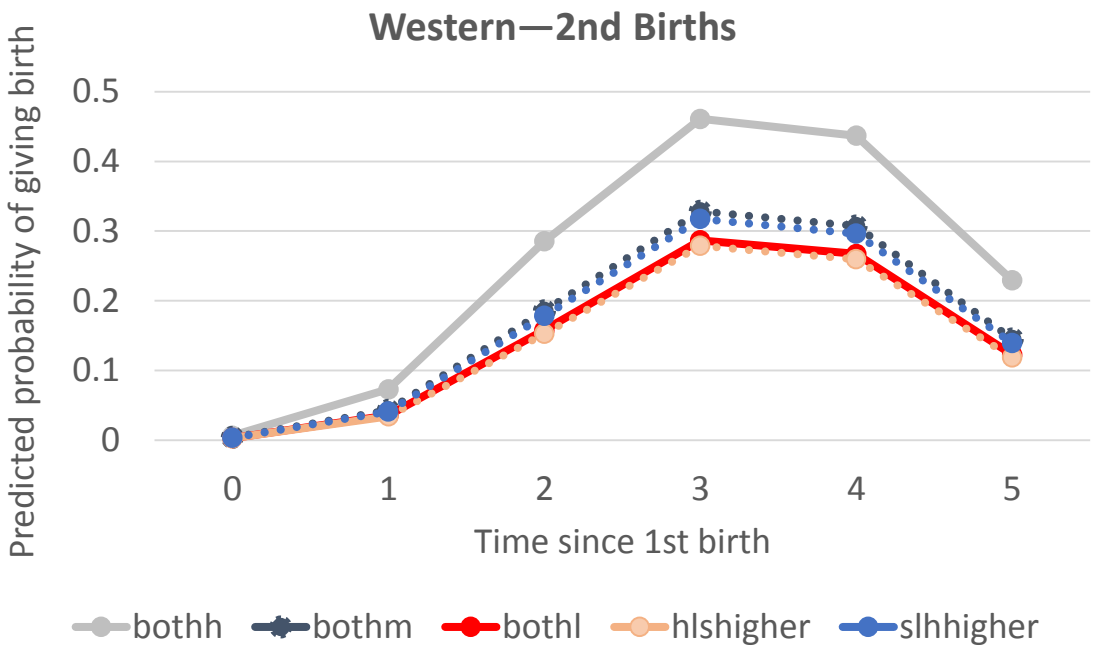
Western—2nd Births
Predicted probability of giving birth
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Time since 1st birth
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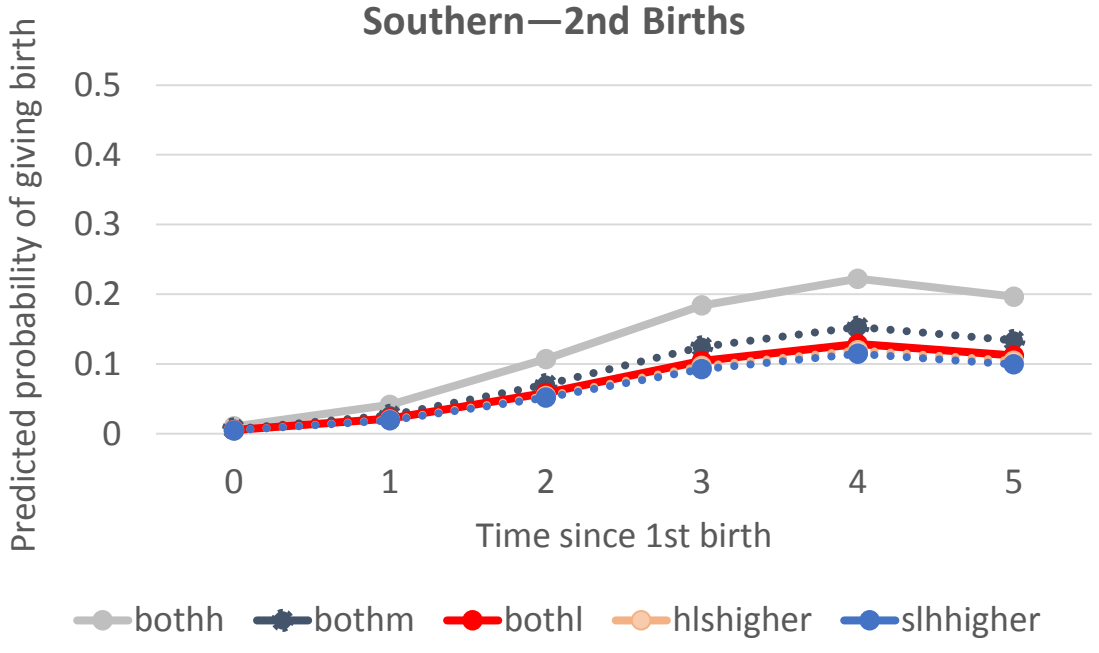
Southern—2nd Births
Predicted probability of giving birth
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0.4
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Time since 1st birth
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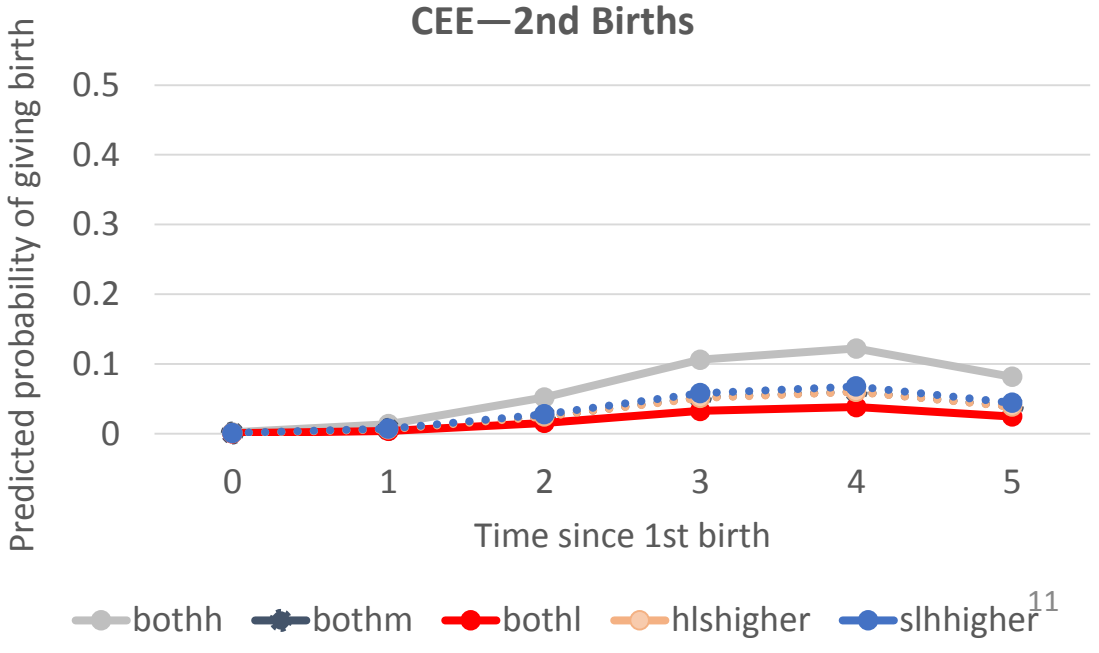
CEE—2nd Births
Predicted probability of giving birth
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Time since 1st birth
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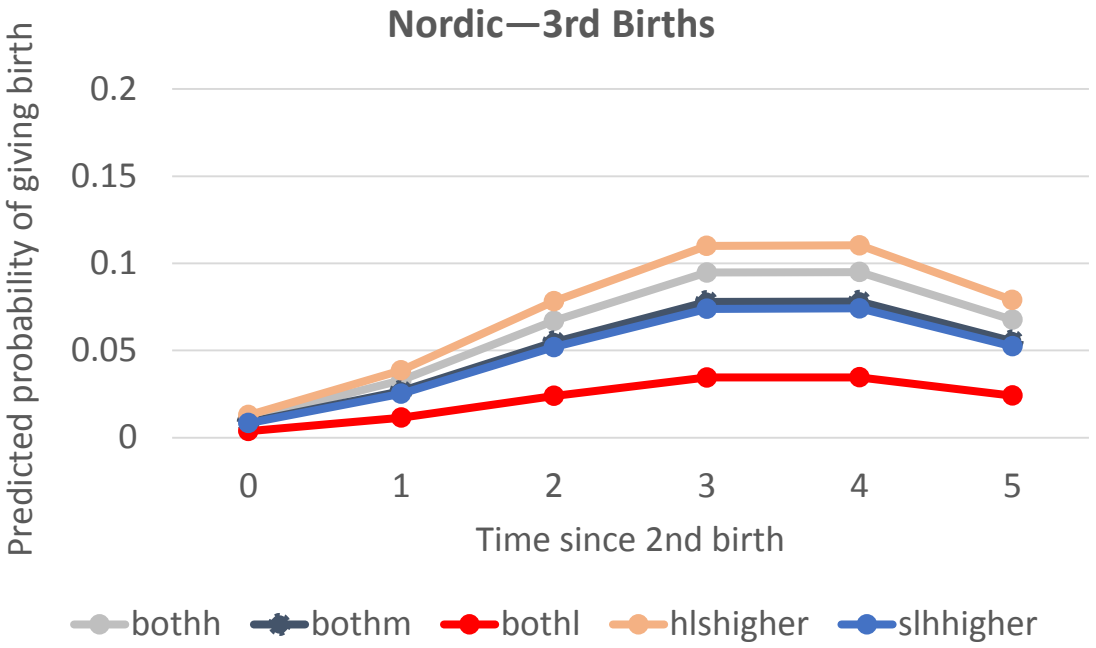
Nordic—3rd Births
Predicted probability of giving birth
0.2
0.15
0.1
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Time since 2nd birth
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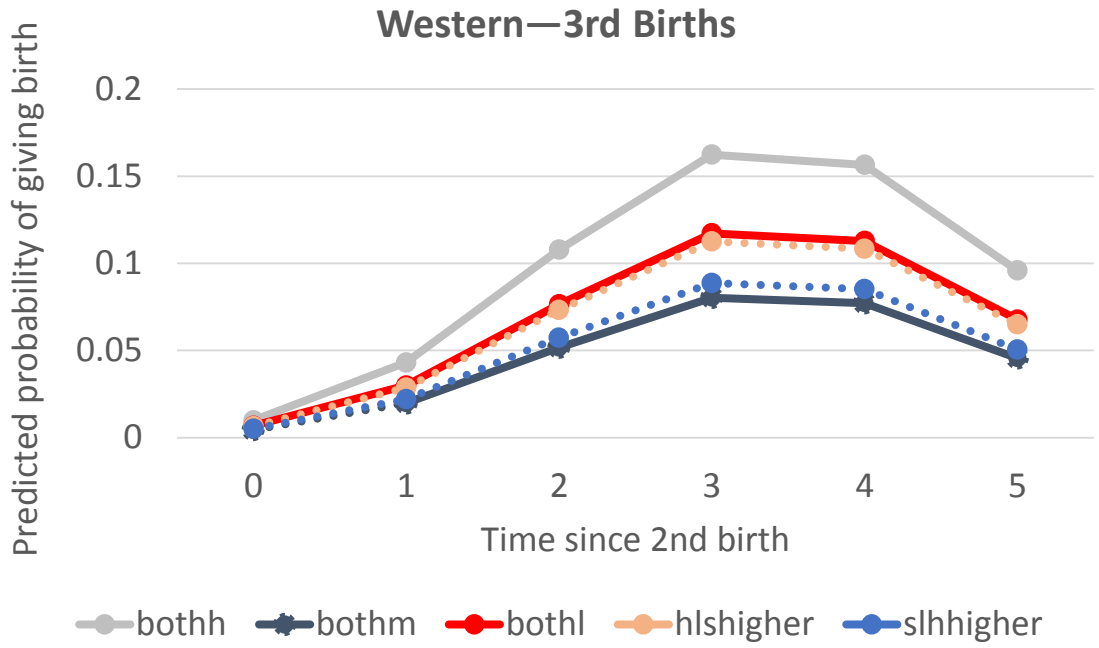
Western—3rd Births
Predicted probability of giving birth
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Time since 2nd birth
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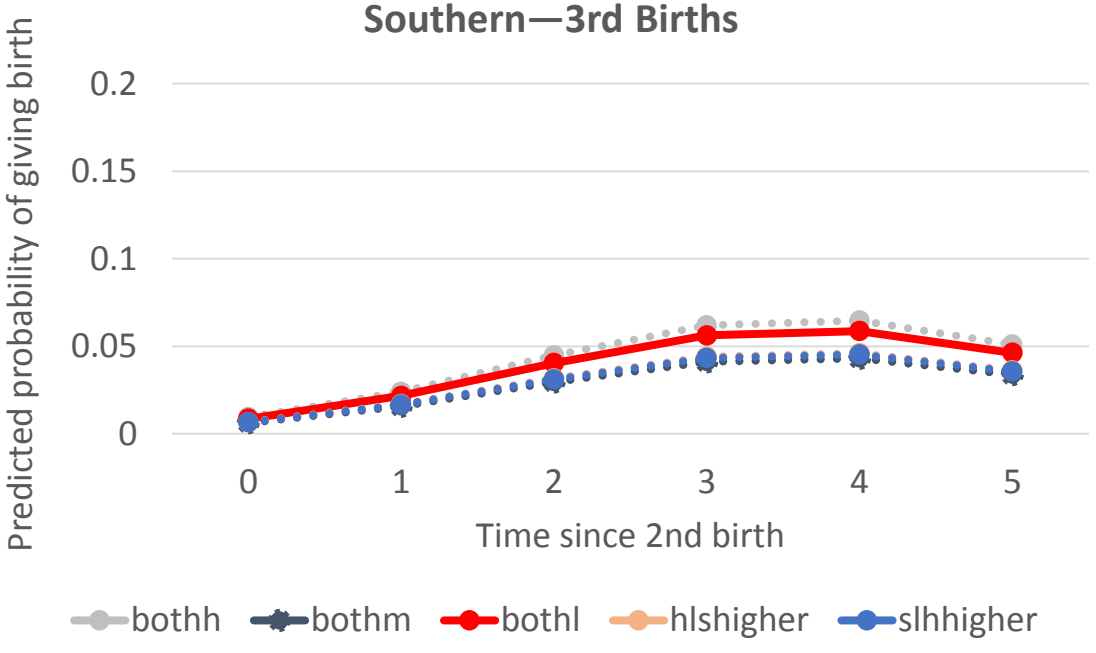
Southern—3rd Births
Predicted probability of giving birth
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Time since 2nd birth
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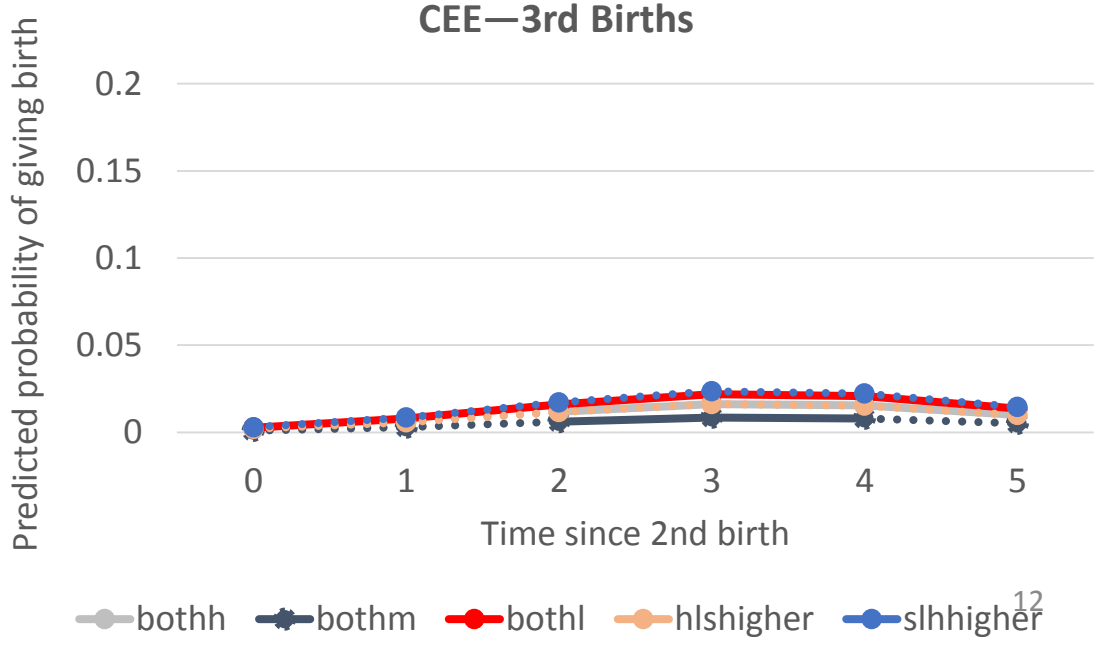
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0.1
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Time since 2nd birth
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Conclusions

- Pairings with one or two low educated partners: lowest 2nd and 3rd parity progressions compared to higher educated couples
- No differentiation between couples with one or two low educated partners in Europe beyond Nordic countries
- Nordic Countries: Evidence for resource pooling effects, lowest progression rates for couples with two low educated partners
- BUT: low case numbers (results reliable?--marginalized group?)

Thank you for your attention

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Contrasting Research Hypotheses—*Uncertainty Reduction*

- (Women) Individuals with limited labor market prospects might respond to labor market uncertainties by choosing the "alternative career" of mothers.
- "*For this group, nothing is lost by having children because they have no opportunity to succeed in the mainstream economy*." (McDonald 2000: 10)
- "*Therefore those in subgroups with the poorest prospects of successful careers are more likely to seek parenthood*." (Friedman et al. 1994: 385)
- UNCERTAINTY REDUCTION?

→ **It could be expected that *couples with two low educated partners may be the most likely to display accelerated birth transitions* as both partners may strife to reduce their joint rather high level of uncertainty**

Motivation

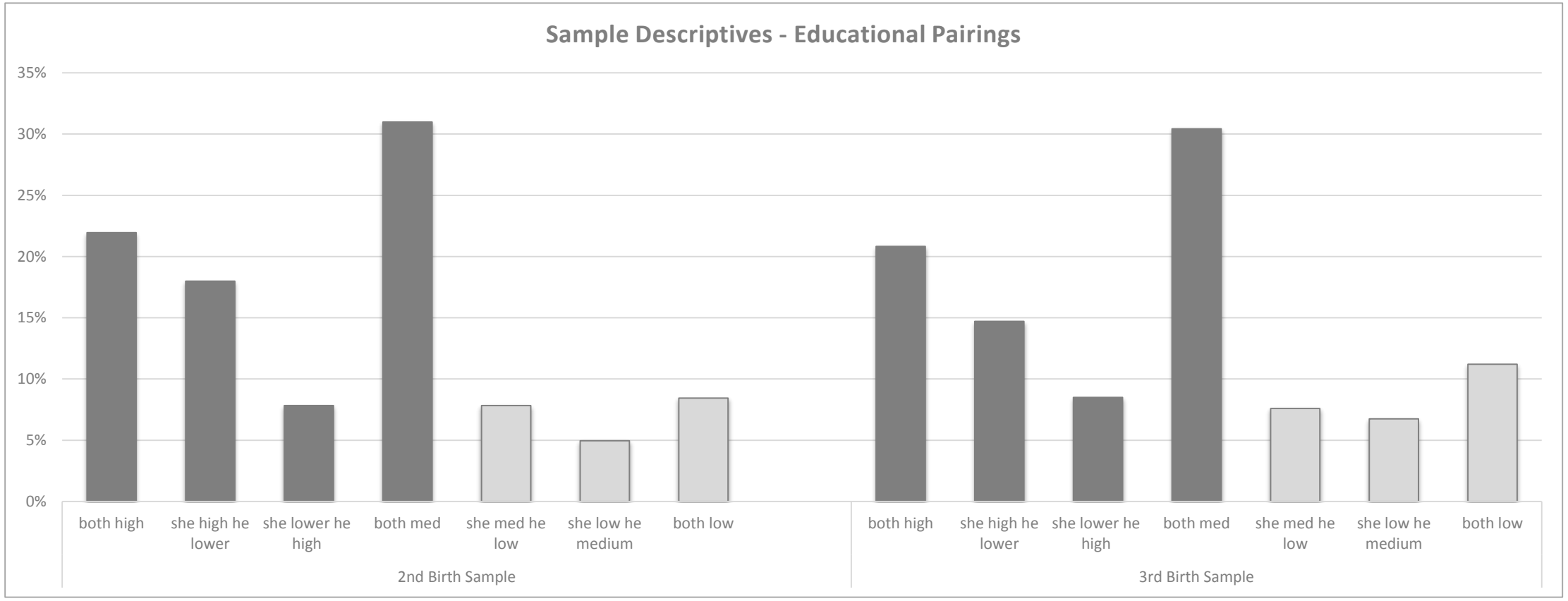
- Women outperforming men in participating in and completing in higher education

Figure 2.1 The Gender Gap in Tertiary Enrollment, by Country, 2012

Source: From "Women now a majority of tertiary level students in most countries," UNESCO Institute for Statistics, pp. 78–79 in *World Atlas of Gender Equality in Education* © UNESCO 2012. Reprinted with permission.

Source: DiPrete and Buchmann (2013)

Distribution of Educational Pairings…



SAMPLE – Distribution of Educational Pairings

COUNTRY	EDUC. PAIRINGS (in %) bothh	shhm	shhl	smhh	bothm	smhl	slhh	slhm	bothl	SAMPLE SIZE (no. of cases)
AT	8.7	6.76	0.39	12.27	50.95	3.84	1.01	11.38	4.7	2,575
BE&LU	22.93	10.34	2.81	6.82	21.52	9.68	2.07	7.93	15.91	4,061
CZ&SK	8.87	9.57	0.06	7.8	67.57	2.14	0.07	2.91	1.01	5,369
EE&LV&LT	14.09	19.54	1.5	6.45	42.56	7.08	0.38	4.29	4.1	7,018
ES	18.23	8.23	8.1	6.61	9.8	10.2	4.03	7.32	27.48	6,655
FI&DK	22.94	17.53	4.99	8.26	27.58	8.05	1.01	5.9	3.75	4,747
FR	20.98	14.11	2.93	7.43	28.96	8.51	1.18	10.04	5.87	4,820
IT	5.92	6.44	1.79	4.27	27.58	17.2	0.89	10.87	25.05	10,237
NL	20.43	11.56	2.2	11.26	25.19	10.96	1.6	8.56	8.23	3,001
NO	23.12	16.44	2.14	8.86	29.11	6.98	2.05	6.98	4.32	2,336
SE	23.31	18.38	1.55	7.11	34.53	8.56	0.87	3.43	2.27	2,068
SI	11.21	14.17	0.98	6.33	42.25	9.1	0.23	8.9	6.84	3,889
UK	24.68	15.79	1.82	12.82	33.51	5.04	0.82	2.83	2.69	2,083
Total	15.39	12.37	2.41	7.03	35.49	8.75	1.14	7.04	10.38	65,458