The unequal use of childcare in Denmark, France, Germany, Italy, Sweden and the UK

Class, employment status and within-household earning difference in five family policy models

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Introduction

Early Child Education and Care (ECEC) is one of the pillars of the “social investment strategy”

In fact

Formal childcare use is linked to **better** development outcomes for children, **higher** employment rates in mothers, and **higher** fertility rate in the society

However

More affluent social groups receives the **“lion’s share”** of formal childcare services

Hence

Additional investments in this service are **not granted to limit** structural inequalities, as the use might remain **“segregated”**

Contributions

1. We define formal and informal childcare separating childcare by a professional childminder from the former, and we measure “formalization” through the concept of intensity of use

2. We relate formal childcare use to the mothers’ social class variable (derived by Oesch, 2006) and employment status (typical vs atypical workers)

3. We introduce a feminist perspective by controlling for within-household earning difference and focusing on differences between single and partnered mothers

4. We analyse our results by comparing across five family policy models, to investigate potential diverging trends

Family policy models

Germany

Primary caregiver model:
Compensates care role, does not support employment, caracherized by high female part-time employment

United Kingdom

Primary earner/secondary caregiver model:
Short parental leaves and support to labour market participation through incentives

Italy

Mediterranean model:
Less generous variant of primary caregiver model with long parental leaves and low financial support and childcare provision

Denmark & Sweden

Dual earner carer model:
Balanced gender roles, long leaves, generous allowances and childcare provision

France

Choice model:
Incentivises care and employment through high quality childcare provision

Hypotheses

1. We expect a higher intensity of childcare use – formal & informal – to be related with a higher probability of being employed

2. We expect mothers belonging to lower classes and in atypical employment or out-of-work to display a lower intensity of childcare use

3. We expect a higher income gap within couples will have a negative impact on the intensity of childcare use

4. We expect that the relation between an increased use of childcare and maternal employment should be stronger in least generous family policy models and that access to childcare should be more constrained by class, employment status and within-household earning difference in these same contexts

Data and Methods

EU-Silc data, waves from 2007 to 2018 for Denmark, France, Germany, Italy, Sweden, and the UK

- Sample: Mothers of at least one child aged less than 3 years old at the end of the reference fiscal year
- Two multivariate linear regression models of the type:

$$y_i = \beta_0 + \beta_1 x_i + \beta_2 K_i + \varepsilon_i$$

Model 1: Childcare use
Model 2: Social class/Employment status

Model 1: Employment rate
Model 2: Formal childcare use

Vector of controls

Results: Descriptive Analysis

Trends in childcare use – mothers with a partner

Country	Formal Childcare			Childcare by Professional Childminder			Childcare by Grandparents, Other Relatives or Friends		
	2007	2018	% Change 2018-2007	2007	2018	% Change 2018-2007	2007	2018	% Change 2018-2007
Germany									
Mean	4.66	11.99	**157%**	1.18	1.85	**57%**	1.84	1.05	**-43%**
Std deviation	10.96	16.63		5.40	7.33		5.31	4.51	
Denmark									
Mean	25.69	20.85	**-19%**	0.00	1.11	Missing	0.27	0.31	**15%**
Std deviation	16.22	18.05		0.00	6.23		3.10	3.61	
France									
Mean	8.09	17.25	**113%**	5.49	3.10	**-44%**	3.23	2.42	**-25%**
Std deviation	14.37	17.66		12.68	10.01		9.05	6.97	
Italy									
Mean	10.77	9.84	**-9%**	0.45	0.08	**-81%**	7.31	6.43	**-11%**
Std deviation	15.66	15.49		3.37	1.13		14.01	13.20	
Sweden									
Mean	15.70	15.16	**-4%**	0.92	0.50	**-45%**	0.09	0.05	**-39%**
Std deviation	16.73	17.06		5.41	4.41		1.25	1.48	
United Kingdom									
Mean	4.36	5.65	**30%**	2.18	2.02	**-7%**	4.73	4.83	**2%**
Std deviation	9.43	10.94		7.08	6.91		9.42	10.41	
Total									
Mean	7.89	12.45	**58%**	2.37	1.81	**-24%**	3.88	3.06	**-21%**
Std deviation	13.89	16.55		8.33	7.43		9.78	8.76	

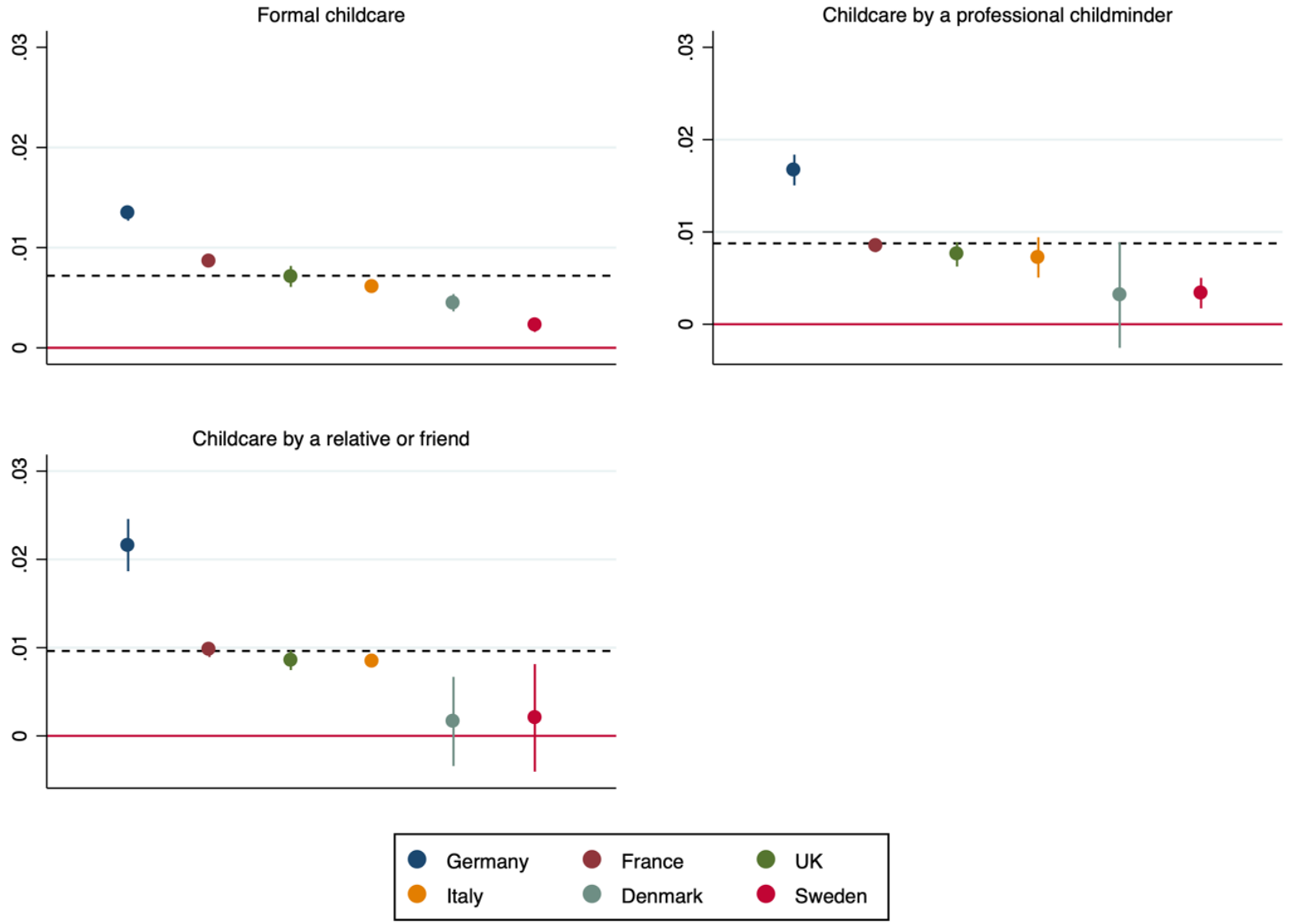
Results: Descriptive Analysis

Trends in childcare use – mothers without a partner

Country	Formal Childcare			Childcare by Professional Childminder			Childcare by Grandparents, Other Relatives or Friends		
	2007	2018	% Change 2018-2007	2007	2018	% Change 2018-2007	2007	2018	% Change 2018-2007
Germany									
Mean	5.86	12.85	**119%**	0.06	0.95	**1386%**	1.85	0.47	**-75%**
Std deviation	12.54	17.87		0.51	3.45		7.05	1.90	
Denmark									
Mean	18.78	27.65	**47%**	0.00	0.00	Missing	1.39	0.16	**-89%**
Std deviation	17.05	17.77		0.00	0.00		6.45	0.55	
France									
Mean	11.46	15.04	**31%**	1.91	3.83	**101%**	3.03	3.93	**30%**
Std deviation	16.36	18.21		8.16	11.39		8.90	11.24	
Italy									
Mean	9.57	8.82	**-8%**	0.73	0.78	**8%**	8.06	14.00	**74%**
Std deviation	16.44	14.81		5.69	5.91		15.15	16.96	
Sweden									
Mean	17.71	17.78	**0%**	0.00	0.00	Missing	0.02	0.00	**-100%**
Std deviation	16.98	19.22		0.00	0.00		0.14	0.00	
United Kingdom									
Mean	5.65	4.24	**-25%**	2.11	1.08	**-49%**	5.81	8.41	**45%**
Std deviation	10.16	8.35		6.53	5.52		13.92	12.31	
Total									
Mean	8.46	10.69	**26%**	1.31	1.52	**16%**	4.51	6.85	**52%**
Std deviation	14.23	16.01		6.07	7.02		11.82	13.09	

Figure 1: Regression predicting maternal employment from childcare use (with controls), mothers with partner

- Overall positive trend;
- Larger coefficient for countries that saw the largest increases in childcare use;
- Small coefficient for "dual earner-carer" countries.

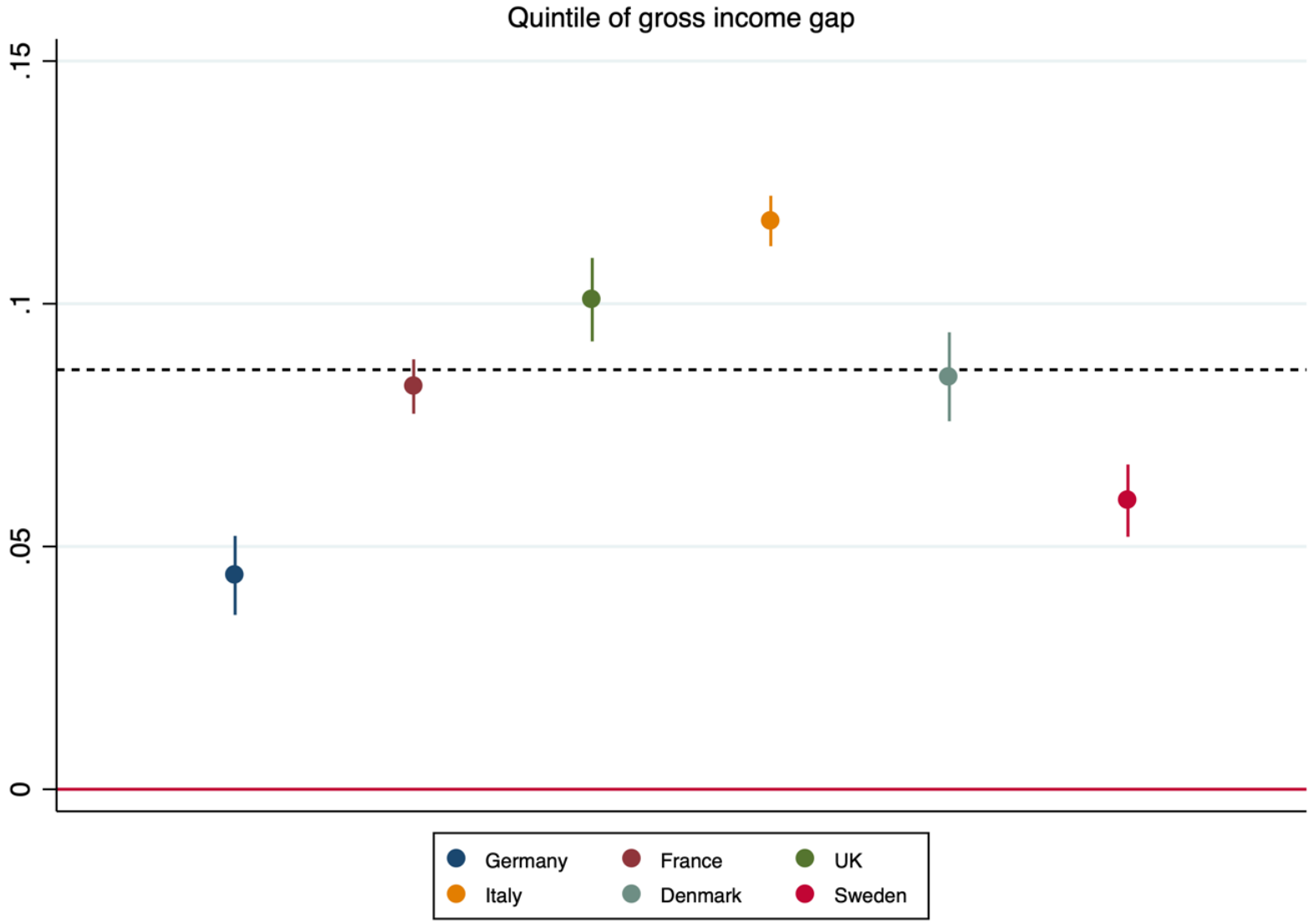


Note: The range for the various coefficients represents the 95% confidence Interval. The dotted line represents the coefficient for the overall sample controlling for the country. The regression is run for each country separately and it controls for highest educational level achieved, age of the mother, age of the child, total number of children, household disposable income, gross family/child related allowances, within-household earning difference, whether or not the spouse is in employment, and year fixed effects. The coefficients for the other variables included as controls are available in Table A8 in the columns for mothers with partners.

Source: EU-Silc (2007-2018).

Figure 2: Regression predicting maternal employment from within-household earning difference (with controls), mothers with partner

- Expected positive trend;
- Smallest coefficient in Germany, where mothers predominantly have part-time jobs.

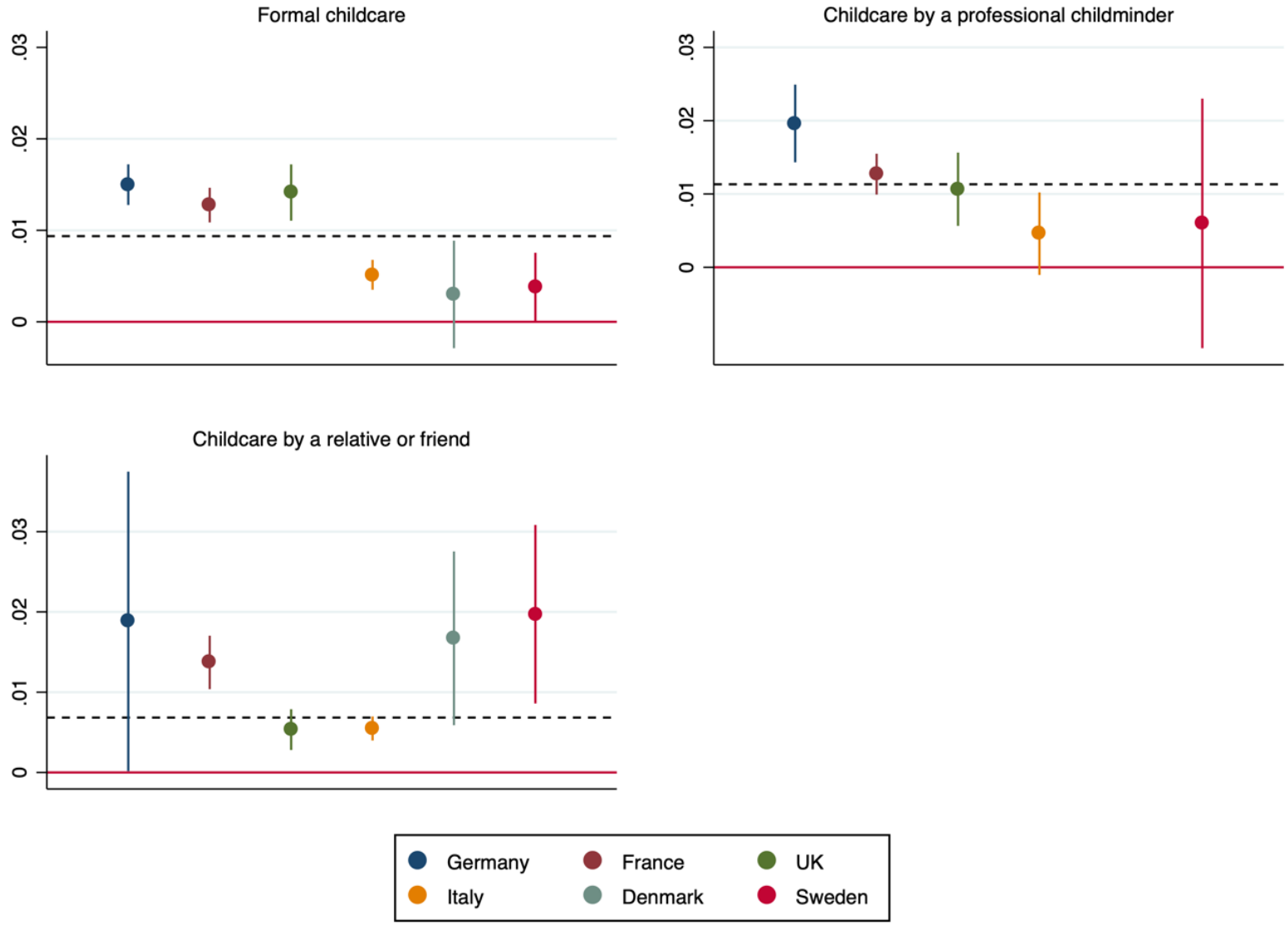


Note: The range for the various coefficients represents the 95% confidence Interval. The dotted line represents the coefficient for the overall sample controlling for the country. The regression is run for each country separately and it controls for formal childcare use, use of childcare provided by a professional childminder, use of childcare provided by a relative or friend, highest educational level achieved, age of the mother, age of the child, total number of children, household disposable income, gross family/child related allowances, whether or not the spouse is in employment, and year fixed effects. The coefficients for the other variables included as controls are available in Table A8 in the columns for mothers with partners.

Source: EU-Silc (2007-2018).

Figure 3: Regression predicting maternal employment from childcare use (with controls), single mothers

- Overall positive trend in non-“dual earner-carer” countries;
- Results consistent with those for mothers with a partner.

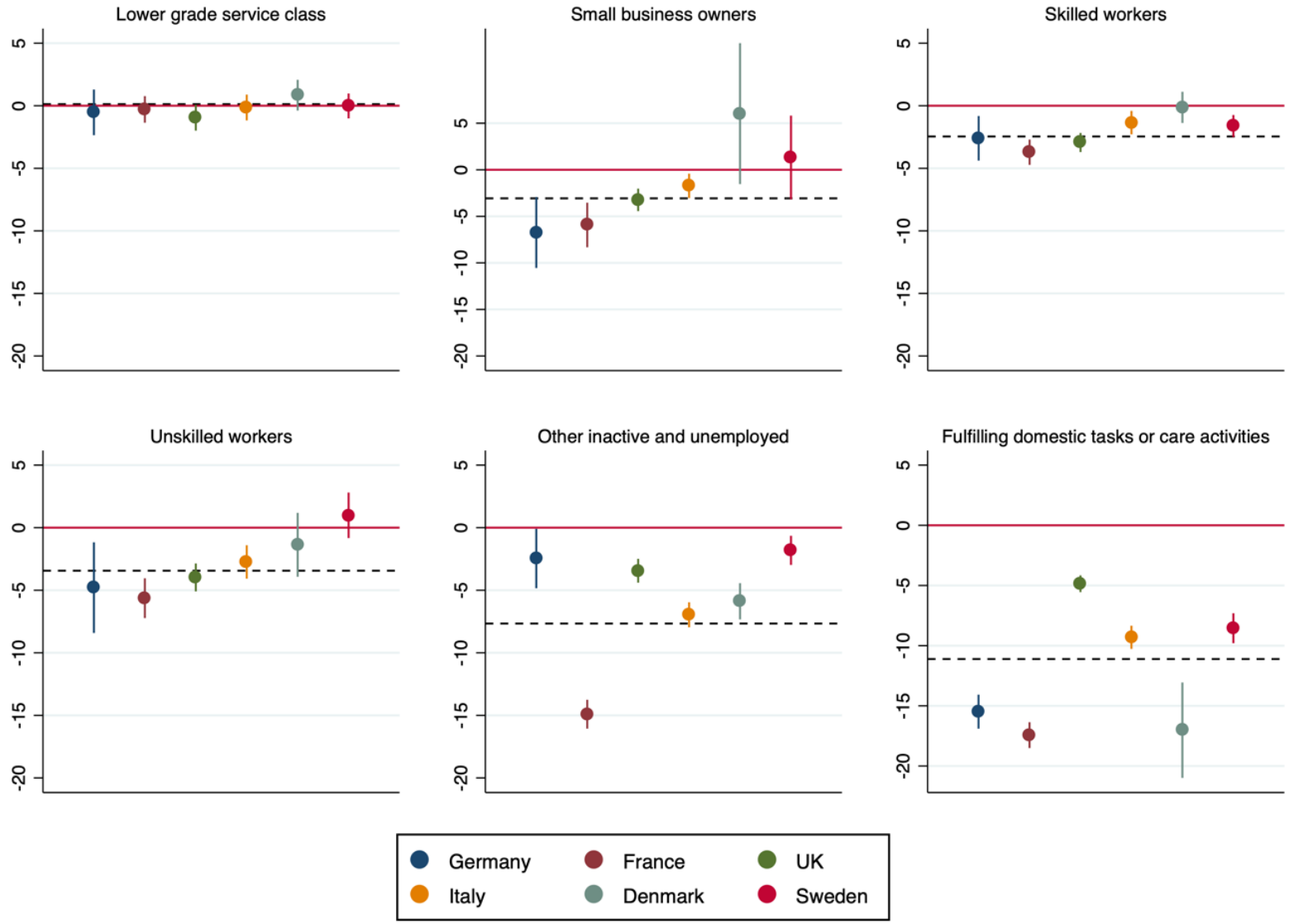


Note: The range for the various coefficients represents the 95% confidence Interval. The dotted line represents the coefficient for the overall sample controlling for the country. The regression is run for each country separately and it controls for highest educational level achieved, age of the mother, age of the child, total number of children, household disposable income, gross family/child related allowances, and year fixed effects. The coefficients for the other variables included as controls are available in Table A8 (in the columns for single mothers). The variable ‘Childcare by a professional childminder’ is missing for Denmark for this sub-sample.

Source: EU-Silc (2007-2018).

Figure 4: Regression predicting childcare use from the Oesch class variable (with controls), mothers with a partner

- Negative coefficient for lower social groups in non-“dual earner-carer” countries;
- Wider gaps for out-of-work mothers, particularly in France.

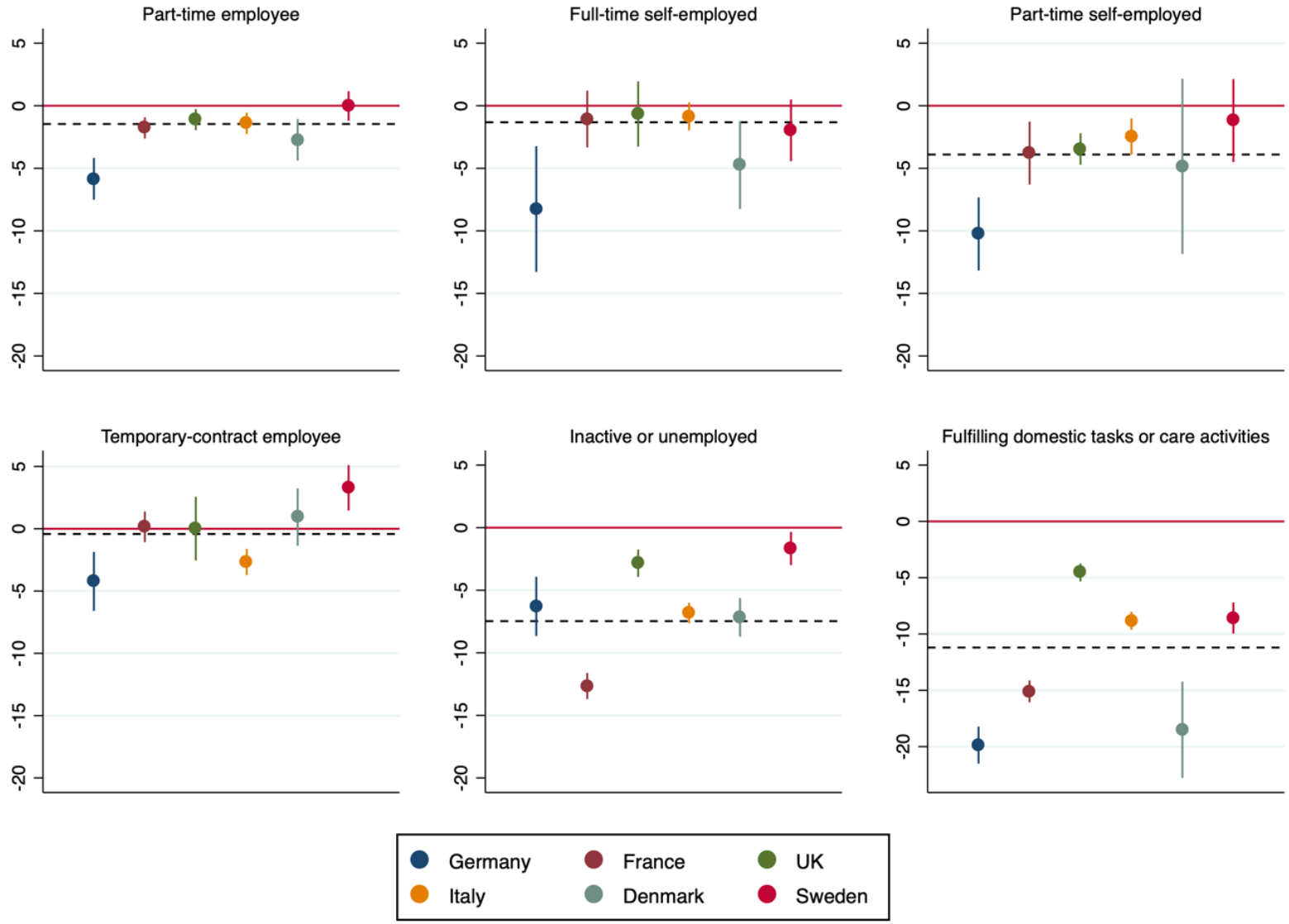


Note: The range for the various coefficients represents the 95% confidence Interval. The coefficients have to be interpreted as the difference in average formal childcare use between the reference category (Higher grade service class) and the indicated category. The dotted line represents the coefficient for the overall sample controlling for the country. The regression is run for each country separately and it controls for the use of childcare by a professional childminder, use of childcare by a relative, age of the mother, age of the child, total number of children, household disposable income, gross family/child related allowances, within-household earning difference, whether or not the spouse is in employment, and year fixed effects. The coefficients for the other variables included as controls are available in Table A11. The coefficient for Germany is based on data for the period 2007-2014 only. There are only six observations for the variable small business owners in the case of Denmark. This explains the wide confidence interval.

Source: EU-Silc (2007-2018).

Figure 5: Regression predicting childcare use from employment status (with controls), mothers with a partner

- Negative coefficient for atypical forms of employment in non-“dual earner-carer” countries;
- Negative and significant coefficient for temporary contract employees in Germany and Italy
- Wider gaps for out-of-work mothers, particularly in France.

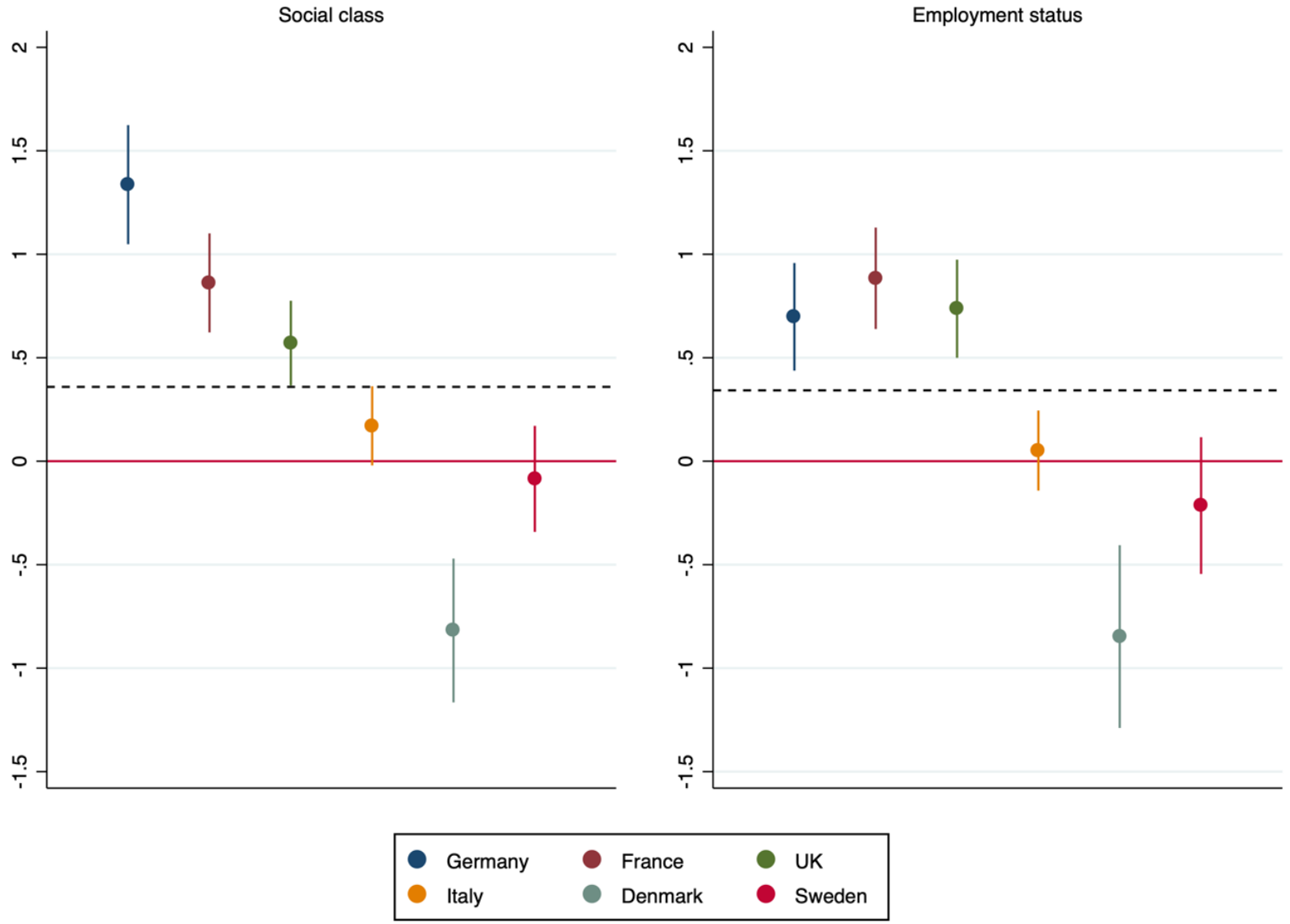


Note: The range for the various coefficients represents the 95% confidence Interval. The coefficients have to be interpreted as the difference in average formal childcare use between the reference category (Full-time employee) and the indicated category. The dotted line represents the coefficient for the overall sample controlling for the country. The regression is run for each country separately and it controls for the use of childcare by a professional childminder, use of childcare by a relative, highest educational level achieved, age of the mother, age of the child, total number of children, household disposable income, gross family/child related allowances, within-household earning difference, whether or not the spouse is in employment, and year fixed effects. The coefficients for the other variables included as controls are available in Table A17.

Source: EU-Silc (2007-2018).

Figure 6: Regression predicting childcare use from within-household earning difference (with controls), mothers with partner

- In most countries, less inequality in earnings within the households is linked with more formal childcare use;
- There appears to be an intersection between family structure and gender issues that has an impact on childcare use.



Note: The range for the various coefficients represents the 95% confidence Interval. The dotted line represents the coefficient for the overall sample controlling for the country. The regression is run for each country separately and it controls for Oesch class variable (left panel), employment status variable (right panel), the use of childcare by a professional childminder, use of childcare by a relative, highest educational level achieved, age of the mother, age of the child, total number of children, household disposable income, gross family/child related allowances, whether or not the spouse is in employment, and year fixed effects. The coefficients for the other variables included as controls are available in the table with all the results in Tables A11 (model with social class) and A17 (model with employment status). The coefficients for Germany in the model with social class are based on data for the period 2007-2014 only, while the entire sample is used in the model with the type of contract.

Source: EU-Silc (2007-2018).

Conclusions (1)

1. Formalization of childcare use, especially among mothers with partners, less so among single mothers

2. More weekly hours of childcare are linked with higher employment rates for mothers, regardless of the presence of a partner

3. Childcare use seems to have a stronger relation to maternal employment in newcomers to childcare provision and in countries with lower maternal employment levels ➔ saturation effect?

Conclusions (2)

4 Stratification in access to childcare affects all countries apart from Denmark and Sweden:

- Results for social class are particularly stark
- Employment status also appears related with formal childcare use for part-time workers and temporary contract ones

5 With the noticeable exception of Denmark, families with a more egalitarian income distribution between partners tend to use childcare more intensively

The implication is that expanding childcare availability without any "targeting" might fail to address the needs of less advantaged mothers