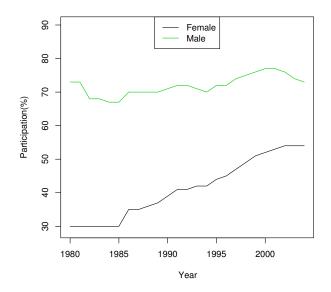
Female labour supply and time use

David Vonka

20.11.2007

・ロト ・母・ ・ヨ・ ・ヨ・ ・ もくの



- Where does the extra working time come from ?
- Q General picture of female time use
- How does non-parental childcare interact with timeuse ?

David Vonka	Female labour supply and time use

- Literature review
- Data (and its limitations)
- Empirical results

David Vonka Female labour supply and time use

▲□▶ ▲圖▶ ▲圖▶ ▲圖▶

 $\mathcal{O} \mathcal{Q} \mathcal{O}$

₹

- Aguiar-Hurst(2006)
- Hamermesh, Pfann(2004)
- Ichino, Galdeano(2006?)
- Bianchi(2000)
- Bryant, Zick(1996)
- Ruhm (2004)
- Folbre, Yoon (2007)

David Vonka Female labour supply and time use

▲□ ▶ ▲ □ ▶ ▲ □

うへで

Data (and its limitations)

- TBO in 1980,85,90,95 and 2000. 14453 people aged 12+.
- Only one in a family !
- diary + background information.
- Wealth and income information missing. Education available.
- No "with whom" info. Very little "secondary activity" info.
- ... but observed in 7 days.
- Therefore no structural model

Image: A D David Vonka
Female labour supply and time use

- We only include grown-ups (20-55 yo) living in a couple and having a child(<18yo) at home.
- Define three groups: working mothers, stayhome mothers and fathers.
- Activities: formal work, household work, personal time, studying, active time with children and passive time with children

	▲□▶▲□▶▲콜▶▲콜▶ ▲콜▶ ▲ 콜 ∽)♀(3	r -
David Vonka	Female labour supply and time use	

	Working mothers	Stayhome mothers	Fathers
Formal work	19,2 ↑		38,5 ↑
Housework	20,4↓	27,2↓	7,9 🛟
Personal	50,1 ‡	53,5 ‡	47,6 ‡
Act childcare	1,9 ↑	2,7 ↑	1,2 ‡
Pas childcare	4,8 ↑	7,4 1	1,6 ↑
Free time	22,4 ↓	27,9 ‡	21,8↓
Studying	1,2 ‡	1,2 ‡	1,4 1
Nr. of kids	1,9↓	2,1 ‡	2,0 💲
Δ Education	1,5	1,2	1,4
Sample size	1014	1748	1813

- **Dependent vatiable:** Time spent in activity A during the 5 working days
- Independent variables: Year dummies, age, age², working time, partner's working time, kids <3yo dummy, kids 4-12yo dummy, 2 kids dummy, 3+ kids dummy, education level dummies.
- OLS & Tobit



	Work	U	Fath	ers
	moth	ers		
Housework	25	\downarrow	18	7
Personal	11	9	$14,\!5$	
Act childcare	2	1	1,4	1
Pas childcare	5,4	Ĵ	4,4	1
Free time	15		20	Ч
Studying	1,5	î	2	

・ ・ ・ ・ ・ ・ ・ ・ ・ ・ 注 ・ ・ 注 ・ ・ 注 ・ ク へ (や
David Vonka
Female labour supply and time use

- Personal needs
 - Year effects: Every five years an hour less of personal care for working people.
 - Negative effects of many and/or small children (ca 1.5 hour)
- 2 Housework time
 - Small children lead to less housework
 - More children lead to more housework
 - Education leads to much less housework. No year effects.
 - Men have a positive time trend, negative effect of more children. No effect of education.

I Free time

- -1.5h per kid. -5h for small kids. -2h for 4-12yo.
- Men's free time decreased when their spouses worked in the 80's. Higher education leads to less free time. Negative effect of small children. Negative trend.

David Vonka	Female labour supply and time use

	g1TOT	g180	g190	g100	g2TOT	g3TOT
Work	-0,0414 [*]	-0,0344 [*]	-0,0425 [*]	-0,0564 [*]	0(0)	-0,0419 [*]
Work(p)	0,0238 (0.0215)	0,0299 (0.0366)	-0,00908 (0.0298)	0,0696 (0.0567)	-0,0190	-0,0234. (0.0135)
kid<3	$3,72^{*}$	$3,41^{*}_{\scriptscriptstyle{(0.559)}}$	$3,68^{*}_{(0.446)}$	3,56 [*] (0.772)	3,74 [*] (0.297)	$3,12^{*}_{(0.253)}$
kid 4-12	2,74 [*] (0.255)	2,37 [*] (0.432)	3,02 [*] (0.364)	2,23 [*] (0.627)	2,77 [*] (0.254)	$2,19^{*}$
2 kids	$0,502^{*}$	$\underset{\scriptscriptstyle(0.316)}{0,464}$	$0,574^{*}$	$\underset{\scriptscriptstyle(0.451)}{0,493}$	0,425 [*] (0.166)	$0,492^{*}$
3+ kids	0,276 (0.240)	0,139 (0.42)	0,239 (0.33)	0,809 (0.589)	0,0982 (0.201)	0,0226 (0.179)

Active child care

By stayhome mothers and men: increases with education

David Vonka

Female labour supply and time use

《曰》《卽》《臣》《臣》

æ

 $\mathcal{O}Q(\mathcal{O})$

Passive child care

	g1TOT	g180	g190	g100	g2TOT	g3TOT
Work	$-0,120^{*}_{\scriptscriptstyle{(0.0139)}}$	$-0,119^{*}_{\scriptscriptstyle{(0.0216)}}$	$-0,119^{*}$	$-0,129^{*}$	0 (0)	$-0,0795^{*}_{\scriptscriptstyle{(0.00529)}}$
Worp(p)	0,0136 (0.0428)	0,0151 (0.0694)	0,00867 (0.0635)	0,0190 (0.102)	$\underset{\scriptscriptstyle(0.196)}{0,116}$	$-0,0636^{*}_{\scriptscriptstyle{(0.0218)}}$
kid<3	9,86 [*] (0.646)	7,81 * (1.07)	$10,5^{*}_{(0.961)}$	$10.6^{*}_{\scriptscriptstyle (1.44)}$	$11,4^{*}_{(0.699)}$	4,58 * (0.399)
kid 4-12	5 ,7 [*] (0.528)	4,19 [*] (0.852)	$6,02^{*}$	$7,16^{*}_{\scriptscriptstyle{(1.21)}}$	$5,41^{*}$	2,28 [*] (0.357)
2 kids	0,998 * (0.372)	$\underset{\scriptscriptstyle(0.606)}{0,163}$	$1,73^{*}_{\scriptscriptstyle{(0.555)}}$	0,314	0,854 [*] (0.387)	0,551 [*] (0.235)
3+ kids	$1,13^{*}_{(0.477)}$	0,439	$1,77^{*}_{(0.694)}$	0,202 (1.08)	$1.79^{*}_{\scriptscriptstyle{(0.468)}}$	$1,16^{*}_{(0.278)}$
edu5	$1,78^{*}_{\scriptscriptstyle (0.715)}$	$2,78^{*}_{\scriptscriptstyle (1.00)}$	0,32 (1.26)	2,63 (2.82)	3,94 * (0.634)	2,30 [*] (0.38)
eduб	2,54 [*] (0.926)	2,96. (1.54)	1,83 (1.49)	1,29 (3.2)	7,6 [*] (1.67)	3,3 [*] (0.49)

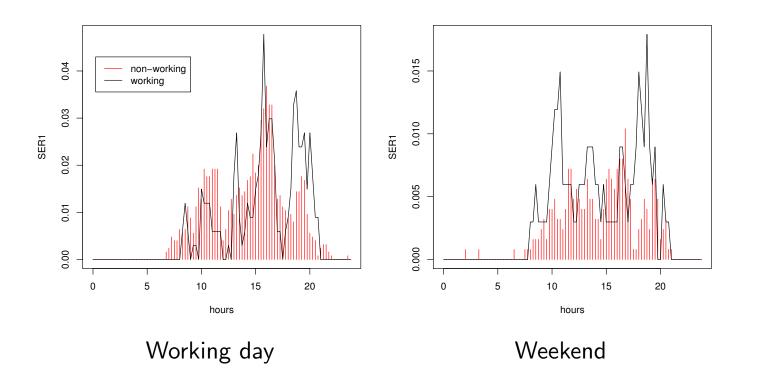
▲□▶▲□▶▲□▶▲□▶ □ のへで

David Vonka

Female labour supply and time use

ne use

Distribution of parental childcare over week



David Vonka	Female labour supply and time use	
	<□> <□> <□> <□> <三> <三> <三> <三> <三	~ ~ ~

	Work	Hshld	Personal	Free	Active	Passive
		work	needs	time	childcare	childcare
aftern'n	$\substack{-0,267\\ (0.189)}$	0,536* (0.102)	-0,146. (0.073)	0,586* (0.113)	0,284* (0.076)	$-0,186^{*}$
sex	-5,6* (0.633)	2,31* (0.223)	0,627* (0.230)	1,52* (0.261)	$1,00^{*}$	1,25* (0.183)
childc'e	0,024 (0.299)	-0,033 (0.208)	0,0238 (0.139)	-0,367 (0.238)	-0,207 (0.170)	0,356* (0.136)
age	$1,38^{*}$	0,268* (0.11)	-0,123	-0,211.	0,0328 (0.0886)	0,101 (0.09)
age ²	$-2,05^{*}$	-0,376. (0.185)	0,171 (0.203)	0,358. (0.207)	-0,0134	-0,130 (0.152)
fem∙chc	3,79* (0.413)	$-1,08^{*}$	-0,775* (0.173)	$-0,591^{*}$	$-0,531^{*}$	-0,577*
σ_ϵ	2,21*	1,24*	$0,911^{*}$	1,31*	0,773*	0,767*
σ_{lpha}	2,23*	0,626*	0,829*	0,766*	0,529*	0,574*
% > 0	54 %	57 %	60 %	48 %	31 %	51 %

▲ □ ▶ ▲ 三 ▶ ▲ 三 ▶ æ うへつ < □ ▶

David Vonka

Female labour supply and time use

- Female labour supply is mainly compensated by housework and free time
- ... but still work has a negative effect on time spent actively with children
- ... and this negative effect has intensified over time
- Nonparental childcare correlates positively only with formal labour. Other activities are supressed.

