



Growing Diversity in Couples' Employment Models During the COVID-19 Pandemic in Austria

Caroline Berghammer and Bernhard Riederer

Department of Sociology, University of Vienna Wittgenstein Centre (IIASA, OeAW, University of Vienna), Vienna Institute of Demography, Austrian Academy of Sciences

> CES 2023, Reykjavik/Iceland June 27, 2023



COVID-19 had multiple effects: Catalyst for more traditional gender roles?

(e.g., Bujard et al. 2020; Collins et al. 2021; Cook and Grimshaw 2021; Hipp and Bünning 2020)

Mixed evidence: Larger decrease in employment hours among women or not?

+ US, Canada, UK, Israel

(US: Collins et al. 2021; Fan and Moen 2022; Canada: Fuller and Qian 2021; UK: Hupkau and Petrongolo 2020; Israel: Kristal and Yaish 2020)

- Germany, Italy, Austria

(Germany: Knize et al. 2021; Italy: Brini et al. 2021; Austria: Steiber et al. 2022)



COVID-19 had multiple effects: Catalyst for more traditional gender roles?

Mixed evidence: Larger decrease in employment hours among women or not?

- + US, Canada, UK, Israel
- Germany, Italy, Austria

Theory

Gender role theory (e.g., Collins et al. 2021; Eagly and Wood 2016; Geist and Ruppanner 2018) Resource/bargaining approaches (e.g., Agarwal 1997; Lachance-Grzela and Bouchard 2010)



COVID-19 had multiple effects: Catalyst for more traditional gender roles?

Mixed evidence: Larger decrease in employment hours among women or not?

- + US, Canada, UK, Israel
- Germany, Italy, Austria

Theory

Gender role theory (e.g., Collins et al. 2021; Eagly and Wood 2016; Geist and Ruppanner 2018) Resource/bargaining approaches (e.g., Agarwal 1997; Lachance-Grzela and Bouchard 2010)

Welfare state regime/context (e.g., Esping-Andersen 1990; Petts et al. 2023)



COVID-19 had multiple effects: Catalyst for more traditional gender roles?

Mixed evidence: Larger decrease in employment hours among women or not?

- + US, Canada, UK, Israel
- Germany, Italy, Austria

Theory

Gender role theory (e.g., Collins et al. 2021; Eagly and Wood 2016; Geist and Ruppanner 2018) Resource/bargaining approaches (e.g., Agarwal 1997; Lachance-Grzela and Bouchard 2010)

Welfare state regime/context (e.g., Esping-Andersen 1990; Petts et al. 2023)

Couple level: decline in dual earners, increase in female main workers (Italy: Brini et al. 2021; UK/US: Qian and Hu 2021)

only two studies; longitudinal perspective missing



Austria

PRE COVID

Conservative welfare state regime

Institutional characteristics and cultural attitudes foster part-time work (Berghammer and Schmidt 2019, Riederer and Berghammer 2020)

Almost half of Austrian couples with children below age 15 male full-time/female part-time model (Statistics Austria 2020)



Austria

PRE COVID

Conservative welfare state regime

Institutional characteristics and cultural attitudes foster part-time work (Berghammer and Schmidt 2019, Riederer and Berghammer 2020)

Almost half of Austrian couples with children below age 15 male full-time/female part-time model (Statistics Austria 2020)

DURING THE PANDEMIC

Reduced working hours due to unemployment and <u>short-time work</u> (Steiber et al. 2021; Vogtenhuber and Steiber 2021)

Flexibility and double-burden due to working from home (Berghammer 2022)

Women more frequently in <u>critical occupations</u>, but also in those that closed during lockdowns (Bock-Schappelwein et al. 2021; Bock-Schappelwein and Mayrhuber 2020)



Research Questions

How has the distribution of couples' employment arrangements changed?

How did employment arrangements change on a couple level during the first lockdown in spring 2020 compared to the months before?

Which couple characteristics played a role?

Data and Methods

Austrian Microcensus 2019 and 2020 (22,500 households) Focus on heterosexual couples with co-resident children < 15 Persons in main working age (25-54) Multinomial logistic regression models



Analytic Strategy

Actual working hours, not contracted or usually worked hours

Couple's Employment	Male partner	Female partner		
Male sole worker	Full-/part-time Not employed			
Male main worker	Full-time (36+ hrs/week)	Part-time (1-35 hrs/week)		
About equal	Both either full-time, part-time, or not working			
Reversed roles	Female partner more hours per week than male partner			

Time series: January 2019 to December 2020

Compare spring 2019 and spring 2020 (first lockdown)

Panel component: changes between the time before and during the lockdown

Family characteristics, educational/occupational characteristics, controls



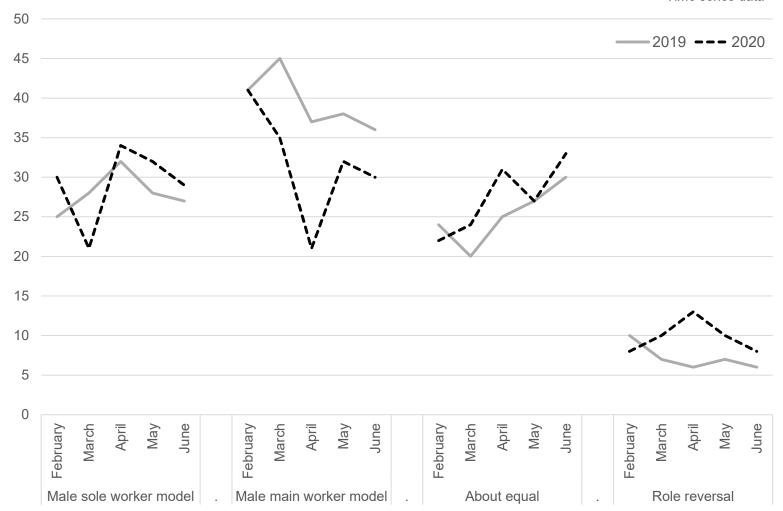
Findings (1)



Average weekly working time among couples with children below age 15 in Austria in 2019 and 2020 by gender (both partners age 25-54)

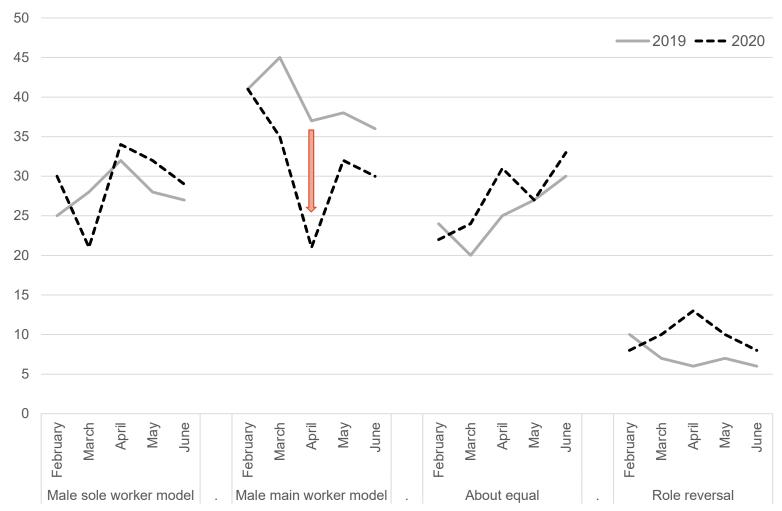
Findings (2)





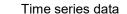
Findings (2)

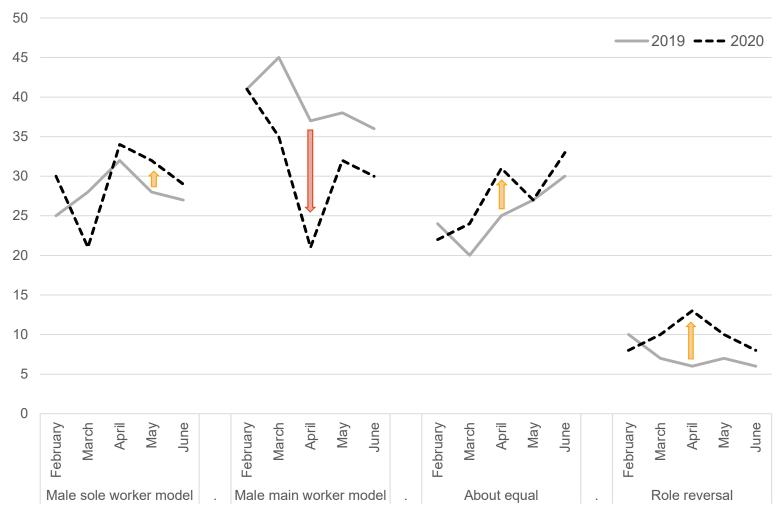




• Strong decrease of male main worker model (16 ppt.)

Findings (2)

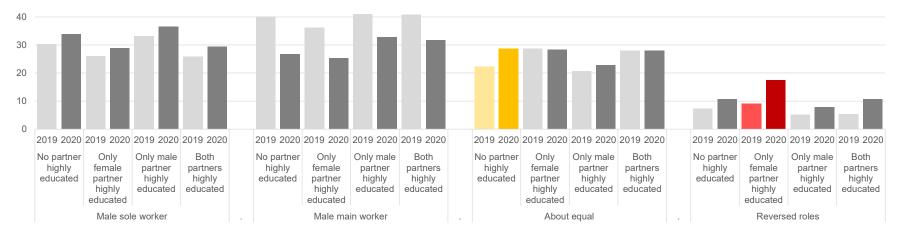




- Strong decrease of male main worker model (16 ppt.)
- About equal and role reversal increasing an; but also male sole worker model
 → temporary polarization

Findings (3)

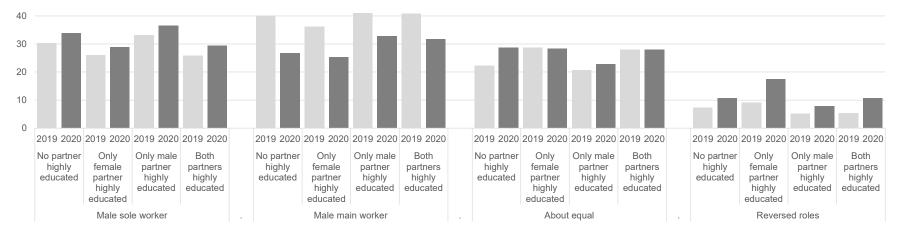
Time series data March-May (pooled) 2019 vs. 2020



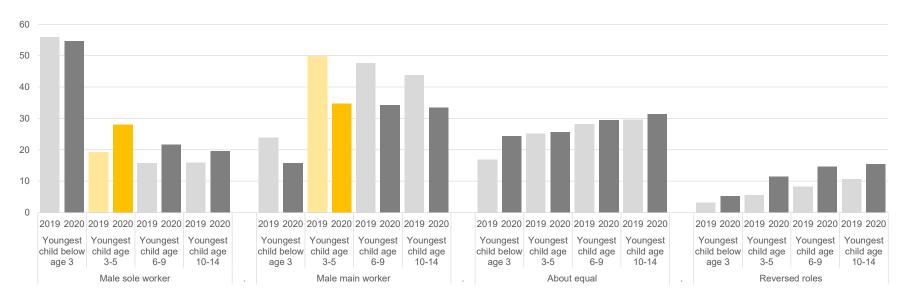
• Lower education: about equal (short-time work), highly educated female: role reversal

Findings (3)

Time series data March-May (pooled) 2019 vs. 2020



• Lower education: about equal (short-time work), highly educated female: role reversal

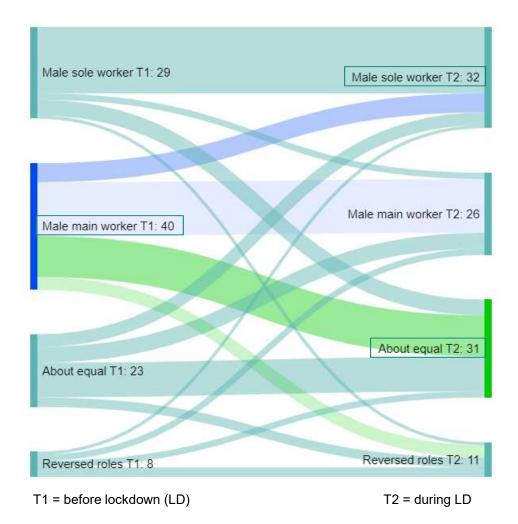


 both decline of male main worker and increase of male sole worker stronger among parents of "kindergarten kids" (age 3-5) / closed childcare facilities

Panel analysis



Findings (4)



Changes in the division of employment within couples with children below age 15 from before (T1) to the first lockdown (T2) in Austria (Share of employment models in %)

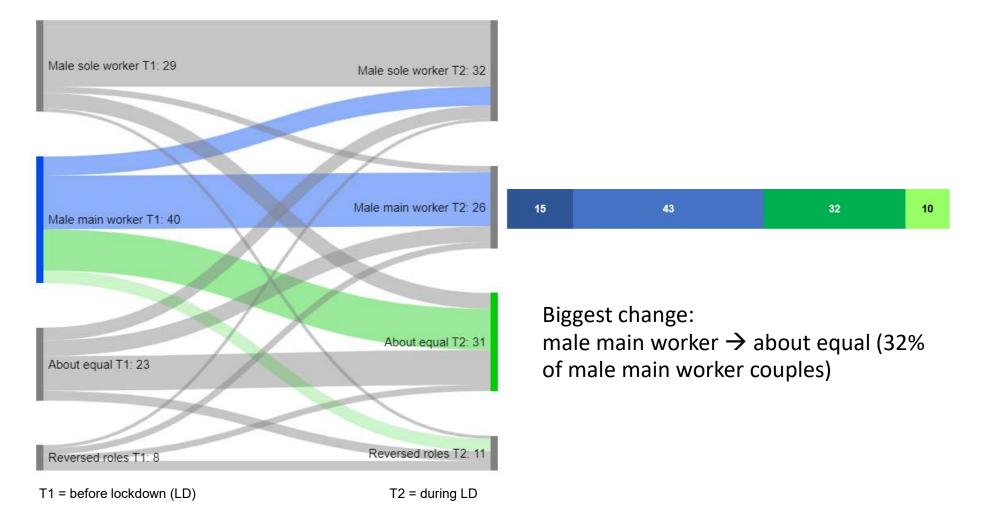
Male main worker model no longer dominant

 $(\rightarrow \text{polarization?})$



Panel analysis

Findings (4)





Findings (4)

Change traditional model \rightarrow egalitarian model

- average working time of men decreases significantly (23.5 hours/week)
- average working time of women remains almost unchanged
- male partner long part-time (21-35 hrs/week), female partner short part-time (max. 20 hrs/week), in which only the male partner or both show a decrease in working hours

More detailed:

- male sole worker → "about equal": mainly reduction in working hours of men (increases among women are rare)
- male main worker \rightarrow "about equal": reduction of average working time larger among men than women

Change egalitarian model \rightarrow traditional model

 "about equal" → male main worker: average working time of men even increased whereas average working time of women slightly decreased



Findings (5) / Change in multinomial logistic regression

Male sole worker more likely if

- Young children
- Lower education
- His income higher than hers

 male sole worker less likely if both partners in critical occupations and working from home



Findings (5) / Change in multinomial logistic regression

Male sole worker more likely if

- Young children
- Lower education
- His income higher than hers

About equal more likely if

- Lower educated parents
- Specific occupations (e.g., office clerks)
- Other adults in the same household

 male sole worker less likely if both partners in critical occupations and working from home

Role reversal more likely if

- Older children
- Living in cities
- Higher education
- Her income higher than his
- Woman in critical occupation



Findings (5) / Change in (multinomial) logistic regression

Male sole worker more likely if

- Young children
- Lower education
- His income higher than hers

About equal more likely if

- Lower educated parents
- Specific occupations (e.g., office clerks)
- Other adults in the same household

Stability higher in couples

- with children below age 3
- with highly educated male partner

 male sole worker less likely if both partners in critical occupations and working from home

Role reversal more likely if

- Older children
- Living in cities
- Higher education
- Her income higher than his
- Woman in critical occupation



Summary & Conclusion

- (1) Male main worker model dominant before lockdown
- (2) In lockdown (temporary) polarization: male sole worker & about equal
- (3) Increase in male sole worker model among parents of young children (gender roles), couples with lower education and high earnings share of male partner (bargaining/resource model)
- (4) Change to "about equal" more likely if support by other adults and among specific occupations (office clerks, services) (time availability)
- (5) Role reversal if older children, living in cities, high education and high earnings share of female partner (bargaining/resource model)
- (6) Austria as conservative welfare state: both resources and gender roles mattered



Questions? Comments?

⊠ caroline.berghammer@univie.ac.at

⊠ bernhard.riederer@univie.ac.at

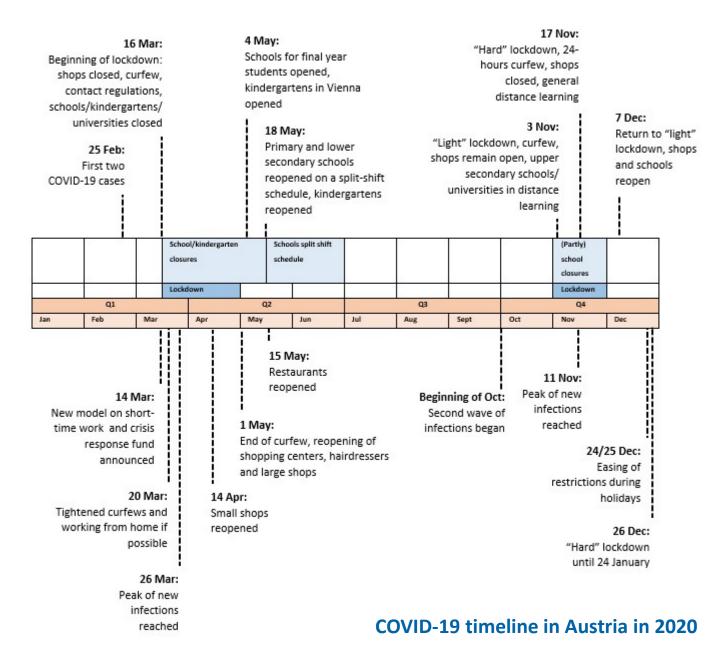


Der Wissenschaftsfonds.

This work was funded by the Austrian Science Fund (FWF) within the project "Couples' division of work during COVID-19 lockdown in Austria" (P 34362).

https://cowork.univie.ac.at





Average Marginal Effects (AME)	Male sole worker model	Male main worker model	About equal	Reversed roles
SELECTED TIME 1 COVARIATES	AME	AME	AME	AME
Couple employment model				
Male sole worker	.53 ***	31 ***	15 ***	07 ***
Male main worker	ref.	ref.	ref.	ref.
About equal	.01	18 ***	.14 ***	.03
Reversed roles	07 *	14 ***	03	.24 ***

Average Marginal Effects (AME)	Male sole	Male main	About	Reversed	
	worker model	worker model	equal	roles	
SELECTED TIME 1 COVARIATES	AME	AME	AME	AME	
Couple employment model					
Male sole worker	.53 ***	31 ***	15 ***	07 ***	
Male main worker	ref.	ref.	ref.	ref.	
About equal	.01	18 ***	.14 ***	.03	
Reversed roles	07 *	14 ***	03	.24 ***	
Age of youngest child					
Below age 3	.06 *	06 *	.01	01	
Age 3-5	ref.	ref.	ref.	ref.	
Age 6-9	04	.02	.00	.01	
Age 10-14	04	.03	04	.05 *	
Number of children below 15					
1 child	ref.	ref.	ref.	ref.	
2 children	01	01	.02	.00	
3 or more children	.05	08 *	.03	.00	

Average Marginal Effects (AME)	Male sole worker model	Male main worker model	About equal	Reversed roles
SELECTED TIME 1 COVARIATES	AME	AME	AME	AME
Couple employment model				
Male sole worker	.53 ***	31 ***	15 ***	07 ***
Male main worker	ref.	ref.	ref.	ref.
About equal	.01	18 ***	.14 ***	.03
Reversed roles	07 *	14 ***	03	.24 ***
Age of youngest child				
Below age 3	.06 *	06 *	.01	01
Age 3-5	ref.	ref.	ref.	ref.
Age 6-9	04	.02	.00	.01
Age 10-14	04	.03	04	.05 *
Number of children below 15				
1 child	ref.	ref.	ref.	ref.
2 children	01	01	.02	.00
3 or more children	.05	08 *	.03	.00
Other adults in household (0/1)	.01	11	.14 *	04
Number of children age 15+				
no children 15+	ref.	ref.	ref.	ref.
1 child 15+	06 *	01	.07 *	.00
2 or more children 15+	04	07 ^(*)	.09 ^(*)	.03

Average Marginal Effects (AME)	Male sole worker model	Male main worker model	About equal	Reversed roles
SELECTED TIME 1 COVARIATES	AME	AME	AME	AME
Couple employment model				
Male sole worker	.53 ***	31 ***	15 ***	07 ***
Male main worker	ref.	ref.	ref.	ref.
About equal	.01	18 ***	.14 ***	.03
Reversed roles	07 *	14 ***	03	.24 ***
Age of youngest child				
Below age 3	.06 *	06 *	.01	01
Age 3-5	ref.	ref.	ref.	ref.
Age 6-9	04	.02	.00	.01
Age 10-14	04	.03	04	.05 *
Number of children below 15				
1 child	ref.	ref.	ref.	ref.
2 children	01	01	.02	.00
3 or more children	.05	08 *	.03	.00
Other adults in household (0/1)	.01	11	.14 *	04
Number of children age 15+				
no children 15+	ref.	ref.	ref.	ref.
1 child 15+	06 *	01	.07 *	.00
2 or more children 15+	04	07 (*)	.09 (*)	.03
Degree of urbanisation				
Thinly populated (rural areas)	ref.	ref.	ref.	ref.
Intermediate (towns/suburbs)	.00	03	.01	.02
Densely populated (cities)	01	07 **	.04	.04 *
Couple education (ISCED 5-8)				
No partner highly educated	ref.	ref.	ref.	ref.
Female partner highly educated	04	.01	02	.05 *
Male partner highly educated	02	.09 **	05 (*)	02
Both partners highly educated	05 *	.05 (*)	03	.04 (*)

Average Marginal Effects (AME)	Male sole worker model	Male main worker model	About equal	Reversed roles
SELECTED TIME 1 COVARIATES	AME	AME	AME	AME
(A) Occupational status among dual-earner couples				
Both partners ISCO 1-3	08 *	08 (*)	.10 *	.06 *
Female partner ISCO 1-3, male partner ISCO 4-5	08 (*)	05	.01	.12 **
Female partner ISCO 1-3, male partner ISCO 6-9	10 **	04	.08 ^(*)	.06 (*)
Female partner ISCO 4-5, male partner ISCO 1-3	.02	10 *	.06	.02
Both partners ISCO 4-5	07 (*)	.03	.02	.02
Female partner ISCO 4-5, male partner ISCO 6-9	ref.	ref.	ref.	ref.
Female partner ISCO 6-9, male partner ISCO 1-3	10	03	.04	.09
Female partner ISCO 6-9, male partner ISCO 4-5	07	07	.03	.11 (*)
Both partners 6-9	04	09 ^(*)	.09 (*)	.04
B) Employment in critical occupations (CO) among dual-earner couples				
No partner exercising CO	ref.	ref.	ref.	ref.
Male partner in CO, many working from home	03	.11 *	05	02
Male partner in CO, other	05	.11 *	06	.00
Female partner in CO, many working from home	04	01	.00	.04
Both partners in CO, many working from home	08 *	.17 ***	09 *	.00
Both partners in CO, female partner in CO with many working from home	08	.03	03	.09
Female partner in CO, other	.02	.00	07 ^(*)	.05 (*)
Both partners in CO, female partner in other CO	03	.12 *	11 *	.02
Both partners in CO, other	04	03	.05	.02
C) Female earnings share among dual-earner couples with earnings data				
Max. 25%	.02	.06	01	07 **
Above 25% but max. 34%	04	.04	.01	01
Above 34% but max. 45%	ref.	ref.	ref.	ref.
Above 45%	08 *	06	.03	.10 **

Average Marginal Effects (AME)	Male sole worker model	Male main worker model	About equal	Reversed roles
SELECTED TIME 1 COVARIATES	AME	AME	AME	AME
(A) Occupational status among dual-earner couples				
Both partners ISCO 1-3	08 *	08 (*)	.10 *	.06 *
Female partner ISCO 1-3, male partner ISCO 4-5	08 (*)	05	.01	.12 **
Female partner ISCO 1-3, male partner ISCO 6-9	10 **	04	.08 (*)	.06 (*)
Female partner ISCO 4-5, male partner ISCO 1-3	.02	10 *	.06	.02
Both partners ISCO 4-5	07 (*)	.03	.02	.02
Female partner ISCO 4-5, male partner ISCO 6-9	ref.	ref.	ref.	ref.
Female partner ISCO 6-9, male partner ISCO 1-3	10	03	.04	.09
Female partner ISCO 6-9, male partner ISCO 4-5	07	07	.03	.11 (*)
Both partners 6-9	04	09 (*)	.09 (*)	.04
(B) Employment in critical occupations (CO) among dual-earner couples				
No partner exercising CO	ref.	ref.	ref.	ref.
Male partner in CO, many working from home	03	.11 *	05	02
Male partner in CO, other	05	.11 *	06	.00
Female partner in CO, many working from home	04	01	.00	.04
Both partners in CO, many working from home	08 *	.17 ***	09 *	.00
Both partners in CO, female partner in CO with many working from home	08	.03	03	.09
Female partner in CO, other	.02	.00	07 (*)	.05 (*)
Both partners in CO, female partner in other CO	03	.12 *	11 *	.02
Both partners in CO, other	04	03	.05	.02
(C) Female earnings share among dual-earner couples with earnings data				5
Max. 25%	.02	.06	01	07 **
Above 25% but max. 34%	04	.04	.01	01
Above 34% but max. 45%	ref.	ref.	ref.	ref.
Above 45%	08 *	06	.03	.10 **