The Matthew effect in childcare use: a matter of policies or preferences?

Emmanuele Pavolini & Wim Van Lancker

Published online: 22 Mar 2018.

Submit your article to this journal ⫈

View related articles ⫈

View Crossmark data ⫈

Routledge
Taylor & Francis Group

Check for updates

The Matthew effect in childcare use: a matter of policies or preferences?

Emmanuele Pavolini[a,b] and Wim Van Lancker [c,d]

[a]Economic Sociology and Social Policy, University of Macerata, Macerata, Italy; [b]SPOCRI, University of Macerata, Macerata, Italy; [c]Centre for Sociological Research, University of Leuven, Belgium; [d]Herman Deleeck Centre for Social Policy, University of Antwerp, Antwerpen, Belgium

ABSTRACT
Under the social investment paradigm, formal childcare services are heralded as being the policy instrument *par excellence* to combat social exclusion. However, it was shown that a Matthew effect (ME) in its use is present in almost all European countries: disadvantaged children are less likely to use childcare than more advantaged children. In this contribution we aim to uncover the cause of the ME by distinguishing between supply-side and demand-side explanations. This refers to constraints in the availability or affordability of childcare and to dominant cultural norms on motherhood. In doing so, we take due account of the role of employment. The results show that the ME in formal childcare cannot be explained by class differences in employment. Moreover, the ME is related to the supply-side and much less to the demand-side. Structural constraints in childcare provision matter everywhere and tend to limit the uptake of childcare, especially for disadvantaged children. In contrast, cultural norms on motherhood are a less important predictor of the ME in childcare use. This means that more investment in the provision of childcare services is necessary in order to achieve its ambitious policy goals.

Introduction

The social investment (SI) perspective emphasizes that social policy should not only provide a *buffer* for protection against the occurrence of social risks, but should focus on raising the *stock* of human capital and easing the *flow* of labour market integration (Hemerijck 2018). One important piece of the SI puzzle is the provision of high-quality early childhood education and care services (henceforth: formal childcare services).

At first glance, providing formal childcare services for young children is the policy instrument *par excellence* to raise the stock and ease the flow in the short term as well as over the life course. Childcare services allow for higher

levels of maternal employment, in turn raising the family income and reducing welfare dependency at the individual level and contributing to a balanced budget at the country level. Provided the quality of the service is sufficiently high, formal childcare contributes to child development, in turn increasing their chances to perform well in school and in the labour market later on. This should be beneficial in particular for children growing up in disadvantaged circumstances (Esping-Andersen *et al.* 2002).

Yet, for these beneficial outcomes to materialize, formal childcare services need to reach those disadvantaged children. Previous research has shown that the use of formal childcare by young children is socially stratified, with low-income or low-skilled parents being less likely to enrol their children in formal childcare services relative to more advantaged families (Van Lancker 2013). As a matter of fact, inequality in formal childcare use is the norm in European countries. Such inequality in outcomes has been referred to as a Matthew effect (ME), the observation that the benefits of government spending on social policy disproportionally accrue to middle- and upper-class relative to other social groups (Bonoli and Liechti 2018).

In this article we go beyond the state of the art by focusing on the root of the ME in formal childcare use across 27 European member states. Hitherto, in-depth investigations on how to understand social differentials in childcare use were limited to single countries (Abrassart and Bonoli 2015; Krapf 2014; Van Lancker and Ghysels 2012; Vandenbroeck *et al.* 2014). Only one exploratory study investigated how welfare state characteristics correlate with childcare inequality in a comparative way (Van Lancker and Ghysels 2016). We propose an analytical distinction between the 'demand-side' and the 'supply-side' in explaining the ME in formal childcare use. The supply-side refers to the availability and affordability of formal childcare, which is directly amenable by policy, while the demand-side refers to the dominant cultural norms on motherhood, i.e., what type of care is in the best interest of the children. Simply put: do MEs emerge because working class families face structural barriers in securing a place in formal childcare, or because they give less preference to using formal childcare compared to middle- and upper-class families? Looming large is the role of employment, since in particular two-earner families have a pressing need for formal childcare services, while household employment patterns differ across social groups (De Wachter *et al.* 2016).

Child-centred investment and the Matthew effect

Social investment is child-centred in the sense that it is grafted on the belief that life chances in modern economies depend on human capital accumulation in early childhood, and that societies need able, productive adults to increase employment rates and competitiveness. Esping-Andersen and

colleagues (2002) argue that the cornerstone of any European social inclusion strategy should focus on children and their families. This argument resonated strongly in policy circles. In its 2013 Recommendation on Investing in Children, for instance, the European Commission puts the provision of high-quality childcare services centre-stage to reduce inequality and increase maternal labour market participation.

The availability of formal care services correlates strongly with maternal labour market participation (Esping-Andersen *et al.* 2002). Insofar the use of formal childcare enables mothers to engage in paid employment, this has a direct impact on the family income and, hence, on the circumstances in which their children are raised. Enrolment in formal childcare services of sufficient quality enhances cognitive and non-cognitive skills, enabling children to be better prepared for learning (Burger 2010; Leseman 2009). Given the fact that there is a strong correlation between the educational level of parents, the cognitive skills and school readiness of their children (Feinstein 2003), quality childcare helps to reduce development gaps between children from different social backgrounds (Leseman and Slot 2014).

The presence of an ME is a problem for a child-centred investment strategy. It is a process of cumulative advantage in which a favourable outcome in one institutional setting becomes a resource producing further gains in other institutional settings (DiPrete and Eirich 2006). The quality of parental care differs greatly between socioeconomic groups, and school systems in many European countries are known to reproduce or even reinforce existing inequalities (Schütz *et al.* 2008). Unequal participation in formal childcare only reinforces this pattern of accumulation of advantage and disadvantage. As such, investing in childcare services runs the risks of increasing the gap among children by the time they start school.

Analytical framework and research questions

We make an analytical distinction between three mechanisms potentially related to the ME in formal childcare use.

First of all, we expect the ME to be related to maternal employment. The availability of childcare correlates with maternal employment. Since in particular working mothers need formal childcare, the direction of causality doesn't necessarily run from childcare use to employment. Some studies have shown that the creation of additional childcare places mainly crowds out informal arrangements and in particular benefits mothers who are already employed (e.g., Havnes and Mogstad 2011). Since the increase in maternal employment observed in developed welfare states over the past few decades was a socially stratified process with higher-educated mothers being much more likely to work compared to lower-educated mothers (De Wachter *et al.* 2016), it could be the case that the ME is simply a reflection of the social gap in maternal

employment. Therefore, the first research question we investigate is to what extent the ME in formal childcare use can be explained by maternal employment (RQ1).

Second, we expect the ME to be related to what we refer to as 'supply-side' factors: the availability and affordability of formal childcare services. An ME can emerge as a result of how childcare policies work, how they select (directly or indirectly) families, creating situations where middle- and upper-classes face fewer barriers to benefit from those services. In case of rationing (supply is lower than demand), the choices made by public authorities' can induce inequality. Abrassart and Bonoli (2015) focus on the institutional regulation of childcare provision in their study of a Swiss canton. Their findings suggest that differences among local authorities in the fees charged to low-income households is a significant predictor of inequality in use. The issue of availability and affordability is also related to employment. Two-earner families with stable occupations are more prevalent among middle- and upper-class families, and these families benefit more from childcare services with typical opening hours (Bihan and Martin 2004). They usually have more means to pay childcare fees (and often benefit from tax deductions) as well. In contrast, atypical, flexible and unpredictable working hours are more prevalent amongst lower social classes (Pintelon et al. 2013). Therefore, the second research question is to what extent supply-side constraints in terms of availability and affordability in the provision of childcare services are related to the ME in formal childcare use (RQ2).

Third, even if employment opportunities were equally distributed over social groups and no constraints in the supply of formal childcare services were at play, MEs can emerge because, on the demand-side, some parents might prefer taking care for their children themselves. This pertains to the role of culture in the relationship between care and work. Following Pfau-Effinger, culture is defined as 'the system of collective constructions of meaning by which human beings define reality and to which they orient their behaviour' (2014: 86). Previous research has shown that parents with more traditional attitudes regarding motherhood and employment are less likely to work and to use formal childcare (Steiber and Haas 2012). Few studies on childcare have given attention to the role of social class in terms of cultural norms (Duncan et al. 2003; Vincent et al. 2008). These studies show distinct class patterns in parents' decisions concerning childcare. If the dominant norm in a country offers no 'cultural support' for maternal employment and outsourcing childcare, MEs might emerge, in particular if personal preferences are in sync with the dominant norm. Therefore, the third research question is to what extent the dominant cultural norms on motherhood are related to the ME in formal childcare use (RQ3).

Finally, demand- and supply-side factors are related to each other. Policies may influence individual work–family choices, in turn changing dominant aggregated norms over time, but prevailing expectations concerning the role of motherhood may shape childcare policies as well (Brooks and Manza 2007). Moreover, demand-side and supply-side factors can reinforce or counteract each other in their impact on the ME in formal childcare use. The fourth research question is to what extent combinations of demand- and supply-side factors are related to the ME in formal childcare use (RQ4).

Research design

Data

The data used throughout this study are drawn from the 2010 European Union Labour Force Survey (EU-LFS) *ad hoc* module 'reconciliation between work and family life'. The *ad hoc* module includes information on the use of formal childcare services for young children as well as on the barriers for labour market participation connected to the availability and affordability of formal childcare services. Being an add-on to the regular EU-LFS, this provides us with the advantage of having a cross-country comparable database with larger sample sizes compared to previous research that is often based on European Union Statistics on Income and Living Conditions (EU-SILC) data.

The EU-LFS database includes 27 European member states (no data for Croatia). The analytical focus is on the level of the household (since childcare is a decision affecting all working-age adults in the household), and the sample is limited to families with a youngest child below three years old. The final sample consists of 32,643 families with young children (see Table A1 in the Online Appendix). The EU-LFS data is complemented by country-level data drawn from the European Values Study (EVS) of 2008.

Variables

The dependent variable is the *use of formal childcare services.* This includes paid childminders, preschool and childcare centres, apart from compulsory school. The respondents are asked whether they have used formal childcare services for their youngest child. The variable is dummy coded, reflecting whether families have or haven't used formal childcare for their youngest child.

The main independent variable of interest is a measure of social class of the household. In contrast with previous studies on this subject, adopting either educational level of the mother or income quintile of the household as indicators of social background, we rely on the Erikson–Goldthorpe–Portocarero (EGP) class scheme (Erikson and Goldthorpe 1992). This is more in line with

political science and sociological definitions of social background, rooted in the status and characteristics of (former) participation in the labour market as measured by the International Standard Classification of Occupation 1988. We adopt a simplified version of the EGP class scheme based on three classes: (1) 'managers and professionals'; (2) 'white-collar workers'; (3) 'blue-collar workers and elementary occupations'.

To take the role of *employment* into account, we include a dummy variable measuring whether the mother in the household (or the father if no mother is present) is in paid employment. We focus on maternal employment, since previous research has made clear that childbirth negatively effects the labour supply of women, not that of men (e.g., Uunk *et al.* 2005); hence, the labour market status of the mother is relevant to understand whether families enrol their children in formal childcare. Yet, by means of robustness check, we also tested a variable measuring the work intensity of the household, operationalized by the ratio of the number of working adults to all adults in the household. The interpretation of the results (not shown) does not change.

In order to test whether supply-side or demand-side dimensions are related to social class differentials in formal childcare use, we include country-level variables measuring structural barriers to childcare participation and dominant cultural norms on motherhood. For gauging the role of structural barriers, we first draw on a set of questions included in the *ad hoc* module on the reasons why respondents with at least one child below 14 years old with young children don't work or work only part-time. Respondents that were not seeking a job or were only working part-time were asked to indicate whether this was owing to structural reasons ('suitable care services for children are not available or affordable') or that the availability or affordability of care facilities did not influence their work arrangement (which suggests a matter of choice). We calculate a country-level variable 'structural constraints' measuring the weighted proportion of respondents referring to structural reasons not to work (more).

Third, for the demand-side, we create a variable measuring dominant cultural norms on motherhood based on the question 'A pre-school child is likely to suffer if his or her mother works'. The variable measures the extent to which social norms disapprove of the mother's role in the labour market. The logic behind using this question is that if one believes that working is bad for one's child, this will affect the demand for formal childcare. We draw on the EVS wave 2008 to construct an aggregated measure of dominant norms on motherhood for all countries included in our sample, based on a subsample of respondents with children below 14 years old.

All models control for the following individual and household characteristics: highest level of education in the household (in three categories, following the International Standard Classification of Education classification

[ISCED]), age of the youngest child, number of children in the household, migration background (dummy coded: 0 = native, 1 = born in another country), being a single parent, and currently using or having used maternity or parental leave. Summary statistics of these variables are reported in Table A2 in Online Appendix.

Method

To deal with the clustered nature of our dataset (households are nested in countries) and since our dependent variable is a binary indicator, we apply multilevel logistic regression models. In particular, we estimate the probability to have used formal childcare services by means of random intercept models with country being the higher level. A multilevel design takes the hierarchical structure of the data into account and yields less biased standard errors compared to a logistic regression model with country dummies (e.g., Hox 2002). The focus of the analyses is on the ME in formal childcare use, tested by examining the relationship between social class and formal childcare use. We empirically test whether the ME can be explained by labour market participation, and whether the supply-side factors, demand-side factors or a combination of both are associated with it. The change in deviance is reported to estimate the fit of the models.

Results

Descriptive results

Panel A of Figure 1 shows the proportion of families with young children having used formal childcare services for their youngest child during a regular week, panel B shows the percentage point difference in the proportion of formal childcare use between the highest (I) and the lowest (III) social classes.

EU member states are characterized by great diversity in terms of formal childcare uptake. Differences range from 15 per cent or less in Czech Republic, Slovak Republic, Romania, Hungary, Latvia and Austria, over about 30 per cent in Finland, Germany and Ireland, to over 50 per cent in Portugal, Sweden, France, Luxemburg and Denmark. These averages conceal stark differences across social classes. Only Denmark and Malta combine high levels of formal childcare use with the absence of an ME. In Sweden, the difference is limited to less than 10 per cent. In countries such as Luxemburg, France, Portugal, Netherlands and Belgium, social class differences range between 25 and 40 per cent. It is an arithmetic regularity that percentage point differences between social classes are lower in countries reporting low levels of average formal childcare use, but even then, differences
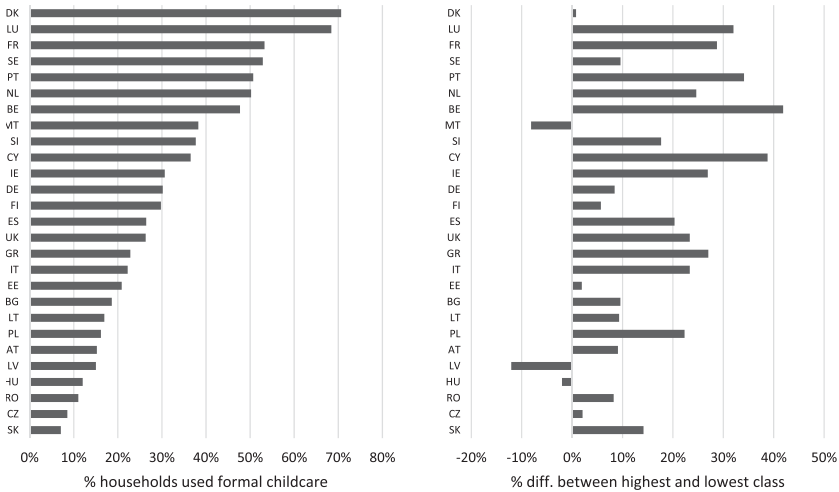
Figure 1. Average and social class differences in formal childcare use, European countries, 2010.

Note: Own calculations on EU-LFS 2010. Sample selection: households with a youngest child < three years old. Country abbreviations: DK = Denmark; LU = Luxemburg; FR = France; SE = Sweden; PT = Portugal; NL = Netherlands; BE = Belgium; MT = Malta; SI = Slovenia; CY = Cyprus; IE = Ireland; DE = Germany; FI = Finland; ES = Spain; UK = United Kingdom; GR = Greece; IT = Italy; EE = Estonia; BG = Bulgaria; LT = Lithuania; PL = Poland; AT = Austria; LV = Latvia; HU = Hungary; RO = Romania; CZ = Czech Republic; SK = Slovak Republic.

regularly amount to 10 per cent points. It is clear that the ME in formal childcare use across European Union (EU) member states is the norm rather than the exception.

Figure 2 shows how European countries score on the demand-side and supply-side dimensions of formal childcare use. The two indicators are only weakly correlated ($r = 0.18$). The scatterplot shows how countries can score high on both dimensions, on only one dimension, or score low on both dimensions. Drawing on these two dimensions, four groups of countries can be roughly distinguished. A first group consists of Ireland, Spain, Belgium and United Kingdom. In these countries, the share of respondents reporting traditional norms on motherhood is below-average, but an above-average share of respondents indicates structural constraints in childcare provision. In a second group, Bulgaria, Germany, Latvia, Poland, Greece, Romania and Austria, an above-average level of structural constraints is combined with more traditional norms on motherhood. The third group consists of Lithuania, Italy, Cyprus, Portugal, Malta, Estonia, Luxemburg and Hungary. In these countries the dominant norm on motherhood is traditional with a below-average share of people indicating supply-side problems. Finally, a fourth group comprises Denmark, Sweden, Finland and the Netherlands, as well as Slovenia, Czech Republic, France and the Slovak Republic. Here, the dominant norm is more
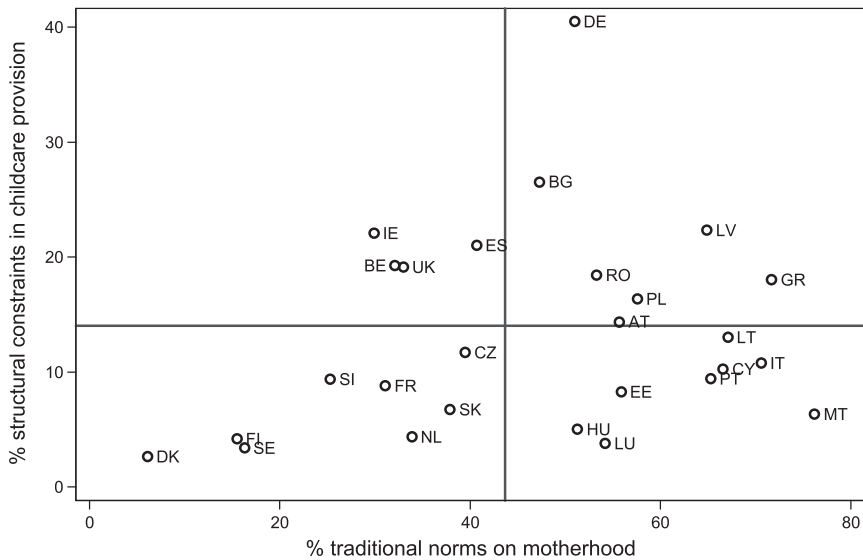
Figure 2. Supply-side and demand-side dimensions of formal childcare use, European countries, 2010.

Note: Horizontal and vertical lines represent average values of both dimensions.

progressive and structural constraints are limited. Yet, even in these countries, between 10 and 40 per cent of respondents adhere to traditional norms on motherhood, and that 30 per cent or more of families with young children haven't used formal childcare for their youngest child (cf. Figure 1).

Multivariate results

Model 1a in Table 1 shows the association between social class and formal childcare use, controlled for individual and household characteristics; Model 1b estimates whether the relationship between social class and formal childcare use is affected by maternal employment.

Model 1a confirms the significant and substantial class differentials in formal childcare use. Converting logit coefficients to probabilities, the model predicts that 35 per cent of families in the highest social class have used formal childcare for their youngest child, 30 per cent of families in the second class, and 23 per cent in the lowest class, across countries and controlled for individual and household characteristics. Full models showing all coefficients are reported in Table A3 in the Online Appendix. These models show that individual and household characteristics significantly influence the probability to use formal childcare.

To investigate to what extent maternal employment might explain these social class differentials in formal childcare use, model 1b adds the variable

Table 1. Multilevel logistic regression models estimating the probability to use formal childcare.

	1a		1b		2		3	
	coeff.	(se)	coeff.	(se)	coeff.	(se)	coeff.	(se)
Social class (ref. = I)								
II	−0.325***	(0.034)	−0.085	(0.060)	−0.164	(0.095)	−0.571***	(0.056)
III	−0.755***	(0.048)	−0.173**	(0.065)	0.248*	(0.119)	−0.872***	(0.088)
Maternal employment (ref. = no)			1.530***	(0.054)	1.289***	(0.033)	1.283***	(0.034)
Maternal employment* Social class								
II			−0.310***	(0.069)				
III			−0.513***	(0.090)				
Structural constraints * Social class					−0.020	(0.018)		
II					−0.012**	(0.004)		
III					−0.037***	(0.006)		
Traditional norms * Social class					−0.022*	(0.009)		
II					−0.001	(0.002)		
III					−0.004	(0.002)		
Country groups (ref = 1)								
Group 2							−0.926	(0.528)
Group 3							−0.390	(0.516)
Group 4 * Social class							0.084	(0.515)
Group 2 * II							0.307**	(0.090)
Group 2 * III							0.106	(0.127)
Group 3 * II							0.436***	(0.090)
Group 3 * III							0.817***	(0.122)
Group 4 * II							0.501***	(0.081)
Group 4 * III							0.846***	(0.112)
Variance component								
Country	0.878***	(0.243)	0.921***	(0.254)	.618***	(0.173)	.696***	(0.194)
Model fit								
Deviance	32629.97		30969.79		30935.79		30894.19	
N(households)	32643		32643		32643		32643	
N(countries)	27		27		27		27	

Notes: Results from multilevel logistic regression models based on EU-LFS 2010. Sample: families with a youngest child below three years old. Social class categories: I = Managers/professionals; 2 = White-collar; 3 =Blue-collar/elementary occupations. Country groups: 1 = Structural constraints + progressive norms; 2 = Structural constraints + traditional norms; 3 = No structural constraints + traditional norms; 4 = No structural constraints + progressive norms. All models are controlled for age of the youngest child, number of children in the household, highest educational level of the household, country of birth, being a single parent, and leave use. Full models are reported in Table A3 in the Online Appendix. Significance levels: ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.

depicting maternal employment and its interaction with social class to the estimation. The likelihood ratio test suggests a significantly better fit. The coefficients show that in households where the mother does not work, the social class differential in formal childcare use disappears almost completely. This is expected, since households with young children where the mother stays at home are less in need of formal childcare. This points, first and foremost, to the reciprocal relationship between maternal employment and childcare

use, and suggests that a social investment strategy needs to focus on increasing labour market participation in order to increase formal childcare use as well.

Yet, the interaction of social class with maternal employment is significant, suggesting that a labour market strategy alone will not suffice. Even among households with employed mothers, there are significant social class differentials in formal childcare use. Converted to probabilities, this amounts to 47 per cent of households from the highest social class predicted to have used formal childcare for their youngest child, over 39 per cent of households from the second class, to 34 per cent of the lowest class. In sum, the ME in formal childcare use cannot be readily explained by individual characteristics, nor employment status.

Let us now turn to the question how supply-side and demand-side issues are associated with social class differentials in formal childcare use. Model 2 tests the role of structural constraints (supply-side dimension) and cultural norms on motherhood (demand-side dimension) by adding cross-level interactions with social class. Cross-level interactions test whether the nature of the relationship between social class and formal childcare use changes as a function of structural constraints or cultural norms on motherhood. Model 3 tests how the interplay of structural constraints and cultural norms affects particular countries by adding the country cluster dummies identified *supra*. We tested all of these models controlling for economic development (measured as gross domestic product [GDP] per capita) and the state of the labour market (measured as the unemployment rate) at the country level, as well as with a random slope allowing the effect of social class to vary between countries. Since the results do not fundamentally change, we show the more parsimonious models without these macro-level controls (see also the warnings issued by Bryan and Jenkins [2015] about adding higher-level variables and cross-level interactions when the number of higher level observations is limited).

The results in model 2 show that the main effect of structural constraints is not significant but that the interaction effect with social class is, while the main effect of cultural norms is significant but the interaction effect with social class is not. Because cross-level interaction terms in a logit framework are notoriously difficult to interpret, Figure 3 visualizes how the supply and demand-side variables relate to social class differentials in formal childcare use. The figure reports predicted probabilities for using formal childcare by social class, over (1) the share of respondents indicating structural constraints to work related to formal childcare service, and (2) the share of the population reporting traditional norms on motherhood.

The figure shows that more traditional norms on motherhood *and* more structural constraints in childcare provision are associated with lower probabilities to use formal childcare across social classes. However, the figure shows that structural constraints in childcare provision hurt the lower social
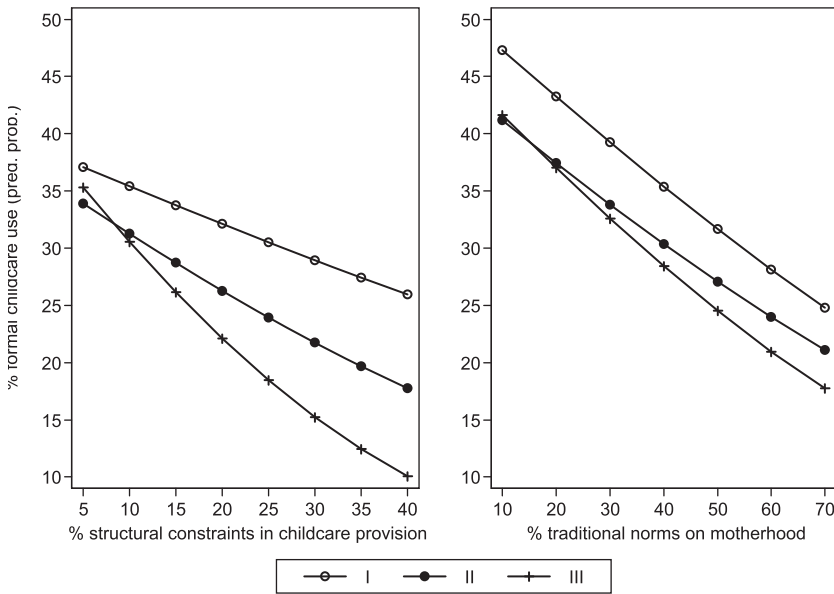
Figure 3. Predicted probabilities of formal childcare use by social class over demand-side and supply-side dimensions.

Note: Predicted probabilities based on model 2. Legend: social class I = Managers/professionals; II = White-collar; III = Blue-collar/elementary occupations.

classes relatively more. While the social class differential in formal childcare use is limited in countries where only a small share of respondents reports structural constraints, the gap widens strongly as structural constraints in childcare provision increase (RQ2). The effect of traditional norms on motherhood on social class differentials is not significant: the ME occurs in both more traditional and more progressive countries (RQ3).

It might be the case that the social gap in countries reporting high levels of structural constraints can be explained by the countries reporting high levels of traditional norms that also score high on the supply dimension, or vice versa. To test for this, we add the four groups of countries identified above to the model. Group 1 consists of countries combining higher levels of structural constraints in childcare provision with progressive norms on motherhood; group 2 combines higher levels of structural constraints with traditional norms on motherhood; group 3 includes countries with lower levels of structural constraints but traditional norms; and group 4 combines lower levels of structural constraints with progressive norms. If the supply-side dimension is more important in explaining MEs than the demand-side dimension, social class differentials should be particularly large in country groups 1 and 2; if the opposite holds, social class differentials should be

larger in country groups 3 and 4. If both dimensions are important, social class differentials should be smallest in group 4. We add an interaction effect between the four country groups (which represent constructed interactions between the demand-side and supply-side indicators) and social class to model 3. Here, too, the results are visualized by means of predicted probabilities in Figure 4 to facilitate its interpretation.

Figure 4 shows that average formal childcare use is highest in countries where supply and demand are aligned, and lowest in countries where constraints in both supply and demand reinforce each other. Confirming the results from model 2, given a similar level of supply, formal childcare use tends to be lower when norms on motherhood are more traditional. Most importantly, however, differences between social classes in the probability to use formal childcare services are related to structural constraints (in groups 1 and 2), not to traditional norms on motherhood (in groups 3 and 4). Succinctly summarized: if the dominant norms on motherhood are biased against maternal employment and formal childcare use, families across classes are affected in a similar way. If the supply of childcare places is constrained, in particular families from the lower classes are hurt.
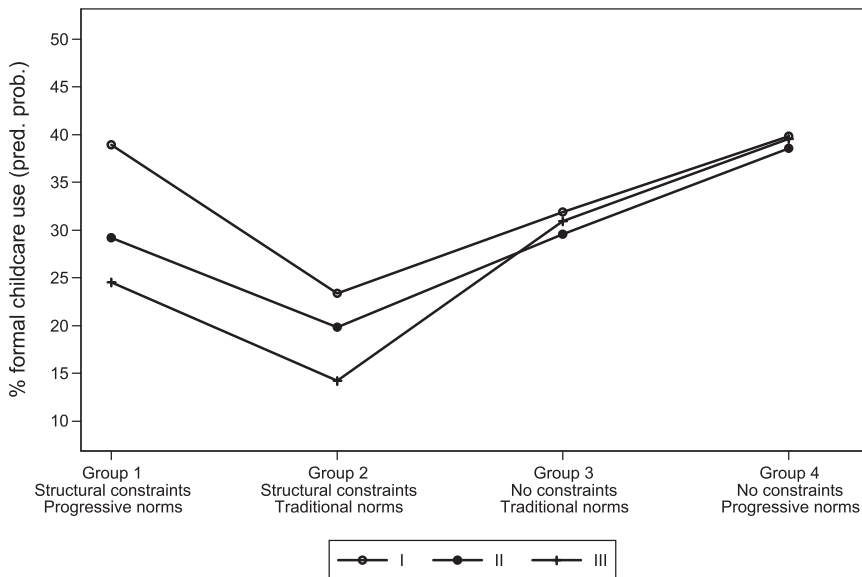

Figure 4. Predicted probabilities of formal childcare use by social class, over country groups.

Note: Predictions based on model 3. Group 1: Ireland; Spain; Belgium, and United Kingdom. Group 2: Germany; Bulgaria; Latvia; Poland; Greece; Romania; and Austria. Group 3: Lithuania; Cyprus; Estonia; Italy; Portugal; Malta; Luxemburg; and Hungary. Group 4: Denmark; Sweden; Finland; the Netherlands; Slovenia; Czech Republic; France; and Slovak Republic. Legend: social class I = Managers/professionals; II = White-collar; III = Blue-collar/elementary occupations.

Conclusion and discussion

Three conclusions stand out from our analysis. First, it is beyond doubt that the ME can be observed in formal childcare use in most European countries: both descriptive and multivariate analyses show substantial class differentials in childcare use. Second, the ME cannot be explained simply by class differentials in maternal employment. Even among households with employed mothers there are significant differences in formal childcare use between social classes. Third, the ME is related to supply-side and much less so to demand-side issues. Structural constraints in childcare provision matter everywhere and tend to limit the uptake of childcare especially for children growing up in disadvantaged circumstances. In contrast, dominant cultural norms on motherhood are a less important predictor of the ME in childcare use.

From a SI point-of-view, this is encouraging. Structural constraints in the availability or affordability are amenable by policies. This entails increasing the availability of formal childcare services, imposing quality regulations, and keeping parental fees at bay. In sum, this calls for *more* SI, and in particular higher levels of spending on childcare services, since government expenditures and childcare coverage are closely related (Van Lancker 2017).

The importance of the supply-side for mitigating the ME does not mean that cultural norms are not important to take into consideration. The probability of using formal childcare tends to be lower for all families in countries with more traditional norms, irrespective of supply-side constraints. Even in countries where the dominant norm is progressive, a substantial share of people still adheres to more traditional norms on motherhood. This means that not all families will be convinced that using formal childcare is the best thing to do, even if available and affordable. Such 'demand-side' constraint is currently not considered in the SI paradigm but should be explicitly dealt with in order to set achievable policy goals.

The ME in formal childcare means that government investment in formal childcare provision today is not likely to deliver on its promises to combat inequality in early life in the future; this might reinforce existing inequalities rather than mitigating them; the exact opposite of what the SI paradigm seeks to achieve.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

Notes on contributors

Emmanuele Pavolini is associate professor in economic sociology and social policy at the University of Macerata.

Wim Van Lancker is an assistant professor in social work and social policy at the Centre for Sociological Research, University of Leuven, and affiliated with the Herman Deleeck Centre for Social Policy, University of Antwerp.

ORCID

Wim Van Lancker ⓘ http://orcid.org/0000-0003-4071-5329

References

Abrassart, A. and Bonoli, G. (2015) 'Availability, cost or culture? obstacles to childcare services for low-income families', *Journal of Social Policy* 44(4): 787–806.

Bihan, B.L. and Martin, C. (2004) 'Atypical working hours: consequences for childcare arrangements', *Social Policy & Administration* 38(6): 565–590.

Bonoli, G. and Liechti, F. (2018) 'Good intentions and Matthew effects: access biases in participation in active labour market policies', *Journal of European Public Policy*. doi:10.1080/13501763.2017.1401105

Brooks, C. and Manza, J. (2007) *Why Welfare States Persist. The Importance of Public Opinion in Democracies*, Chicago, IL: University of Chicago Press.

Burger, K. (2010) 'How does early childhood care and education affect cognitive development? An international review of the effects of early interventions for children from different social backgrounds', *Early Childhood Research Quarterly* 25(2): 140–165.

De Wachter, D., Neels, K. Wood, J. and Vergauwen, J. (2016) 'The educational gradient of maternal employment patterns in 11 European countries', in D. Mortelmans *et al.* (ed.), *Changing Family Dynamics and Demographic Evolution*, Cheltenham, UK: Edward Elgar Publishing, pp. 140–178.

DiPrete, T.A. and Eirich, G.M. (2006) 'Cumulative advantage as a mechanism for inequality: a review of theoretical and empirical developments', *Annual Review of Sociology* 32: 271–297.

Duncan, S., Edwards, R. and Reynolds, T. (2003) 'Motherhood, paid work and partnering: values and theories', *Work, Employment & Society* 17(2): 309–330.

Erikson, R. and Goldthorpe, J.H. (1992) *The Constant Flux: A Study of Class Mobility in Industrial Societies*, Oxford: Oxford University Press.

Esping-Andersen, G., Gallie, D., Hemerijck, A. and Myles, J. (2002) *Why We Need a New Welfare State*, Oxford: Oxford University Press.

Feinstein, L. (2003) 'Inequality in the early cognitive development of British children in the 1970 cohort', *Economica* 70: 73–97.

Havnes, T. and Mogstad, M. (2011) 'Money for nothing? universal child care and maternal employment', *Journal of Public Economics* 95: 1455–1465.

Hemerijck, A. (2018) 'Social investment as a policy paradigm', *Journal of European Public Policy* doi:10.1080/13501763.2017.1401111

Hox, J.J. (2002) *Multilevel Analysis: Techniques and Applications*, London: Lawrence Erlbaum Associates.

Krapf, S. (2014) 'Who uses public childcare for 2-year-old children? coherent family policies and usage patterns in Sweden, Finland and western Germany', *International Journal of Social Welfare* 23: 25–40.

Leseman, P. (2009) 'The impact of high quality education and care on the development of young children: a review of the literature', in EACEA (ed.), *Early Childhood Education and Care: Tackling Social and Cultural Inequalities*, Brussels: EACEA, pp. 17–49.

Leseman, P. and Slot, P. (2014) 'Breaking the cycle of poverty: challenges for European early childhood education and care', *European Early Childhood Education Research Journal* 22(3): 314–326.

Pfau-Effinger, B. (2014) 'Explaining Differences in Child Care and Women's Employment across Six European Gender Arrangements', in M. Leon (ed.), *The Transformation of Care in European Societies*, Basingstoke: Palgrave, pp. 83–103.

Pintelon, O., Cantillon, B., Van den Bosch, K. and Whelan, C. (2013) 'The social stratification of social risks: the relevance of class for social investment strategies', *Journal of European Social Policy* 23(1): 52–67.

Schütz, G., Ursprung, H.W. and Wößmann, L. (2008) 'Education policy and equality of opportunity', *Kyklos* 61(2): 279–308.

Steiber, N. and Haas, B. (2012) 'Advances in explaining women's employment patterns', *Socio-Economic Review* 10(2): 343–367.

Uunk, W., Kalmijn, M. and Muffels, R. (2005) 'The impact of young children on women's labour supply: a reassessment of institutional effects in Europe', *Acta Sociologica* 48(1): 41–62.

Van Lancker, W. (2013) 'Putting the child-centred investment strategy to the test: evidence for the EU27', *European Journal of Social Security* 15(1): 4–27.

Van Lancker, W. (2017) 'Reducing inequality in childcare service use across European countries: what (if any) is the role of social spending', *Social Policy & Administration*, forthcoming.

Van Lancker, W. and Ghysels, J. (2012) 'Who benefits? The social distribution of subsidized childcare in Sweden and Flanders', *Acta Sociologica* 55(2): 125–142.

Van Lancker, W. and Ghysels, J. (2016) 'Explaining patterns of inequality in childcare service use across 31 developed economies: a welfare state perspective', *International Journal of Comparative Sociology* 57(5): 310–337.

Vandenbroeck, M., Geens, N. and Berten, H. (2014) 'The impact of policy measures and coaching on the availability and accessibility of early child care: a longitudinal study', *International Journal of Social Welfare* 23(1): 69–79.

Vincent, C., Braun, A. and Ball, S. (2008) 'Childcare, choice and social class: caring for young children in the UK', *Critical Social Policy* 28(1): 5–26.