# The SES-gradient in Shared Custody in 30 European Countries

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## Introduction

Traditionally, when parents divorced, children lived with one of their parents, most often the mother. In the last decades, there has been a rise in shared custody in a number of countries, with children increasingly living in two households and parents sharing responsibility for their children after divorce (*1, 2*). The concept of shared custody – sometimes called co-parenting – is complex and has legal, physical, and parenting (i.e., co-parenting) dimensions (*3*). In this paper, the focus is on the physical dimension, which is the tendency of children to live in two households. Living in two households does not need to be exactly equally divided, but it is assumed that children regularly live in a second household and not just for weekend visits to the non-resident parent.

An increasing number of studies have been published on the consequences of shared custody, typically finding positive associations with child outcomes such as internalizing and externalizing problems, self-esteem, school achievement, and relations with fathers (*4-8*). Moreover, children in shared custody arrangements are often found to fare as well and have as good relationships with parents as children in two-parent families (*9*). Positive associations have also been found for indicators of parent well-being (for a review, see *1*). Due to a lack of panel surveys with sufficient scope and (sample) sizes, as well as debate about how to define shared custody, knowledge is still in progress, with many novel findings arising and debate continuing about the pros and cons of this new family arrangement. Nonetheless, the notion of positive consequences remains a plausible idea.

Fewer studies have focused on the selectivity of shared custody arrangements. The entry into shared custody can be selective in a number of respects, such as parental conflict, parents' employment, geographical distance, and children's ages (*9, 10*). One important factor is socioeconomic status (SES), as indicated by the occupational and educational status of mothers and fathers. There are several reasons to expect that shared custody is a more common arrangement in higher-SES families than in lower-SES families. First, because of the positive association between educational attainment on the one hand, and the employment and human capital of mothers on the other, there may be more need to share the care for children after divorce in such families (*11*). Second, attitudes toward gender inequality are more supportive in higher-SES families than in lower-SES families (*12*) which will result in more agreement among divorcing parents to share custody and in case of disagreement, a better bargaining position of divorced fathers to obtain partial custody. There is evidence for an association between shared custody and parents' educational attainment and income in a number of countries, including Belgium (*8*), Germany (*13*), the Netherlands (*10*), and the United States (*14*). An SES-gradient in shared custody is relevant for social inequality, as it implies that primarily the higher status groups are benefiting from this new arrangement after divorce.

The *first goal* of this study is to examine if and to what extent parents' SES affects shared custody in Europe. We analyze data from secondary school children in 30 European countries and estimate the effects of mothers' employment and mother's occupational status on the choice for shared vis-à-vis sole physical custody. Additional SES-measures are also explored, in particular fathers' occupational status and children's perceived income status of the household (*15*).

Studying the SES-gradient in shared custody is also relevant from a comparative perspective. Diffusion theories suggest that innovations, including new family arrangements that are not normatively accepted yet, are more likely to be adopted first by the young and by

members of the cultural elite (*16-18*). For example, several studies have shown that in times where divorce was uncommon, divorce was more often a choice made by better-educated couples than by less-educated couples (*19-21*). Similar diffusions patterns have been suggested for the spread of other 'non-standard' family forms, such as unmarried cohabitation (*22*). These findings suggest not only that there would be an SES gradient in shared custody, but also that such a gradient will depend on the country context. In countries where shared custody is uncommon, all SES-groups will have a relatively low chance of choosing shared custody. When shared custody was emerging, we expect that this new arrangement was adopted most by higher-SES families, leading to a rising SES-gradient in the first stage of the diffusion process.

The *second goal* of this paper is to compare the SES-gradient in shared custody in a large number of European countries that differ strongly in the prevalence of shared custody. Using multilevel models with cross-level interaction effects, we test if and how the SES-gradient and the prevalence of shared custody are linked. The role of the prevalence of shared custody is explored while taking into account other relevant macro-level factors such as gender roles and the divorce rate.

A number of studies have been done on the prevalence of shared custody in different countries. The US and in Europe, Sweden, seen to be forerunners in the trend (*9, 14*). Two prior studies have compared European (and North American) countries and have shown that shared custody is often an uncommon arrangement, although it is clearly more common in Western and especially Northern Europe than in Southern and Eastern Europe (*23, 24*). Both studies calculated prevalence for the entire population, however, and not for families 'at risk' of shared physical custody, i.e., divorced or never-married families. Moreover, both studies primarily focused on describing country differences and analyzing the associations between shared custody on the one hand, and life satisfaction (*24*) and communication with fathers on the other (*23*).

Important to note is that our data are cross-sectional and that the period between the two surveys was too short to analyze trends. Differences between countries cannot be equated to changes over time, as this would suggest that we are 'reading history sideways' (*25*). The criticism is that countries do not follow a similar historical path in the modernization process, a criticism which has received considerable empirical support. For recent trends in divorce and shared custody, however, such a criticism is not entirely relevant given the fact that many countries have experienced steep rises in divorce but in different periods. Still, the point should be kept in mind that we can only argue that the countries with high levels of shared custody are the ones that have changed recently, whereas the countries with low levels of shared custody are the ones that haven't changed in this direction.

## Data

### *Data and analytical sample*

Data were obtained from the Health Behaviour in School-aged Children (HBSC) studies of 2005/2006 and 2009/2010 (Currie et al. 2008; Currie et al. 2012). The HBSC studies were done in school where the school class was the initial sampling design and where the sampling was proportional to the size of the school. Students were 11, 13, or 15 years of age. The number of cases per country ranged from about 4,000 to 6,000 in each year. The years were pooled to allow for more statistical power in the analysis. The questions on family structure were identical. The data were collected by an international network of researchers funded by the World Health Organization and national funding agencies (https://hbsc.org/ ). We use the international harmonized versions of the data which are made available for external academic researchers.

To construct the analytical sample, we retained data from European countries in which the questions on mothers' occupation and joint physical custody were asked. Next, we excluded individual cases with missing or inconsistent values on the relationship with the father, the relationship with the mother, and the living situation. We excluded country-years if there were more than 25% missing values on mothers' occupations, not counting mothers who did not work for pay. Finally, and most importantly, we limited the sample to children whose parents were alive and not living together. The reason to focus on this subsample is that these children were 'at risk' of a shared custody arrangement. This resulted in an analytical sample 38,369 students in 30 countries.

*Dependent variable*

The main dependent variable was shared custody versus sole custody. Students were asked about the presence of a second home and a follow-up question was asked about how often the student stayed in that home: (a) half of the time, (b) regularly, but less than half of the time, (c) sometimes, and (d) hardly ever. In the current paper, students were regarded as having a second home when they lived there half of the time or regularly, but less than half of the time. This broad definition of living somewhere else 'regularly' was chosen to allow arrangements like $^{1}/_{3}$-$^{2}/_{3}$ to qualify (*8*). The categories were the same in 2005/2006 and 2009/2010. The data from 2001/2002 were not used since the categories used at that time were slightly different. Sole custody was defined as children reporting only the mother or father in the main home, in combination with either not a second home or a second home without the other parent. Shared physical custody was defined as children reporting the mother or father in the main home and the other parent in a second home (28.2%). Children not living with any parent were excluded.

A disadvantage of the HBSC survey is that it does not ask about parents' marital history. As a result, it is not possible to directly distinguish between divorced, separated, widowed, and never-married families. Because especially widowhood is socially stratified, with shared custody being logically impossible, this is a potential problem for our analyses. To solve the problem, we relied on an additional question that was asked to all children, which is about the child's relationship to the biological father and mother. In these questions, children could tick a box labeled 'don't have or see this person.' In our analyses, children who ticked this box for either the father or mother were excluded. This eliminates widowhood from the analytical sample, although it may also eliminate the group of children who lost contact with a parent altogether. The disadvantage of this latter exclusion was considered less problematic than the disadvantage of including children with deceased parents. Note that the presence of stepparents was not addressed in the current paper as this would require a separate analysis but it was used as a control variable.

*Independent variables*

Occupational status was used as the key socioeconomic variable. Children were asked to describe the occupations of their parents and these were coded in each country into five classes from low to high (1-5). The class position of the mother was used because information on fathers was often missing, especially when children lived only with their mother. When mothers did not work for pay, they were classified in a separate category.

Three country-level characteristics were included in the analyses. First, we used the crude divorce rate (divorces per 1000 persons) in the country (averaged for the years 2000 and 2010). Second, we used a structural measure of gender roles based on the Global Gender Gap Index constructed by the World Economic Forum. This measure merges indicators of gender inequality in the economic, educational, political, and health domains (*26*). Values for 2006-2010 were averaged. Third, we used the prevalence of shared custody in a country

based on the data (for children not living with both parents). In extra analyses, we also added GDP per capita to explore the robustness of our findings but this was not a core variable.

Control variables were the following: age, gender, year, fathers' SES, fathers' unemployment (if available), school-level fathers' SES, the number of siblings, a scale of family affluence (*15*), a student assessment of how well to do the family is (on a scale from 1-5), and the presence of a stepparent in the main home. How control variables are treated is discussed below.

The key independent variable – mothers' SES – had a number of missing values (14%), mostly because occupations were unclear and/or could not be coded. These missing values were imputed using multiple imputation in STATA's *mi* procedure, which is based on chained regression models (*27*). All control variables and country dummy's were used as independent variables to impute missing values in mothers' SES. In the procedure, missing values on these other variables were also imputed. To facilitate the estimation of the multilevel models and the calculation of margins and their confidence intervals, only one imputation was selected. One of the attractive features of the chained regression method is that it allows us to use predictors of missing values that have missing values themselves. For example, fathers' SES was often missing but when it was not, it could be used as a predictor of missing values for mothers' SES.

*Design of the analysis*

After a descriptive part of the analyses, we estimate multi-level linear probability models for the choice between shared and sole custody. Random intercept and random slope models were used where respondents were nested in countries. The nesting in schools was ignored as no school-level measures were included. Independent variables were included at the individual level and the country level. Random slopes were included for mothers' SES and mothers' (non)employment. In the second part, we examine how the SES gradient in shared custody varies across countries. We estimated a meta-regression analysis, given the small number of macro units (*28, 29*). In this model, the linear association between mothers' SES and shared custody was obtained from individual regressions in each country and in a second-stage model the gradient was regressed on macro-level indicators where the the standard errors served as weights. The results of this model were presented in a regression table as well as in a bubble plot where each bubble represents a country and where the size of a bubble is inversely related to the standard error.

**Data references**

(1) Currie, Candace; Gabhainn, Saoirse Nic; Godeau, Emmanuelle; Roberts, Chris; Smith, Rebecca; Currie, Dorothy; Picket, Will; Richter, Matthias; Morgan, Antony; Barnekow, Vivian (2008). Inequalities in Young People's Health. HBSC International Report from the 2005/2006 Survey. Copenhagen: World Health Organization.

(2) Currie, Candace; Zanotti, Cara; Morgan, Antony; Currie, Dorothy; de Looze, Margaretha. et al. (2012). Social determinants of health and well-being among young people: Health Behaviour in School-aged Children (HBSC) study: International report from the 2009/2010 survey. Copenhagen: World Health Organization.

REFERENCES


1. A. Steinbach, Children's and Parents' Well-Being in Joint Physical Custody: A Literature Review. *Fam. Process* **58**, 353-369 (2019).
2. M. Kalmijn, Father-Child Relations after Divorce in Four European Countries: Patterns and Determinants. *Comparative Population Studies* **40**, 251-276 (2015).
3. H. Juby, C. Le Bourdais, N. Marcil-Gratton, Sharing roles, sharing custody? Couples' characteristics and children's living arrangements at separation. *Journal of Marriage and Family* **67**, 157-172 (2005).
4. L. Nielsen, Joint Versus Sole Physical Custody: Children's Outcomes Independent of Parent–Child Relationships, Income, and Conflict in 60 Studies. *J. Divorce Remarriage* **2018**, 1-35 (2018).
5. L. Nielsen, Shared Physical Custody: Recent Research, Advances, and Applications. *J. Divorce Remarriage* **2018**, 1-8 (2018).
6. R. Bauserman, A Meta-analysis of Parental Satisfaction, Adjustment, and Conflict in Joint Custody and Sole Custody Following Divorce. *Journal of Divorce and Remarriage* **53**, 464-488 (2012).
7. R. Bauserman, Child adjustment in joint-custody versus sole-custody arrangements: A meta-analytic review. *Journal of Family Psychology* **16**, 91-102 (2002).
8. K. Bastaits, I. Pasteels, Is joint physical custody in the best interests of the child? Parent-child relationships and custodial arrangements. *Journal of Social and Personal Relationships* **36**, 3752-3772 (2019).
9. E.-L. Palmtag, *Breaking down break-ups: Studies on the heterogeneity in (adult) children's outcomes following a parental separation*. (Swedish Institute for Social Research 111, Stockholm, 2023).
10. A. R. Poortman, R. Van Gaalen, Shared residence after separation: A review and new findings from The Netherlands. *Family Court Review* **55**, 531-544 (2017).
11. OECD. (OECD Publishing, Paris, 2017).
12. G. M. D. Sani, M. Quaranta, The Best Is Yet to Come? Attitudes Toward Gender Roles Among Adolescents in 36 Countries. *Sex Roles* **77**, 30-45 (2017).
13. A. Steinbach, Coparenting as a mediator between physical custody arrangements and children's mental health. *Fam. Process*, (2021).
14. M. Cancian, D. R. Meyer, P. R. Brown, S. T. Cook, Who Gets Custody Now? Dramatic Changes in Children's Living Arrangements After Divorce. *Demography* **51**, 1381-1396 (2014).
15. M. Richter *et al.*, Parental occupation, family affluence and adolescent health behaviour in 28 countries. *International Journal of Public Health* **54**, 203-212 (2009).
16. W. J. Goode, Marital satisfaction and instability: A cross-cultural class analysis of divorce rates. *International Social Science Journal* **14**, 507-526 (1962).
17. B. Wejnert, Integrating models of diffusion of innovations: A conceptual framework. *Annual Review of Sociology* **28**, 297-326 (2002).
18. T. Nazio, H. P. Blossfeld, The diffusion of cohabitation among young women in West Germany, East Germany and Italy. *European Journal of Population-Revue Europeenne De Demographie* **19**, 47-82 (2003).
19. S. P. Martin, Trends in Marital Dissolution by Women's Education in the United States. *Demographic Research* **15**, 537-560 (2006).
20. P. M. De Graaf, M. Kalmijn, Change and stability in the social determinants of divorce: A comparison of marriage cohorts in the Netherlands. *European Sociological Review* **22**, 561-572 (2006).

21. F. Van Poppel, Landbouwuniversiteit Wageningen, Wageningen (1992).
22. R. Guetto, M. Mancosu, S. Scherer, G. Torricelli, The Spreading of Cohabitation as a Diffusion Process: Evidence from Italy. *European Journal of Population* **32**, 661-686 (2016).
23. T. Bjarnason, A. M. Arnarsson, Joint Physical Custody and Communication with Parents: A Cross-National Study of Children in 36 Western Countries. *Journal of Comparative Family Studies* **42**, 871-+ (2011).
24. A. Steinbach, L. Augustijn, G. Corkadi, Joint Physical Custody and Adolescents' Life Satisfaction in 37 North American and European CountriesPalabras clave(sic)(sic)(sic). *Fam. Process* **60**, 145-158 (2021).
25. A. Thornton, The developmental paradigm, reading history sideways, and family change. *Demography* **38**, 449-465 (2001).
26. R. Hausmann, L. D. Tyson, S. Zahidi, *The Global Gender Gap Report 2011*. (World Economic Forum, Cologny/Geneva, 2011).
27. P. Royston, Multiple imputation of missing values: Update of ice. *Stata Journal* **5**, 527-536 (2005).
28. M. L. Bryan, S. P. Jenkins, Multilevel Modelling of Country Effects: A Cautionary Tale. *European Sociological Review* **32**, 3-22 (2016).
29. R. M. Harbord, J. P. T. Higgins, Meta-regression in Stata. *The Stata Journal* **8**, 493-519 (2008).

Table 1. Summary statistics of variables by country

| Country/ Region | Age | Woman | Year | Mother SES | Mother employed | Shared custody | N | Divorce rate | Gender gap |
|---|---|---|---|---|---|---|---|---|---|
| Austria | 13.4 | 0.533 | 2008.3 | 2.260 | 0.826 | 0.228 | 1538 | 2.2 | 0.71 |
| Belgium (Flemish) | 13.6 | 0.502 | 2008.0 | 2.488 | 0.813 | 0.348 | 1389 | 2.7 | 0.72 |
| Belgium (French) | 13.6 | 0.506 | 2007.9 | 3.209 | 0.787 | 0.502 | 1623 | 2.7 | 0.72 |
| Bulgaria | 13.8 | 0.465 | 2006.0 | 2.047 | 0.846 | 0.121 | 454 | 1.3 | 0.70 |
| Croatia | 13.8 | 0.485 | 2008.5 | 3.037 | 0.759 | 0.224 | 536 | 1.0 | 0.70 |
| Czech Republic | 13.6 | 0.536 | 2008.1 | 2.733 | 0.832 | 0.259 | 1673 | 2.9 | 0.68 |
| Denmark | 13.6 | 0.524 | 2010.0 | 2.754 | 0.816 | 0.419 | 868 | 2.7 | 0.76 |
| Estonia | 13.9 | 0.553 | 2008.0 | 2.532 | 0.834 | 0.183 | 1624 | 2.6 | 0.70 |
| Finland | 13.7 | 0.522 | 2008.2 | 3.034 | 0.843 | 0.480 | 2542 | 2.6 | 0.81 |
| France | 13.6 | 0.533 | 2008.0 | 2.742 | 0.813 | 0.388 | 1932 | 2.0 | 0.70 |
| Germany | 13.6 | 0.516 | 2006.0 | 2.658 | 0.800 | 0.416 | 1126 | 2.3 | 0.75 |
| Greece | 13.9 | 0.522 | 2008.3 | 2.520 | 0.807 | 0.161 | 757 | 1.1 | 0.67 |
| Hungary | 13.6 | 0.534 | 2008.5 | 3.168 | 0.804 | 0.359 | 1163 | 2.3 | 0.68 |
| Iceland | 13.5 | 0.507 | 2010.0 | 2.239 | 0.783 | 0.392 | 2588 | 1.9 | 0.81 |
| Ireland | 13.7 | 0.493 | 2008.2 | 2.650 | 0.742 | 0.278 | 969 | 0.7 | 0.75 |
| Italy | 13.6 | 0.474 | 2008.4 | 2.349 | 0.819 | 0.140 | 709 | 0.8 | 0.67 |
| Latvia | 13.8 | 0.527 | 2008.3 | 2.508 | 0.856 | 0.109 | 1392 | 2.5 | 0.73 |
| Netherlands | 13.5 | 0.504 | 2008.1 | 2.661 | 0.804 | 0.537 | 1158 | 2.1 | 0.74 |
| Norway | 13.6 | 0.507 | 2008.0 | 2.701 | 0.839 | 0.321 | 1474 | 2.2 | 0.82 |
| Poland | 13.8 | 0.523 | 2008.0 | 2.817 | 0.769 | 0.166 | 740 | 1.4 | 0.69 |
| Portugal | 13.6 | 0.532 | 2008.3 | 2.658 | 0.844 | 0.187 | 780 | 2.2 | 0.70 |
| Romania | 13.6 | 0.525 | 2007.4 | 2.332 | 0.694 | 0.017 | 1767 | 1.5 | 0.68 |
| Slovenia | 13.6 | 0.529 | 2006.0 | 2.801 | 0.875 | 0.239 | 401 | 1.1 | 0.69 |
| Spain | 13.5 | 0.524 | 2006.0 | 1.982 | 0.833 | 0.306 | 821 | 1.5 | 0.74 |
| Sweden | 13.7 | 0.538 | 2010.0 | 2.759 | 0.846 | 0.468 | 1328 | 2.5 | 0.81 |
| Switzerland | 13.7 | 0.509 | 2008.5 | 2.222 | 0.823 | 0.394 | 1727 | 2.2 | 0.73 |
| Macedonia | 13.7 | 0.485 | 2008.0 | 2.444 | 0.616 | 0.143 | 307 | 0.8 | 0.70 |
| England | 13.9 | 0.495 | 2006.0 | 2.943 | 0.778 | 0.326 | 766 | 2.3 | 0.74 |
| Scotland | 13.7 | 0.531 | 2008.2 | 2.862 | 0.785 | 0.324 | 2135 | 2.3 | 0.74 |
| Wales | 13.8 | 0.499 | 2008.4 | 3.049 | 0.789 | 0.334 | 2082 | 2.3 | 0.74 |
| Total | 13.6 | 0.518 | 2008.2 | 2.658 | 0.805 | 0.317 | 38369 | 2.1 | 0.74 |

Source: HBSC data 2006 and 2010. Country-years with questions on mothers' SES and second home.

Table 2. Multilevel models of shared custody: Linear probability models with random slopes and intercepts

| *Shared vs sole custody* | Model 1 | Model 2 | Model 3 | Model 4 |
|---|---|---|---|---|
| Age | -.012** | -.012** | -.012** | -.013** |
| | (-8.44) | (-8.43) | (-8.85) | (-9.43) |
| Girls vs boy | .019** | .019** | .020** | .023** |
| | (4.15) | (4.14) | (4.42) | (5.15) |
| Survey year | .002 | .002 | .001 | -.003** |
| | (1.25) | (1.25) | (.50) | (-2.59) |
| Country: Gender gap | 1.453** | .818 | .731 | .570 |
| | (3.42) | (1.73) | (1.61) | (1.35) |
| Country: Divorce rate | .070* | .059* | .045 | .038 |
| | (2.50) | (2.24) | (1.80) | (1.64) |
| Country: GDP per capita | | .004* | .004* | .003 |
| | | (2.35) | (2.51) | (1.91) |
| Mother not employed | | | -.067** | -.038** |
| | | | (-7.82) | (-4.59) |
| Mothers' SES (1-5) | | | .029** | .013** |
| | | | (9.01) | (3.59) |
| Fathers' SES (1-5) | | | | .017** |
| | | | | (8.12) |
| Family affluence | | | | .027** |
| | | | | (20.25) |
| Perceived income status | | | | -.004 |
| | | | | (-1.62) |
| Number of siblings | | | | -.007** |
| | | | | (-4.19) |
| Father not employed | | | | -.040** |
| | | | | (-4.30) |
| Stepparent in main home | | | | .091** |
| | | | | (18.65) |
| Constant | -4.021 | -3.658 | -1.666 | 6.397* |
| | (-1.53) | (-1.40) | (-.64) | (2.45) |
| BIC | 47221 | 47227 | 46957 | 45937 |
| Variance of intercept | .0084 | .0071 | .0059 | .0050 |
| | .0022 | .0019 | .0017 | .0015 |
| Variance of SES effect | | | .00014 | .00018 |
| | | | .00008 | .00009 |
| Variance of employment effect | | | .00108 | .00089 |
| | | | .00058 | .00059 |
| Observations | 38369 | 38369 | 38369 | 38369 |

Note: HBSC data 2006 and 2010 on children living without both parents. Multiple imputation of missing values. Nonemployed mothers assigned the country-specific average SES.

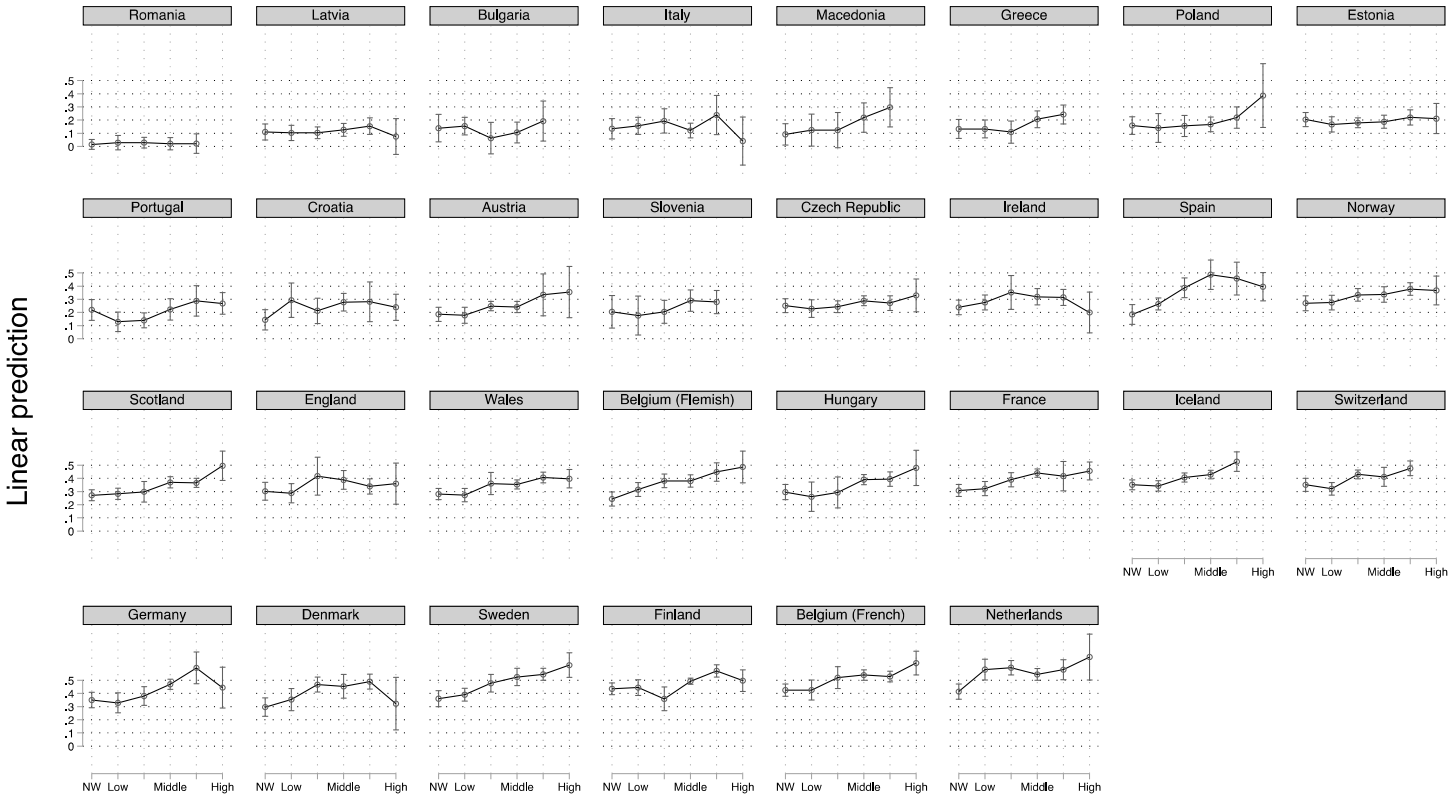
* $p < 0.05$, ** $p < 0.01$

Table 3. Metaregression models of mother's SES gradient in shared vs. sole custody

| | Model 1 | Model 2 | Model 3 |
|---|---|---|---|
| Prevalence shared custody | .066* | .057 | .047 |
| | (2.71) | (1.90) | (1.42) |
| Gender Gap Index | | .045 | .047 |
| | | (.54) | (.55) |
| Crude Divorce Rate | | | .004 |
| | | | (.66) |
| Constant | .011 | -.020 | -.027 |
| | (1.46) | (-.34) | (-.45) |
| Observations | 30 | 30 | 30 |
| | Model 1 | Model 2 | Model 3 |
| Prevalence shared custody | .091** | .090** | .085** |
| | (4.25) | (3.38) | (2.82) |
| Gender Gap Index | | .006 | .008 |
| | | (.09) | (.11) |
| Crude Divorce Rate | | | .002 |
| | | | (.41) |
| Constant | .005 | .001 | -.004 |
| | (.76) | (.02) | (-.07) |
| Observations | 28 | 28 | 28 |

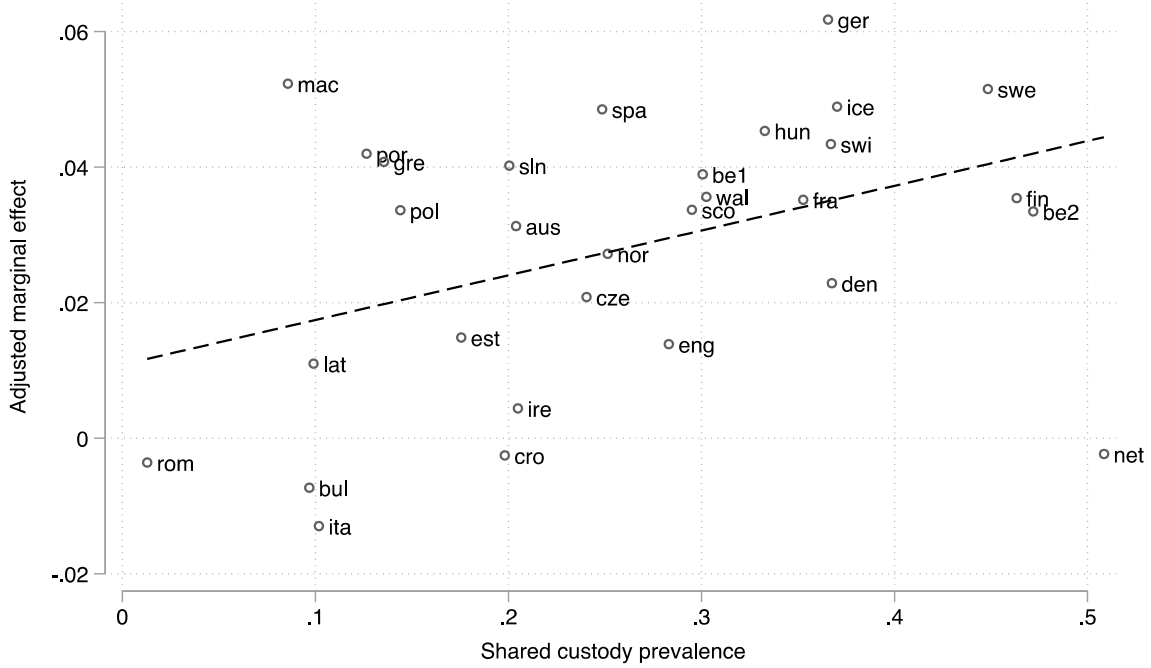
Note: Aggregate data on 30 countries (first panel) and 28 countries (panel 2, NL and MAC excluded).
* $p < 0.05$, ** $p < 0.01$

# Figure 1. Shared custody by mothers' SES




Note: HBSC data. Children whose parents are alive and not living together. NW is mother not working for pay. Category 4 and 5 collapsed in specific countries.

Figure 2. The effect of mothers' SES and the prevalence of shared custody




Note: Custody based on own calculations of HBSC 2006-2010 data.