

# Childhood Mental Health Effects of Early-Life Exposure to a Parental Job Loss

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  - ▶ For the spouse: higher physical and mental health problems and mortality for the spouses (Gathmann et al., 2020; Bubonya et al., 2017; Bloemen et al., 2018) and more divorce (Eliason, 2012)

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  - ▶ For the spouse: higher physical and mental health problems and mortality for the spouses (Gathmann et al., 2020; Bubonya et al., 2017; Bloemen et al., 2018) and more divorce (Eliason, 2012)
- ▶ Chaotic environment with higher separation rates and more mental health problems of the parents are risk factors for mental health problems among children (Faraone et al., 2015; Marsh et al., 2020)

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- ▶ In general, causal research link between early-life circumstances and childhood mental health problems is scarce

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- ▶ We do not find similar effects for maternal job loss
- ▶ We provide evidence that income drop cannot explain our findings, and chaotic family environment is the likely pathway
- ▶ Our findings
  - ▶ Contribute to our understanding on job loss effects
  - ▶ Provide evidence that postnatal environment matters for future mental health status
  - ▶ Add to the limited understanding of missing middle years (Almond et al., 2018)

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- ▶ around 368,000 in the control group and around 34,000 in the treatment group for the maternal job loss

# Method

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- ▶ We run the following regression:

$$y_i = \alpha + \beta t_i + \gamma X_i + \theta E_i + \lambda S_i + \varepsilon_i \quad (1)$$

$X_i$  is a vector of basic characteristics (cohort of birth dummies, gender of the child, age of parents etc.)

$E_i$  includes employment information (dummies for the year of job loss, tenure of the dismissed parent, dummies for the size of the firm, dummies for sector of the firm etc.)

$S_i$  includes the socioeconomic status information of the household (salary of the dismissed parent before the job loss, average household income in the neighborhood etc.)

# Pre-trends

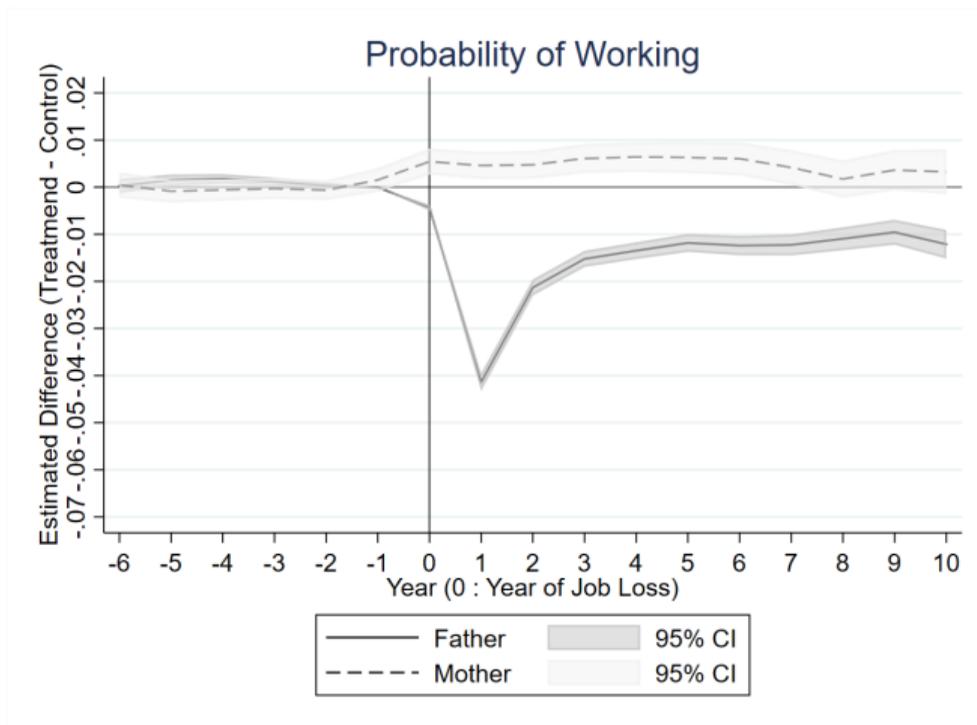


Figure: Paternal Job Loss

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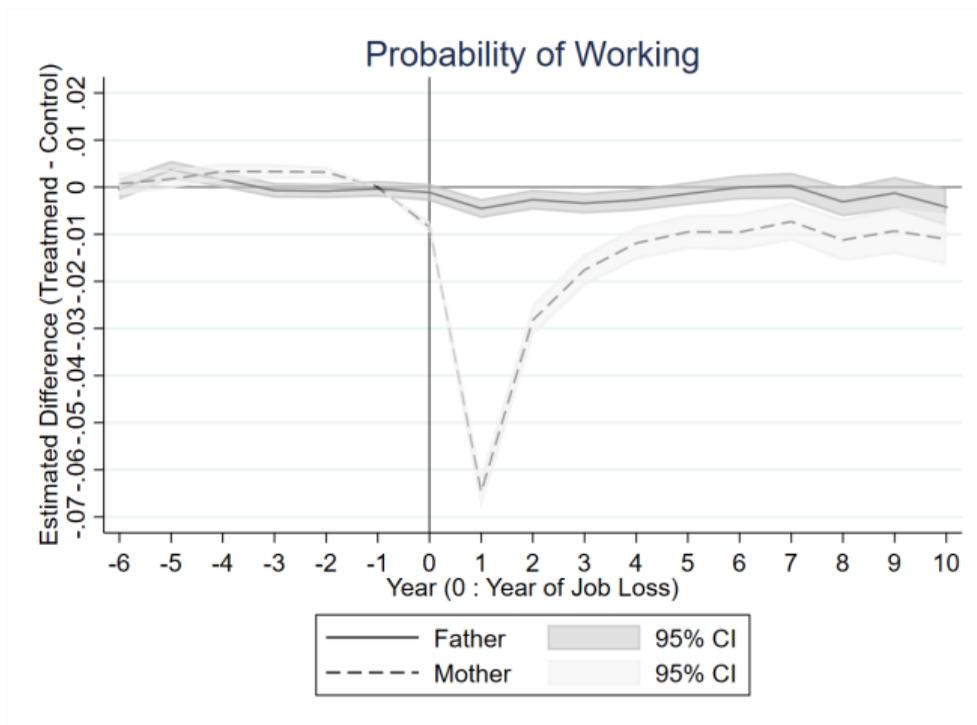


Figure: Maternal Job Loss

# Baseline Results: Mental Health Medications

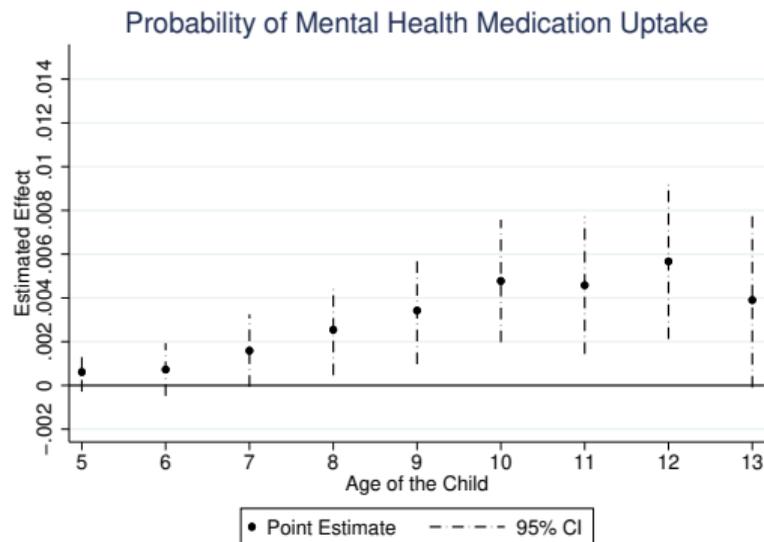


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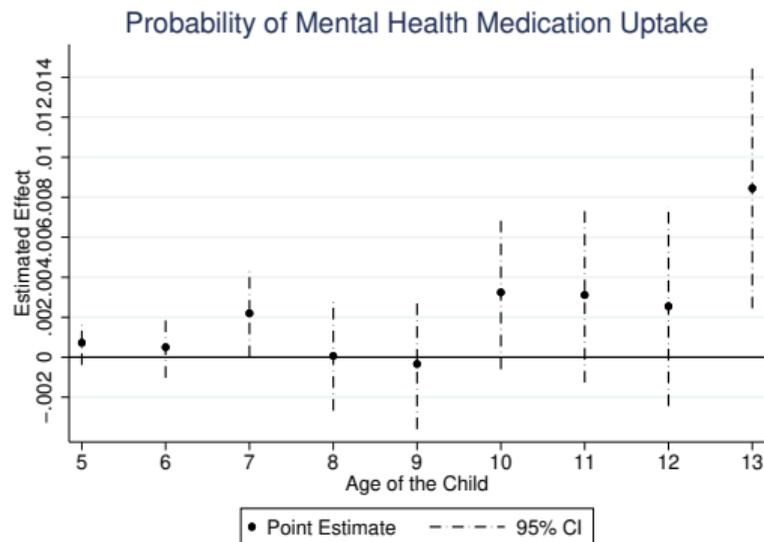


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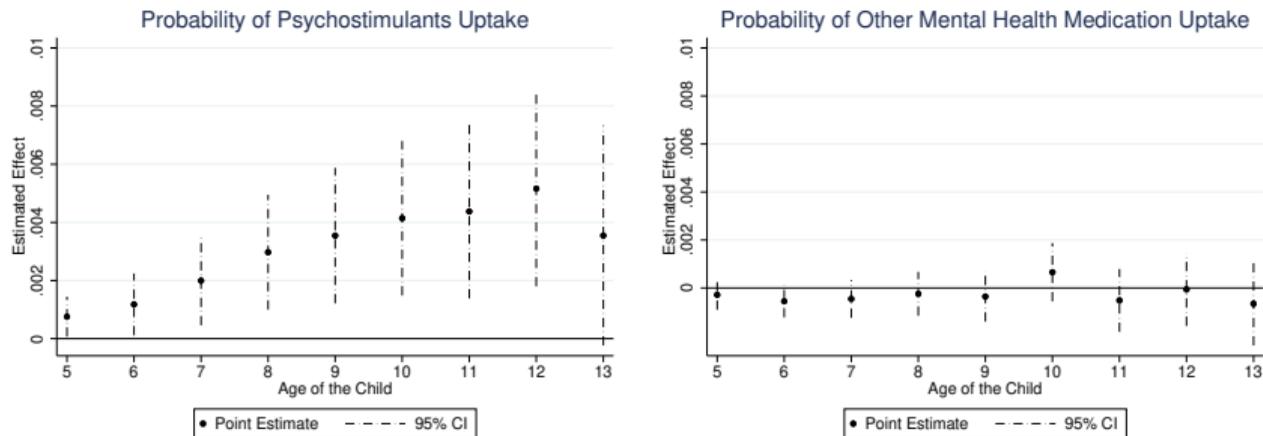


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- ▶ Different criteria for the sample (different firm sizes, different tenure)
- ▶ Using non-linear methods
- ▶ Placebo regression
  - ▶ Treatment children: they will face a parental job loss in the future. Control: constructed in the same way.
  - ▶ This show pre-existing differences

# Robustness Checks, Placebo

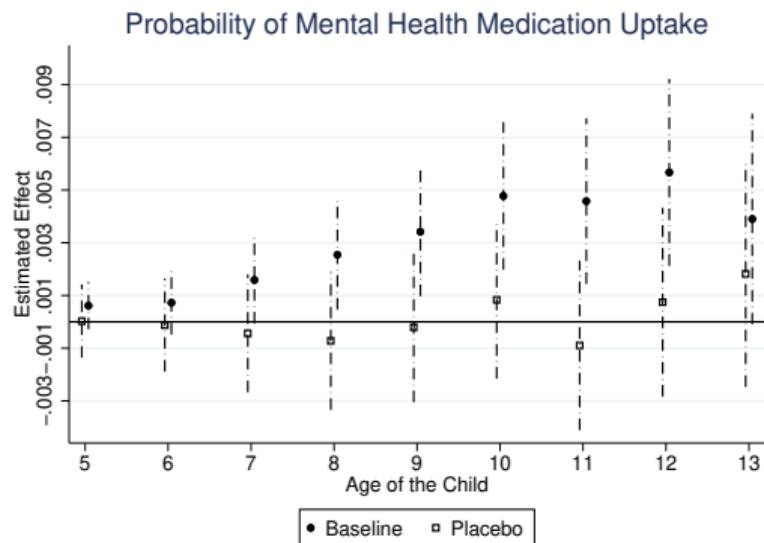


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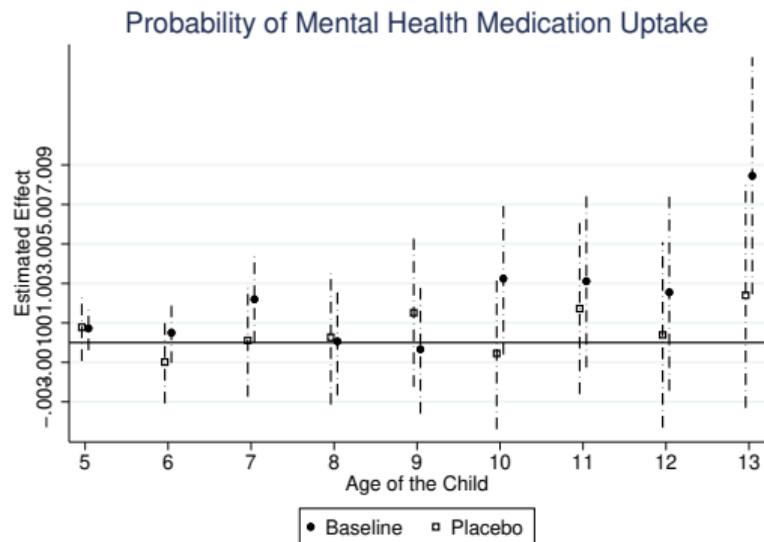


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- ▶ Health care is free for the minors, and there are protective rules to support the households against (income) effects of job loss
- ▶ We split the sample by the main breadwinner of the household before the job loss
  - ▶ The income shock for the household is smaller when the breadwinner is the spouse
  - ▶ Bertrand et al. (2015) shows that mixed-gender relationships with higher income gaps (female-male) are less stable, and in those relationships, satisfaction indicators are lower. Foster and Stratton (2018) also note similar findings.

# Mechanisms: Income Drop

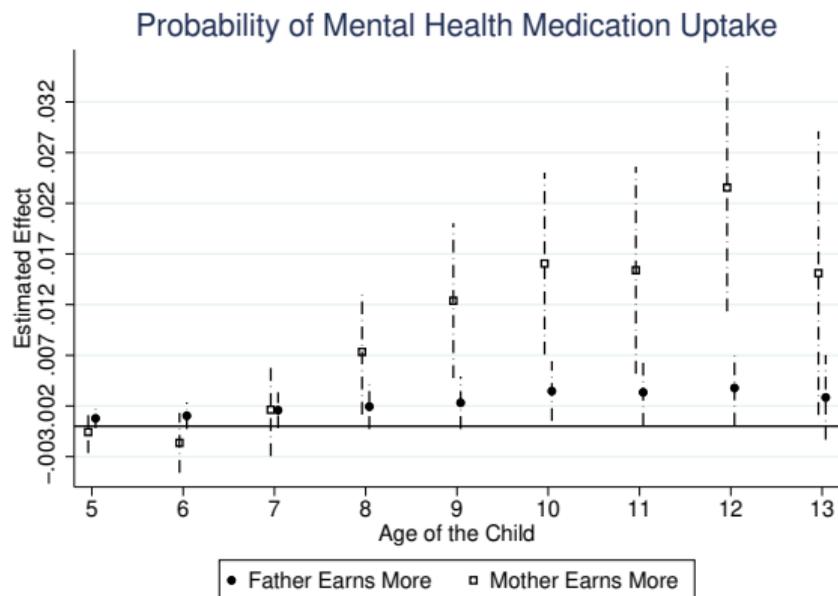


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- ▶ We use parents separation as a proxy for chaotic family environment. However, depending on the context not always relationship dissatisfaction translates into separation Foster and Stratton (2018).

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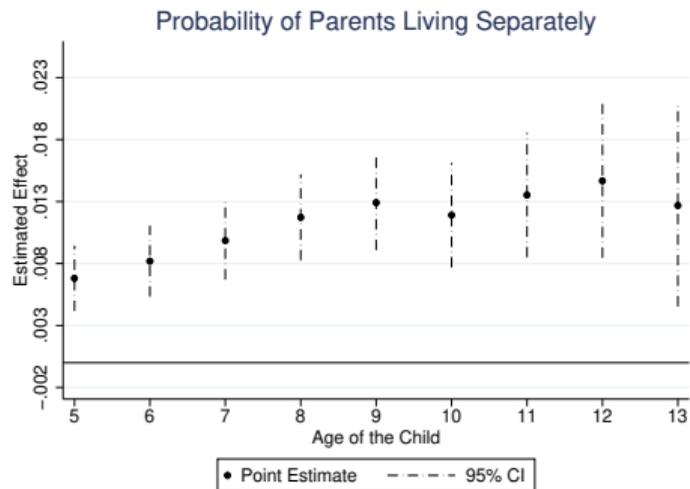


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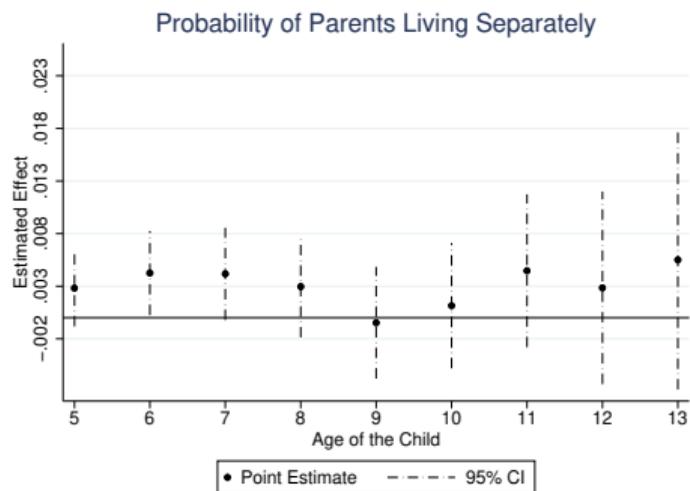


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  - ▶ Actual behavioral changes of the parents
- ▶ We focus on education performance of the children as mental health problems and especially ADHD is correlated with worse school performance (Currie and Almond, 2011).
- ▶ We provide evidence that children experienced early-life paternal job loss perform worse in their education later in high school

# Conclusion

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- ▶ Our findings are in line with the findings in job loss literature that job loss effects are gender specific.
- ▶ We find evidence that the income drop channel is not a likely reason to explain our findings
- ▶ Our findings
  - ▶ Contribute to our understanding on job loss effects
  - ▶ Provide evidence that postnatal environment matters for future mental health status
  - ▶ Help to understand the missing middle mechanisms to adulthood outcome

# Appendix: Baseline Results: Summary stats, Maternal

Table 2: Maternal Job Loss, Summary Statistics

	Control Group		Treatment Group		Standardized Bias
	N	Mean (SD)	N	Mean (SD)	%
Child Gender (1=Female)	368490	0.49 (0.50)	33986	0.49 (0.50)	0.0
At the Time of Job Loss					
Age of the Child	368490	2.64 (1.48)	33986	2.62 (1.45)	-1.4
Age of the Father	368490	35.11 (5.37)	33986	34.67 (5.20)	-8.2
Age of the Mother	368490	32.47 (4.62)	33986	32.10 (4.51)	-8.0
Immigrants Parent	368490	0.17 (0.38)	33986	0.14 (0.35)	-7.9
Birth Order	368490	1.65 (0.76)	33986	1.62 (0.74)	-4.0
Tenure of the Mother	368490	6.28 (4.63)	33986	7.02 (4.4)	16.0
Dissolved Contract					
Includes UI	368490	0.99 (0.11)	33986	0.99 (0.09)	0.0
Includes DI	368490	0.99 (0.11)	33986	0.99 (0.10)	0.0
Three Years Before the Job Loss					
Father's Salary (€)	368490	32021 (25918)	33986	31424 (22158)	-2.3
Mother's Salary (€)	368490	20888 (16791)	33986	19494 (12900)	-8.4
Father is Working	368490	0.94 (0.22)	33986	0.95 (0.19)	4.6
Mother is Working	368490	0.90 (0.27)	33986	0.93 (0.22)	11.3
Neighborhood Mean Income	368490	31090 (5669)	33986	30794 (5313)	-5.3
Parents Living Together	368490	0.88 (0.32)	33986	0.88 (0.33)	0.0

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Child Gender (1:=Female)	767135	0.49 (0.50)	55874	0.49 (0.50)	0.0
At the Time of Job Loss					
Age of the Child	767135	2.72 (1.46)	55874	2.69 (1.43)	-2.1
Age of the Father	767135	34.86 (5.29)	55874	34.54 (5.35)	-6.0
Age of the Mother	767135	32.2 (4.76)	55874	31.77 (4.78)	-9.0
Immigrants Parent	767135	0.18 (0.39)	55874	0.20 (0.40)	5.1
Birth Order	767135	1.77 (0.90)	55874	1.78 (0.93)	1.1
Tenure of the Father	767135	6.69 (5.22)	55874	7.09 (4.95)	7.7
Dissolved Contract					
Includes UI <sup>25</sup>	767135	0.98 (0.14)	55874	0.99 (0.11)	7.2
Includes DI <sup>26</sup>	767135	0.98 (0.14)	55874	0.99 (0.12)	7.2
Three Years Before the Job Loss					
Father's Salary (€)	767135	36019 (32361)	55874	33405 (24993)	-8.2
Mother's Salary (€)	767135	15918 (14562)	55874	15045 (13992)	-6.0
Father is Working	767135	0.96 (0.17)	55874	0.96 (0.16)	0.0
Mother is Working	767135	0.76 (0.40)	55874	0.75 (0.41)	-2.5
Neighborhood Mean Income	767135	30882 (5493)	55874	30255 (5294)	-11.4
Parents Living Together	767135	0.9 (0.31)	55874	0.88 (0.32)	-6.4

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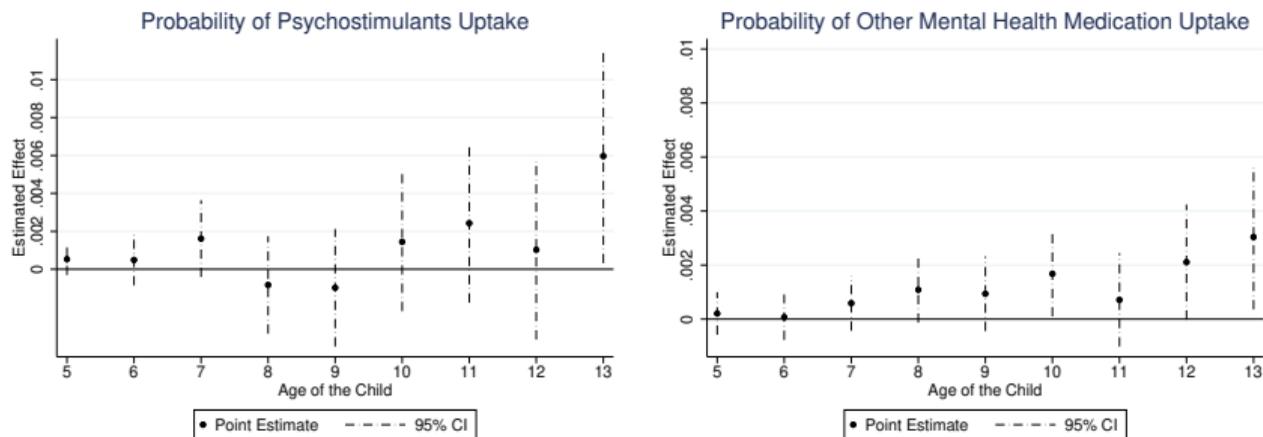


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# Appendix: Mechanisms: Income Drop

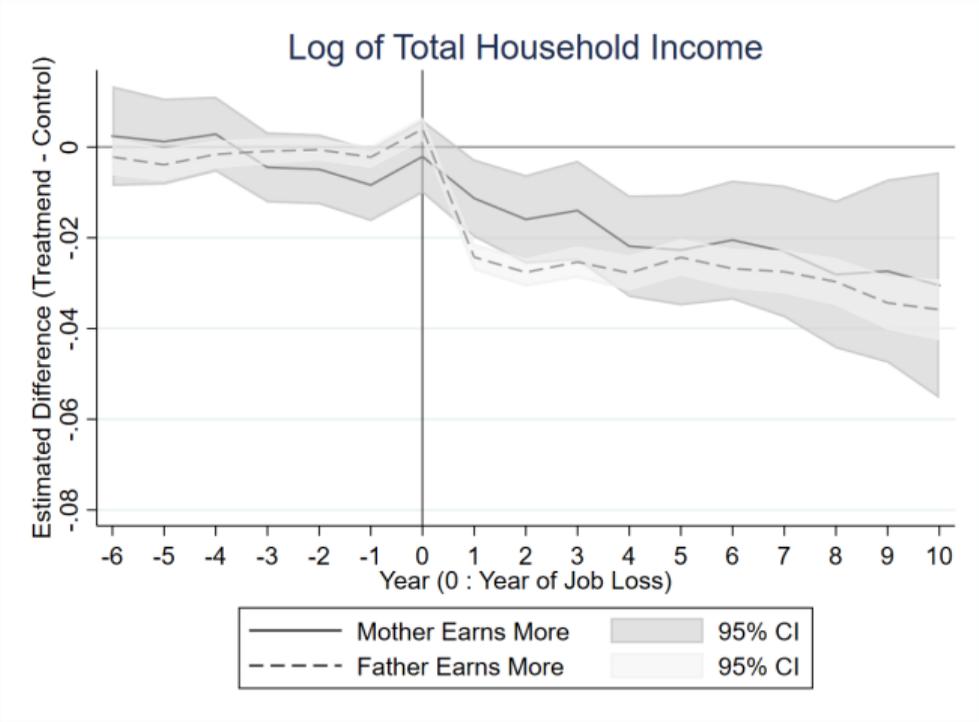


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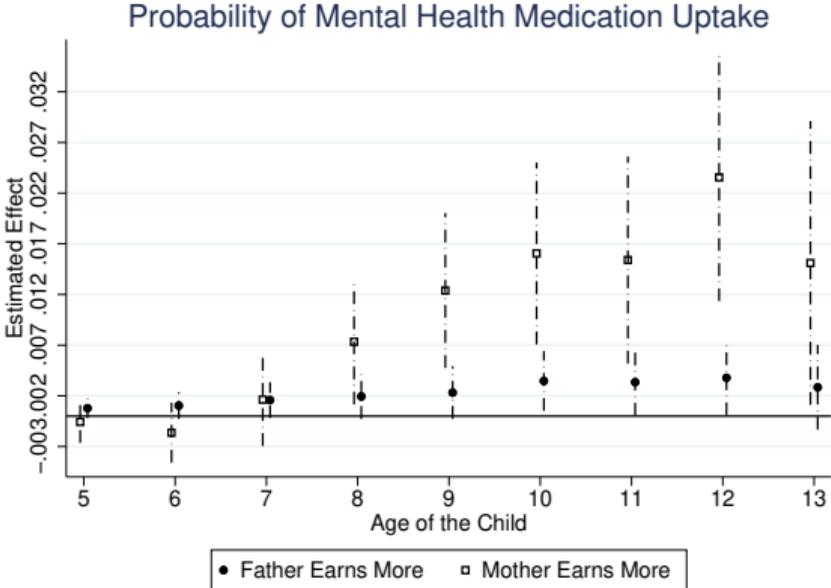


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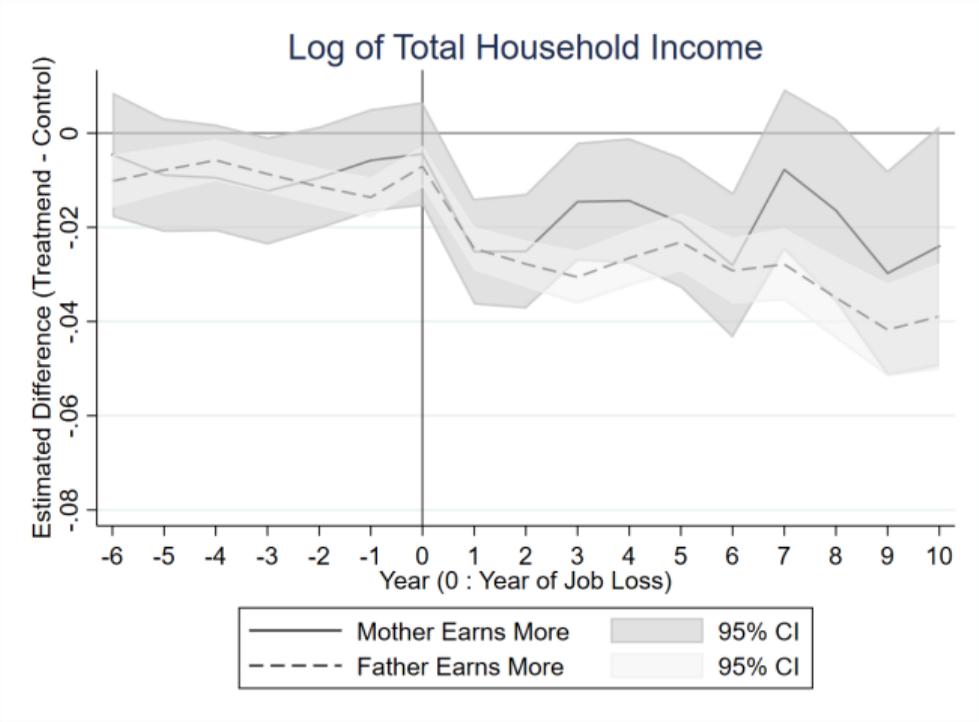


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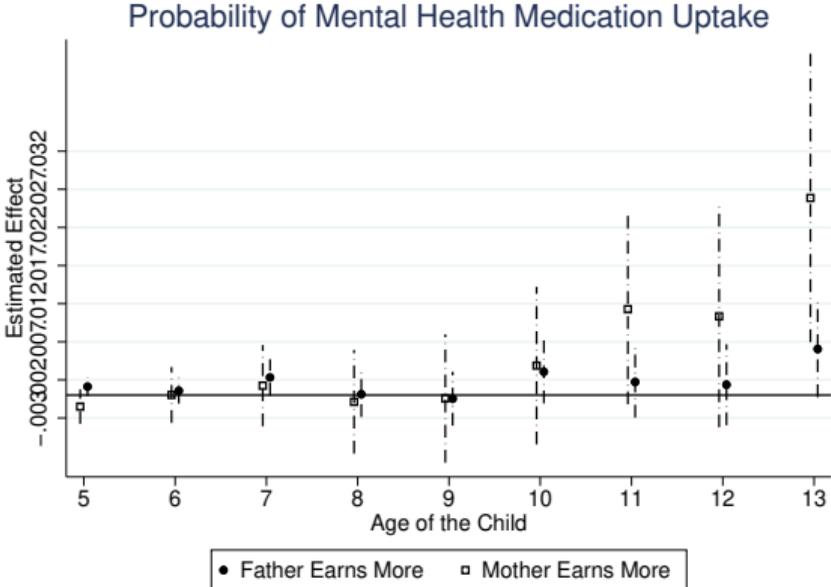


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# Appendix: Separation by Main Breadwinner

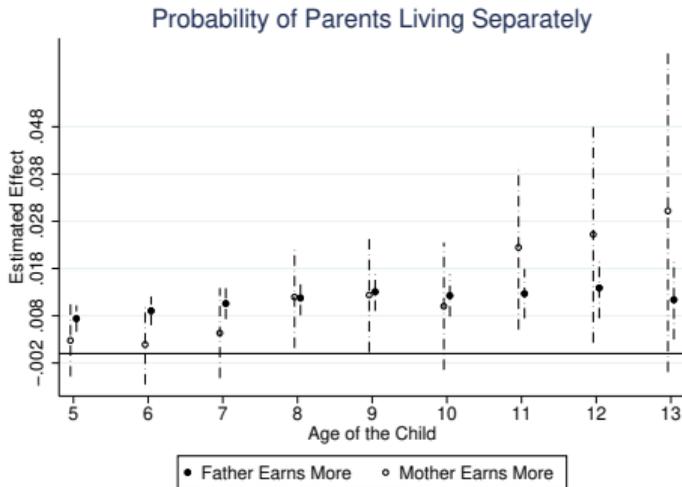


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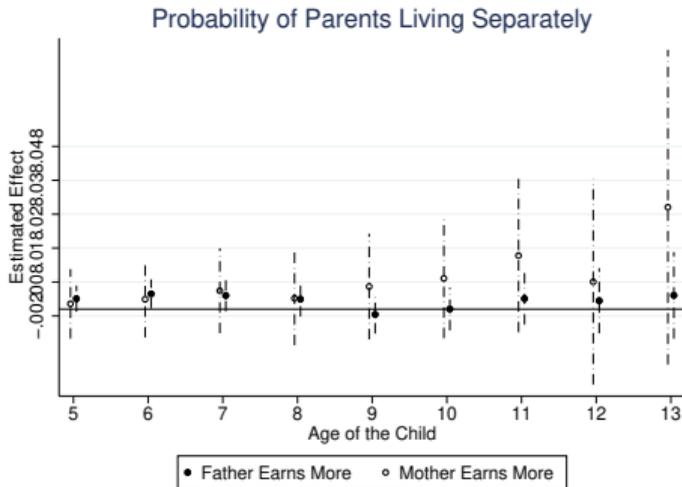


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# Appendix: Neighborhood Mobility

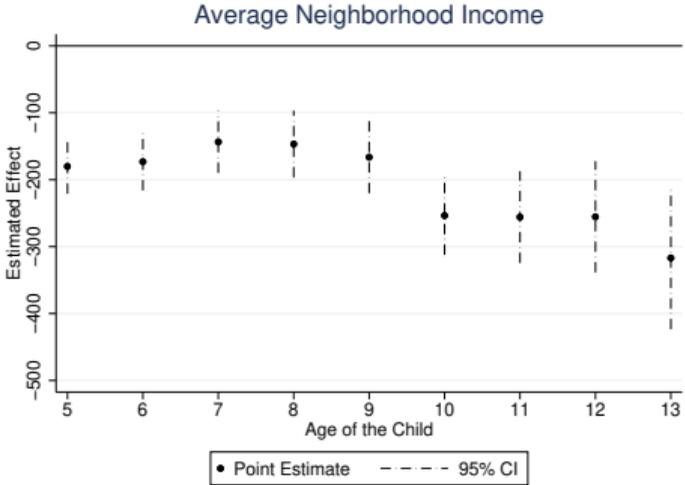


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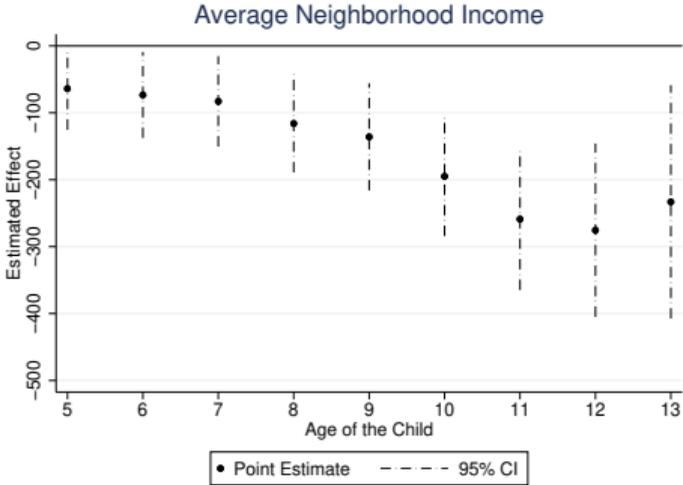


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# Appendix: More (Mis)diagnosis?

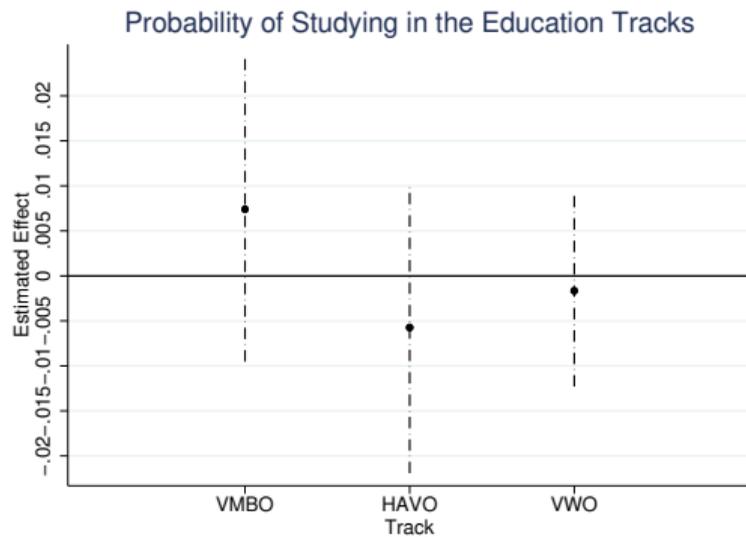
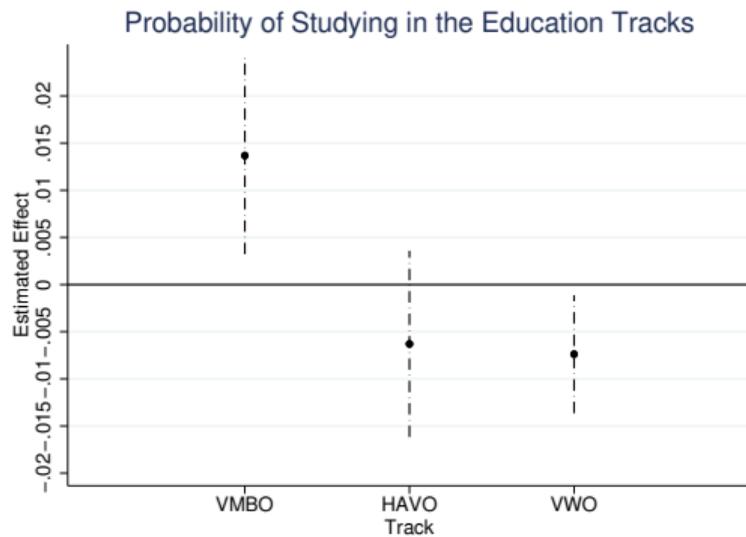


Figure: Paternal Job Loss (left) vs Maternal Job Loss (right)

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