

Comparative Childcare Policy Analysis Revisited. Examples of Central and Eastern Europe

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Abstract

Comparative research routinely employs a small number of indicators to compare family policies across countries. Government expenditure, participation of children in public childcare or length of parental leave are internationally recognised policy indicators. However, they have been subject of academic controversy and are less adequate predictors of gendered policy incentives. This paper, therefore, theoretically and empirically explores and discusses how varieties of state de-familialism could be more fully captured in a cross-country perspective. It offers a methodology to reveal the latent constructs which underlie policies on parental leave and childcare services, to uncover the state assumptions about social organisation of childcare and gender roles in a country-comparative perspective. Legal regulations are central to this analysis, and combinations of policy components take centre stage. An index of state de-familialism is proposed and its analytical potential tested on eight post-socialist EU states.

Key words: Childcare, comparative analysis, policy index, state de-familialism, Central and Eastern Europe

Introduction

Parents increasingly have careers, not just jobs, and ever more women and men expect to ‘have it all’. However, it remains embedded in the “culture of social obligation” that women are the primary caregivers (e.g., Daly 2002: 262). This “gender contract” (Gottfried 2000: 253) affects mothers’ employment opportunities and limits their possibility to compete with men for the best paying jobs. Moreover, it constrains fathers’ parenting possibilities. This division of unpaid work is not trivial, especially for women, who remain most likely to accommodate their economic activities in order to carry out family responsibilities; Land and Rose (1985) call this “women’s compulsory altruism” (cf. Orloff 1993: 313).

For various reasons, welfare states have designed policies aimed at solving the problems that arise from this inherent conflict. These policies set “the rules of the game” (North 1990). They endorse, legitimise, and re-produce the “ethos” of social norms and practices (Hobson et al. 2011: 173; Misra&Akins 1998). Following the feminist critique of welfare-state regimes, normative assumptions about the social organisation of care and gender roles most clearly underpin regulations on parental leave and childcare services (e.g., Knijn&Kremer 1997; Rubery et al. 1998: 223-234; Ruhm 1998; Leitner 2003; Ferrarini 2006). These constrain parents’ choices and hence their “opportunities to be and do” following childbirth (Hobson et al. 2011: 169). I call this *policy conceptual logic*.

Welfare states choose different policy combinations. These policy choices have various implications, one being the disruption of female employment following childbirth (e.g., Gornick&Meyers 2003; Misra et al. 2010). To illustrate, parental leave may come with penalties, including job loss or discriminatory treatment in pay and promotion. Thus, for some parents the decision to take leave could be an option to fall back on instead of a first choice, especially when childcare services are limited. Alternatively, welfare states might use these policies to challenge the normative parenthood ideals (e.g., Leitner 2003; Cicia&Verloo 2012).

A good example of this is Sweden. Since the 1970s, the state has promoted active fatherhood, and shared parenting has increased as a result. Since more men use longer parental leave, the problems associated with taking leave have decreased. This suggests that government initiatives could also transform gendered roles. I call this *policy transformative potential*, to refer to the degree to which the states support a dual-earner/dual-carer family model (Gornick&Meyers 2003).

Policies on parental leave and childcare services are two sides of the same coin (also Misra et al. 2010). Parents can view and experience them as a ‘package’ that constrains their options following childbirth. Therefore, to fully understand their implications, the underlying logic of these policies must be considered. However, previous comparative analysis is limited in its ability to explain their various configurations and implications.

There are two main reasons for these limitations. First, previous research on the implication of welfare-state regimes tends to rely on welfare state output which is problematic if the data is less than ideal. There is a limited amount of cross-national data on comprehensive family policies. Time-series in international databases are short and available indicators on policy delivery and use are scarce or flawed. Administrative data, which often is not translated, is inconsistent across countries. Therefore we see a tradition where policies are measured with subpar data such as the generosity of leave policies (the correlation between leave duration and payment), public spending on childcare, participation rates and number of hours in public childcare and staff-to-child ratios.

Serious methodological issues underlie this data (e.g., Fagan&Hebson 2005; Plantenga&Remery 2005; Lambert 2008: 316; Gilbert 2008: 129, 145). For instance, states may use different funding streams to finance childcare services, yet this is not reflected in national statistics of state investment in childcare if municipalities do not report their spending (e.g., OECD 2010). Moreover, international databases on public expenditure cover information on education-related programmes whilst excluding care-related services. This is a critical omission because public support for parents with children aged 0-3 is concealed.

Second, research tends to combine independent and dependent variables. Research typically uses indicators of policy provision and uptake; however, these are framed by a range of factors such as rules and regulations, national funding streams (e.g., OECD 2010), social norms, preferences, and household income (e.g., Lambert 2008; Gornick&Meyers 2003). For example, parents’ use of entitlements reflects social norms and values that influence whether they feel entitled to claim them. To illustrate, Swedish parents use less public childcare than what is available to them. This pattern appears to be informed by their notion of ‘good worker/good parent’ and the need to put children first (Hobson et al. 2011). Therefore, by using the number of hours in childcare to discern policy logic we could draw erroneous conclusions about childcare availability.

Notwithstanding their weaknesses, these measures are often presented as an intellectual force with an autonomous quality of their own while critical concerns are often missing.ⁱ

This is where the contribution of this article lies. I will present a critical perspective on the power of ‘standard’ policy measures to explain policy logics and will offer an approach that puts legal formulations on parental leave and childcare services in the centre of analysis. To capture state assumptions about social organisation of care and gendered roles, I will expand upon Weber’s (1949) use of ‘ideal types’ and evaluate policies across multiple dimensions. Then, I will examine their combinations and classify policies using the ‘varieties of de-familialism’ framework.

Thus, this paper will be structured in four sections. First, I will consider the issue of how to think about policies in the area of childcare in terms of social organisation of care, mothers’ employment and active fatherhood. Then, I will briefly review earlier approaches to comparative policy analysis. Drawing on these, I will propose a new approach and investigate its analytical potential on eight post-socialist EU countries. Lastly, I conclude by expressing critical reflections and possible directions for future research.

Theoretical perspectives

Research on the gendered welfare state views the state as “not just a set of services; it is also a set of ideas about society, about the family, and – not least importantly, about women who have a centrally important role within the family, as its linchpin” (Wilson 1977: 9). The feminist response to Esping-Andersen’s (1990) welfare regimes has contributed through providing important accounts of cross-country variation in women’s experiences (e.g., Lewis 1992; Orloff 1993; Fraser 1994; Sainsbury 1996; Leitner 2003; Saraceno&Keck 2008). This literature maintains that welfare states vary in the extent to which governments reinforce or challenge gendered roles. Orloff (1993) has described this by saying, “[T]he character of public social provision affects women’s material situations, shapes gender relationships, structures political conflict and participation, and contributes to the formation and mobilisation of specific identities and interests” (pp. 303-4).

Considerable bodies of research demonstrate that parental leave and childcare services have the highest explanatory power for cross-country variation in female employment (e.g., Ruhm 1998; Rubery et al. 1998: 223-234; Pettit&Hook 2005; Uunk et al. 2005; Eliason et al. 2008; Misra et al. 2010). These not only frame the ways in which women engage in employment but also how men

engage in parenting (e.g., Leitner 2003). For example, Haas&Hwang (2008) argue that state incentives for father's use of leave affect active fatherhood throughout the family cycle, whilst Pylkkänen&Smith (2003) found a 'substitution effect': when fathers use leave, mothers could resume employment earlier which positively affects their job prospects. Therefore, welfare states use policies to determine 'proper' parenthood ideals, and these create both incentives and disincentives for shared parenting (e.g., Leitner 2003; Smith&Williams 2007; Gornick&Meyers 2008; Hobson et al. 2011; Ciccio&Verloo 2012).

Leitner (2003), however, maintains that policy conceptual logics reflect how welfare states choose to allocate childcare responsibilities between the state, the family and the market, and within the family between men and women (also Saraceno&Keck 2008). She organises policy combinations in a 4-type framework of state de-familialism. This framework is concerned with the degree to which the welfare states assume and support family interdependencies, and reinforce, or challenge, gendered care giving. Leitner (2003) differentiates between explicit and implicit familialism, defamilialism, and optional de-familialism.

Familialism promotes and supports familial childcare. States do this either *implicitly* by leaving parents without publicly-financed support or *explicitly* by rewarding them with public money to provide childcare themselves (i.e. "caregiver parity model" by Fraser 1994). In contrast, *defamilialism* promotes the dual-earner family model (i.e. "adult worker model" by Lewis 2001: 154), with the state investing in publicly-funded childcare, whereas *optional de-familialism* affords parents to choose between preferable childcare options.

Leitner's (2003) conceptualisation also considers the transformative potential of leave (the familialistic policy element) which can "provide incentives to ensure that care provision is shared on equal terms among male and female family members" (p. 367). This opens up the analytical space for comparative research. First, Leitner's (2003) 'varieties of de-familialism' distinguishes between policy areas, such as childcare and old-age, relative to the broad welfare-state regimes. Second, legal regulations on parental leave and childcare services become central analytical dimensions relevant to parents with preschool children. Third, it questions assumptions in which policy dimensions combine to reflect different policy logics. Leitner argues that different combinations frame different opportunities or constraints. Hence, this concept captures policy transformative potential, such as the extent to which the state challenges gendered roles. Moreover, it recognises that defamilialism may occur through both the state and the market.

However, the two are assigned different conceptual status, acknowledging that recourse to the consumer market is mediated both by family resources and alternatives available through leave. In summary, this conceptual framework offers fruitful lines for analytical developments about the gendered implications of the welfare state in a country-comparative perspective.

Country-comparative family policy research

Comparisons play an important role in social policy analysis and welfare state research. Applications of various methods in this research have grown, including comparisons of welfare state regimes and policy typologies, while also studying changes over time. On the one hand, this literature provides invaluable information about policies across countries. On the other hand, quantitative analyses provide important information about policy implications. Cross-country policy analysis includes increasingly national data and the selection of cases and appropriate research strategy is thus a challenge. Important factors of comparative research are thus the ways in which we source, link, and present policy information.

Parental leave and childcare services are “complex objects of investigation” (Ciccia&Verloo 2012: 507). Their complexity derives from the fact that they are made from a multiplicity of relevant components. These include the duration and payment of leave, flexibility, eligibility, accessibility, affordability, and quality of services, while each element carries implications for the policy as a whole (Leitner 2003; author 2010). This study will assess multiple policy components as structural elements that can combine into a ‘package’ which is available to working parents following childbirth. Considering their effect on gender roles and parental employment it will, in essence, offer a new typology for understanding this policy area, as well as yield a grouped variable with enhanced explanatory power that can be used in quantitative analysis.

Policy indexing

Sainz (1989) argues that the heterogeneity of countries necessitates flexible analytical approaches which combine various types of information. Composite measures are increasingly recognised as useful analytical instruments that can capture multifaceted concepts (e.g., Booyesen 2002: 145; Ragin 2009: 5). This type of research, in which child-related policies are included, has developed a series of indices that can measure gender equality (e.g., Plantenga et al. 2009; Kershaw 2010), active fatherhood (e.g., Smith&Williams 2007), work-family reconciliation (e.g., Gornick et al. 1997; Plantenga&Hansen 1999; Gornick&Meyers 2003; Lambert 2008; Ray et al. 2010), child-

related benefit programmes (e.g., Mandel&Semyonov 2005; Bradshaw et al. 2006), and family poverty (Misra et al. 2007).

In this field, Gornick et al.'s (1997; 2003) approach represents a seminal attempt to include multiple policy dimensions. Authors proposed three indices on leave, childcare, and early-school services which were considered gendered policy incentives for working parents. They comprise of 22 indicators of which 20 are statistical data, such as participation rates in day care, and 2 which are textual. These include service quality and tax relief.

Previous efforts offer tremendous opportunities to analytically systemise policy data. They open up the possibility for new types of scholarly investigations and activities in comparative research. First, they address the need to investigate policies with multiple dimensions, and advance legal regulations as principle ingredients of comparative analysis (largely used in studies on leave, e.g., Bruning&Plantenga 1999; Ferrarini 2006; Ray et al. 2010; Ciccio&Verloo 2012). Second, they demonstrate that effective composite measures depend on comparable and valid metrics. However, no straightforward rule yet exists to decide which and how many indicators to use. In earlier work, selection depended on research focus, theory, pragmatism, and intuitive appeal (for review, see author 2012).

As a consequence, existing indices neither focus on policy models nor on policy conceptual logics (Hudson&Kuhner 2010; Ciccio&Verloo 2012). Instead, they often combine many conceptually different indicators (family income, employment rates) across multiple policy areas (childcare, employment, social security). Although comprehensive, these all-inclusive indices may conceal the latent constructs which underlie this data, rendering its complexities invisible. Given the lack of theoretical assumptions in which policy dimensions combine to reflect different policy logics, several questions remain open. What are the central aspects of parental leave and childcare services? How do they combine to reflect gender and parenting norms? How are these ideal types operationalized?

Measuring state de-familialism

I propose a different approach to evaluating national statutory regulations on parental leave and childcare services and how they conform to Leitner's (2003) ideal policy types. Using Weber's ideal types, I have developed an index of de-familialism; this measures the degree to which states support women's continuous employment and promote active fatherhood. This approach aims

to bridge area-specific and country-comparative policy analyses, to connect analysis with theoretical models of varieties of de-familialism, and to map the differences across countries.

This approach is based on the premise that policies are conceptually rooted, and hence their logics can be best understood in terms of legal formulations. Through laws, states regulate who should be the primary caregiver and who should bear the costs of childcare. To assess parents' opportunities and constraints, the policies I will be considering will be for children from birth until the mandatory school-age (Leitner 2003). The central concerns of this analysis will be related to the extent to which the states: (1) support public childcare (2) financially compensate familial care and (3) expect women and men to engage in childcare.

This approach builds on the assumption that stages in people's lifecycles are causally linked; the choice of motherhood is a key element in family decision-making due to the costs associated with employment interruptions (e.g., Esping-Andersen 2009: 24). I will focus on working parents with preschool children because of the volume of their childcare responsibilities. Younger children demand more attention and time as compared with older children who are more independent. Moreover, older children are obliged to go to school; hence, access is granted without delay, and childcare needs subside (e.g., Gornick et al. 1997: 54-5; Gilbert 2008: 6).

There are a number of reasons why such approach to comparative analysis is appropriate for my investigation purposes. First, multidimensionality is its key advantage. This is important because policies comprise of multiple components; each of these defines the policy as a whole (Ciccia&Verloo 2012). Second, this approach can integrate various types of policy components – be it a quantitative or qualitative attribute (Booyesen 2002). This is important because of how policy logics are reflected in legal regulations (e.g., Gilbert 2008; Gornick&Meyers 2003; Ragin 2009: 5). To my knowledge, no study has employed this information exclusively, at least not beyond policies on leave (e.g., Smith & Williams 2007; Ciccia&Verloo 2012). Furthermore, these are largely textual data; the possibility to use this type of data enables us to go beneath the surface, striking a better balance between the simplification and complication of policies (e.g., Ragin 2009: 5). Third, I will use graphs to summarise and visually present policy information in a comprehensible way. In summary, this approach aims to capture policy combinations and highlight inconsistencies therein. Hence, it will facilitate country-comparative analysis.

Constructing an index with benchmarking

The approach entails four steps: selection of policy components, their assessment and aggregation, and validation (Booyesen 2002). I will apply a ‘programme approach’ to analysing policies on parental leave and childcare services. I will assess and score them against a set of theoretically-guided standards. Then, I will aggregate the scores into an ‘*index of state de-familialism*’ which measures policy logics: the higher the score the higher their transformative potential. Lastly, I will systemise this information using a graphical method of spider charts which will provide a synoptic overview of policies.

Selection of policy components

Central analytical categories are legal formulations on parental leave and childcare services. These provide two types of rights to parents following childbirth: the right to protected time off from work, and the right to external childcare. I will evaluate these across 11 attributes from which assumptions about the effects can be drawn. I will examine them as single object of inquiry, and then through combinations.

I draw the de-familialistic marker between parental leave (*familialism*) and childcare services for children aged from birth to school age (*defamilialism*). Policies on *leave*–maternity, paternity, parental extended childcare leave– support familial care while allowing parents to stay connected to employment (Misra et al. 2010). Maternity/paternity and parental leaves are childbirth-related and accompanied by earnings-related benefits, whereas *extended leave* refers to longer leave that enables familial care, which is either paid or not, and available to wider groups of parents. Henceforth, I use ‘parental leave’ when I refer to all these types. When more than one type is granted, I follow the rule of the most ‘familialistic’ option and consider the longest period available. Given that in some countries differential arrangements are possible, such as in the case of multiple births or the birth of a sick child, I will follow Smith and Williams (2007) and I will consider the least generous regulation.

Leave comprises of six components (Table 1). Limited theoretical knowledge about the implications of some policy components prevents me from considering certain legal aspects such as eligibility according to parents’ employment histories and benefit payment caps. However, exclusion of these regulations is acceptable (Smith&Williams 2007; Ciccia&Verloo 2012) considering that the focus is on norms and not on actual outcomes of policy regulations. Since

there is no standard way to determine what is optimal, I could draw erroneous conclusions (Bradshaw et al. 2006; Plantenga et al. 2009: 25).

Childcare services support children's early education and help parents combine family with employment (e.g., Misra et al. 2010). I include regulations on publicly-funded services for children aged from birth to the compulsory school-age in centre-based day care, and focus on five aspects that pertain to the availability, affordability, quality and intra-country disparity in childcare services. When municipalities are responsible for childcare services, I have checked whether national regulations ensure that these are comparable across the state.

I analyse policies on parental leave and childcare services as a single policy programme related to childcare. These are distinct from other work-family measures in two ways. First, they frame parents' opportunities and constraints following childbirth. With reference to empirical studies of female employment, they critically frame women's return to employment following childbirth, whereas other work-family policy measures (e.g., working time, workplace flexibility) frame the ways in which women return, and parents combine multiple roles. Second, they reflect a cultural script for socially acceptable allocation of childcare, and hence for 'proper' parenting.ⁱⁱ

Optimal policies

There is no simple formula to determine the optimal regulation in a country, and the preferences and values, social norms, and workplace cultures will often shape what is considered optimal. My approach is based on endorsing maternal employment and active fatherhood and I consider the optimal policy type to be 'supported defamilialism'. This is characterised by gender-neutral, well-paid, and flexible parental leave with incentives for active fatherhood. After one year, publicly-financed childcare becomes a pronounced alternative to family childcare. States accommodate the childcare needs of as many parents as possible by prescribing accessible, affordable, and high-quality public services across the state. In this study, assessment criteria are sourced from the predominant theories and empirical evidence on female employment and gender equity. Each dimension is scored against a set of theoretically-guided standards, as follows (Table 1).

Leave time

Parental time following childbirth is a valued commodity, as leaves that are either too short or too long can have detrimental effects on women's likelihood to withdraw from employment.

Earlier studies have shown that a 1-year leave has the fewest negative implications (Bruning&Plantenga 1999: 207; Gornick&Meyers 2003: 122; Wall et al. 2009: 36; Pettit&Hook 2005), but only when the job is safeguarded (Jaumotte 2003: 17; Fagan&Hebson 2005). The downturn effects were identified at six months and two years, with both shorter and longer leaves as having the most adverse effects (Pettit&Hook 2005; Leitner 2003: 370; OECD 2007: 118). In this study, both received equally low scores because they lead to women's complete withdrawal from employment, especially for women in less protected jobs (Fagan&Hebson 2005: 90).

Monetary value of family childcare

Income-replacement levels determine who claims the entitlement. When payment is low, the magnitude of household income shock is lower if used by women, who on average earn less than men (Leitner 2003: 372). Entitlement disadvantages carers and reinforces gendered parenting (Fagan&Hebson 2005: 8, 89). In this study, financial compensation is optimal when leave is paid at a minimum of 85% of previous earnings because fathers increasingly use only fully-paid time-off. Gornick&Meyers (2003: 122) set the optimal replacement level at 80% and Wall et al. (2009: 36) at 70%, which I consider a crossover point.

The policy facilitates *shared parenting* by granting leave as an individual right to time and payment (Leitner 2003: 368; Bruning&Plantenga 1999: 196; Fagan&Hebson 2005: 95). The state may also use the force of fully-paid non-transferable 'daddy-quotas' (e.g., Pylkkänen&Smith 2003). These provide normative guidelines for 'proper' fatherhood, increase fathers' sense of entitlement and opportunities for making claims at the workplace (Hobson et al. 2011). Finally, when it allows for flexibility, parents may stay connected to the workplace; this incentivises fathers' use, speeds up mothers' return to employment, and has less detrimental effects on their job progression and lifetime earnings (e.g., Plantenga&Remery 2005: 48).

Optimal childcare services are regulated and overseen by the state. A guaranteed childcare system is provided when services are affordable, of high-quality, and available across the state during a typical working day/week/year.

Ideally, the state would give parents a choice between parental or public childcare (i.e. optional de-familialism). This reflects in the social organisation of childcare over the first three years of a child's life. In this study, this means that the state allows for realistic choices when it opens

access to childcare services before the earnings-related leave ends (Fagan&Hebson 2005: 105; Plantenga&Remery 2005: 38). A second variation is also possible, in which mothers' employment is given prominence and earnings-related leave and services are contiguous. Furthermore, by guaranteeing a place in day care without delay, the state sends a clear message about social acceptability of public childcare (Gornick&Meyers 2003: 197-206). Care is continuous, and parents can resume working. When a child can be refused a place based on preferential criteria, or local governments are autonomous in setting access priorities, policy can create tensions and the state will contribute to varied availability (e.g., Fagan&Hebson 2005: 108-9).

Opening hours can determine the extent to which services could serve as a supervised form of childcare (Gornick&Meyers 2003: 227). For parents to have realistic opportunities to use the services, these should be available on a full-time basis and allow for a flexible provision to accommodate the different childcare needs around the year (Plantenga&Remery 2005: 38-42; OECD 2007). When opening hours are incompatible with parents' working hours, or vary across providers, then policy creates tensions and affects mothers' employment opportunities (Kreyenfeld&Hank 2000: 318-9).

Childcare costs are the equivalent of a regressive tax on mothers' labour supply and reduce financial returns from employment (Esping-Andersen 2009: 91). Affordable childcare services generate incentives for maternal employment, especially for women with limited earning prospects (e.g., Fagan&Hebson 2005: 12). An optimal policy, then, would provide services free of charge. However, almost no country provides such entitlement. Thus, an optimal entitlement is a legally prescribed parental fee on a sliding-fee scale (Gornick&Meyers 2003: 206). When providers are autonomous in setting the price and operating mechanisms on who pays how much, the state allows for variants of affordability, and this hinders access to public services (e.g., Fagan&Hebson 2005: 106-9).

High-quality service generates incentives for using public childcare (Plantenga&Remery 2005: 35). When the state prescribes and regulates minimal standards and oversees provision, services are considered trustworthy and of comparable quality across the state (e.g., Gornick&Meyers 2003: 195; 218-26). When providers are autonomous in service provision, the state contributes to variant service quality, and this hinders access to public childcare (Kammerman 2006).

Scoring

Adapting Smith and Williams' (2007) approach, each dimension is scored repeatedly across countries using a scale with a four-value set of 1-2-4-8 (Table 1):

- 8 indicates that the component is close to the optimal regulation
- 4 that it is moderately close
- 2 that it is far from optimal, and
- 1 that the component is the furthest from the optimum.

The idea behind this scale is a geometric sequence, so that logarithms yield an arithmetic sequence. 8 is a maximum because 10 or 100 (commonly used in earlier studies) have too strong an influence on the results.ⁱⁱⁱ Since the index is computed using the multiplicative method (explained below), there would be problems if figures were zero (multiplying by 0 means losing information).

[Table 1]

Aggregation

Adapting Smith and Williams' (2007) approach, the index score is derived through a standard mathematical procedure using the following formulae:

$$\text{Leave index} = \sqrt[6]{\text{sumproduct}}$$

$$\text{Day care index} = \sqrt[5]{\text{sumproduct}}$$

$$\text{Composite index} = \sqrt[4]{\text{sumproduct}}$$

 sumproduct = sum of products of individual scores

The final product score can be interpreted as the mean value of a binominal distribution (Argasinski&Kozlowski 2008: 253), and the method could be used for each policy separately. The scores range between 1 and 8, and reveal how far the policy is from the optimum: only policies with consistently high scores on dimensions obtain a high overall score, and vice versa. The advantage of this method over the additive (used in earlier studies) refers to “the inequality of arithmetic and geometric means” (Beckenbach&Bellman 1961: 4). Theorem 1 explains that when we take an average over a set of n positive numbers by dividing their total sum by n , the value we get is never smaller than the one we get by taking n th root of their product. Thereby, the additive method always yields a more favourable picture, but the multiplicative increases the difference in fitness and is more neutral (Smith&Williams 2007: 183).^{iv}

In the absence of any theoretical or empirical justification, I employ no explicit weighting other than the weights implicitly introduced during the scaling (following Booyesen 2002: 131-142; Bradshaw et al. 2006: 24-5; Plantenga et al. 2009: 25; Schütz et al. 1998: 41-3). All dimensions are considered relatively equal in terms of equal intrinsic importance as a component (Ura 2008). This also allows decomposing the index by policies or dimensions.

Validation: Application to post-socialist countries

The proposed approach invites policy analysis across countries and over time. To empirically test its applicability, I extend it to post-socialist EU states which include Czech Republic, Hungary, Poland, Slovakia and Slovenia, Estonia, Latvia, and Lithuania. These countries are a good choice for this study, both empirically and theoretically. First, they share a distinctive history with a common background in terms of state socialist legacies, transition, and EU accession processes. These contexts shaped their institutional legacies, not only in terms of female employment but also in the state's role in the family (author 2010; 2012a). Second, welfare regimes literature often views them as a distinct type. Conventionally, however, only Hungary, the Czech Republic, and Poland are included (with few exceptions, e.g., Szelewa&Polakowski 2008; Ciccia&Verloo 2012). This opens the question of 'representation' of "former communist" regime (e.g., Saraceno&Keck 2008: 22; Esping-Anderson 1990; Rostgaard 2004; Hantrais 2004). I find their 'typicality' a litmus test to determine whether this method will uncover the variances in state de-familialism.

To date, only a few studies have challenged their homogeneity, suggesting that these countries provide conceptually different policies (e.g., Szelewa&Polakowski 2008; Thévenon 2011; Ciccia&Verloo 2012, 2012a). In this article, Szelewa&Polakowski's (2008) study represents a touchstone for my approach because it includes the same eight countries, is framed in Leitner's (2003) 'varieties of familialism', and includes both parental leave and childcare services. However, the authors employ a different method (fuzzy-sets), operationalise policies with more 'standard measures' and omit childcare services for children aged 0-3.^v

Since the purpose of this exercise goes beyond classifying or tracking institutional change, I will report policies for a single year (2008), in order to avoid changes caused by the recent economic recession – an important empirical question but one that remains outside the scope of this analysis. Data comes from the Mutual Information System on Social Protection in EU, Eurydice, OECD Education at a Glance and Family Database, Council of Europe, Unicef, national

administrative and other relevant agencies and ministries. I also contacted national experts and agencies, who reviewed policy information.

Varieties of familialism - Index

Mandel and Semyonov (2005) maintain that the index is “a composite phenomenon with consequences that go beyond the unique effects of each of its components” (pp. 964). I agree that the index is a grouped variable with enhanced explanatory potential. As such, it could be used in analysis of policy implications, for example in order to investigate variance in maternal employment^{vi} or to monitor policy change and progress over time.

Figure 1 reflects the degree of state de-familialism and a transformative potential of national policies on parental leave and childcare services: the higher the score the higher the support for dual roles. It shows how close to the optimum each country was in 2008: with 73 percent of the achievable score, Slovenia came closest to supporting dual roles of women and men, whilst Poland, Slovakia, and the Czech Republic were the farthest.

[Figure 1]

However, an index score is not sufficient if one hopes to fully understand the policy design. Therefore, to determine policy configurations, identify critical policy dimensions and any inconsistencies, I will employ a graphical analysis.

Varieties of familialism - Graphical analysis

To provide a synoptic overview of policies and their distance from the optimum, I will use spider charts (e.g., Schütz et al. 1998; Plantenga&Hansen 1999). Each chart represents one country and comprises of 11 equiangular spokes, one for each policy component. Their length is proportional to the score, and ranges between 1 and 8: the higher the score the closer to the optimum. The line connects them into a radial figure that gives each policy a spider web appearance: the larger the area the more optimal the policy. The advantage of this method is that policies can be easily read from the chart: the right-hand side illustrates leave regulations, with childcare services on the left, and the synoptic overview reflects their overall configuration.

[Figure 2]

Figure 2 shows how diversified national policies are, with only Slovenia and Lithuania resembling spider webs. In the other six countries, family childcare was well-entrenched with policies cast in traditionally gendered roles. These countries largely granted leave as a family entitlement, with limited flexibility in uptake and paternity quota. Then again, countries significantly differed in the monetary value of familial care: whilst Hungary, Estonia, and Czech Republic financially invested (more) in familial care, Poland and Slovakia did not. Maternity leave was too short in Poland and poorly paid in Slovakia. Their parental and extended leaves were means-tested, and Slovakia, as well as Hungary, did not guarantee the full set of rights for workers returning from leave.^{vii} In contrast, the Slovenian, Lithuanian, and Latvian leave regulations carried a higher transformative potential. Their 1-year long leaves were open to both parents and paid at a 100 percent income-replacement rate. States allowed some flexibility in uptake and used the force of paternal quotas: Lithuania granted one month fully-paid paternity leave, and Slovenia combined a 15-day leave at 100% pay with 75 practically unpaid days that lasted until the child's third birthday. However, Slovenian leave was cast in terms of employment since, compared to Lithuania, extended full-time family childcare was not supported.

The countries which were analysed also varied in childcare services, most distinctly for children aged 0-3. Services were a legal responsibility of municipalities in all countries. In Slovenia and Lithuania, however, they were centrally regulated, coordinated, and supervised. Their crèches were available to children aged 1-3 and were part of unitary childcare centres. Their regulations reflected a strong emphasis on high-quality services for different groups of parents across the state: they were prescribed on a full-time basis around the year with some flexibility in provision and a centrally regulated sliding-fee scale (in Slovenia, services were free of charge to families on low incomes and to families with two or more children in childcare). In the other six countries, public childcare for children aged 0-3 was limited and varied across the state, with a strong urban/rural divide. This largely applied to services for older children as well. However, Hungary and Poland stood out for prescribing free childcare without age-limits. That notwithstanding, their regulations gave providers permission to set access criteria and charge for any extra-curricular activities, thus hindering access to publicly-funded childcare.

Finally, I have used spider charts to compare policies against Leitner's (2003) ideal types. Familialism appeared particularly strong in Hungary, Czech Republic, and Estonia. There, states relied upon and supported family childcare. Access to longer paid parental leave was a key feature of this type, whilst public childcare services were limited, especially for children aged 0-3.

Following Leitner (2003), these are characteristics of *explicit familialism*, since the states equate the right to family childcare with the family's obligation to provide it. This was reflected in wide gaps in the employment rates for women with preschoolers as compared to those without, with a range of up to 50 percentage points in the Czech Republic (author 2010).

In contrast, Poland, Slovakia, and Latvia practically left parents without any public support. This resembles *implicit familialism*. Whilst such regulations do not explicitly promote traditional gender roles, the lack of public support implicitly puts the responsibility of childcare primarily within families. Latvia, however, stood out with a high score on parental leave. Whilst its leave policy was closer to the optimal, the state did not provide public alternatives after one year. Given a high reliance on private childcare and limited regulation in the consumer markets (author 2010), access to high-quality childcare services was limited in all three countries, particularly for low-income families. In this group, the employment of women with preschoolers was negatively associated with education - given that education is related to one's potential wage (e.g., Steiber&Haas 2009: 646).

Slovenia and Lithuania focused on women's continuous employment which was reflected in policy logics of *supported defamilialism*. Leave generated incentives for mothers' continuous employment as well as a more active fatherhood following childbirth, and parental leave and childcare services were contiguous. However, public responsibility for childcare has been a long-standing principle (author 2012a). Parents' rights to family time received limited recognition, especially in Slovenia: whilst it remains a cultural norm to spend a year with the newborn, parents are incentivised to use public childcare thereafter. This is shown in maternal employment, which is among the highest in the EU and the OECD. The gaps between different groups of women are narrow, and mothers prevalingly work on a full-time basis (author 2010).

Optional de-familialism remains as an ideal, since none of the analysed countries seemed to equally distribute childcare responsibilities between the state and the family and between the mother and the father. However, the Lithuanian, Hungarian and Estonian policies came close. They both extended paid leave in 2008 and had crèches for the youngest. Then again, their extended leave was cast in traditional gendered roles, paid at a reduced rate and granted as a family right. Moreover, frequent changes to this programme during the 2000s suggest that, in practice, governments are compensating for limited public childcare services, given that family childcare costs less than setting up and maintaining crèches. In summary, a cultural script that phases out

the gendered roles of ‘father and mother’ and replaces them with functional roles of a ‘parent’ does not exist in the countries which were analysed in this study.

Discussion and conclusions

Comparative research attempts to make sense of variations across countries as well as realising the implications of those differences. Historically, research on the welfare state regime has focused on broader welfare state initiatives. This article offered an approach that tries to link area-focused research and country-comparative analysis. By turning the attention to the social organisation of childcare and employing exclusively the legal formulations of parental leave and childcare services, it took into account the multilayered nature of national policies. Thus, the article proposed a new typology for understanding policies in the area of childcare, in addition to offering a grouped policy variable with enhanced explanatory potential for quantitative analysis.

My motivation was twofold. Previous research on policies in the area of childcare often relies on data that is less than ideal and tends to combine the independent and dependent variables. Often, indicators for parental leave and childcare services do not correspond to the children’s ages. Thereby, state assumptions about social organisation of care, policy transformative potential, and potential for trade-offs between parental leave and childcare services may be concealed.

This article introduced a method that explores the latent constructs underlying national policies on parental leave and childcare services. By limiting comparative analysis to one specific area of welfare state policy, I was able to identify patterns which were undetected in previous research. I have also discovered varieties of familialism within a set of countries that previous research had often treated as a homogenous group.

I found that supported defamilialism in Slovenia and Lithuania incentivised women’s continuous employment and active fatherhood. Their policy script suggests partial re-formulation of Leitner’s (2003) de-familialism. Namely, their states first invest in explicit familialism, but also promote active fatherhood, and then in defamilialism, with the crossover point located at a child’s first birthday. Such policy combination suggests that countries pragmatically shift social investments from family childcare to public childcare in order to facilitate women’s continuous employment. By contrast, explicit familialism in Hungary, Czech Republic, and Estonia supports

familial childcare and reinforces gendered parenting. Implicit familialism in Poland, Slovakia, and Latvia leaves parents without public support.

This finding is significant on its own, but also speaks to the strength of this method. Namely, out of the eight countries which were analysed, only Poland and Czech Republic matched Szelewa and Polakowski's (2008) policy types. This may be explained by authors' omission of fathers' leave and publicly-funded services for children aged 0-3. This omission has a significant effect on the policy types because the former reflects policy transformative potential and the latter frames parents' opportunities/constraints to choose between parental leave and childcare services following childbirth. Moreover, analysed countries differed significantly in policies towards children aged 0-3. It is, therefore, essential to view these policies as two sides of one coin, should we understand state de-familialism in the area of childcare.

Furthermore, this analysis revealed that policy types of selected countries share core characteristics with Esping-Andersen's (1990), Korpi's (2000), and Fraser's (1994) typologies. First, Slovenian and Lithuanian supported defamilialism could be compared with social democratic ideas of the Nordic states. They granted gender-neutral leave, promoted active fatherhood, and viewed childcare as a social responsibility thereafter. In both cases, states first supported "the universal breadwinner" (Fraser 1994), followed by the "dual-earner/public-carer" model (Korpi 2000: 144). Second, Hungarian, Czech and Estonian explicit familialism resembled socially conservative principles of Korpi's (2000) "single-earner" or Fraser's (1994) "caregiver parity" model. Their policies were shaped by the subsidiarity principle, which stresses the primacy of financially supported family childcare. And third, implicit familialism in Poland, Slovakia, and Latvia resembled a liberal model, where social benefits are largely organised to preserve the commercial markets. Although their policies were not explicitly cast in gendered terms, they nonetheless had gendered and class implications.

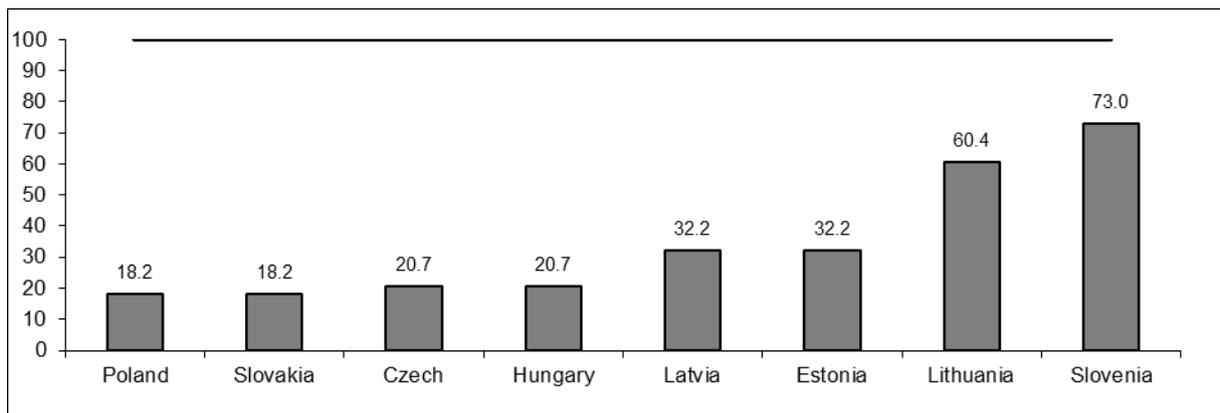
These findings suggest two things. First, the principles that shape family policies may correlate with the principles that underlie welfare-state regimes (e.g., Gornick&Meyers 2003: 23). Also, varieties of familialism will be more fully captured when welfare state regimes are deconstructed into policy domains, and research focuses on institutional characteristics of specific policies (e.g., Kasza 2002; Leitner 2003; Saraceno&Keck 2008).

In summary, the proposed methodology allows researchers to test new hypotheses and has the potential to discredit claims of post-socialist “exceptionalism” (Eger 2010), given that new parents across all industrialised countries essentially face the same challenges. Moreover, it offers an index of de-familialism. This could be a valuable analytical instrument for both academic and non-academic use. For instance, it is easier to interpret a composite measure than a battery of separate indicators. Also, the index is constructed to assess policy performance and change, which makes it actionable. However, given that its focus is on policies tailored to dual-earner heterosexual couples, future research should incorporate differential statutory entitlements for single parents, parents with more children, and same-sex couples.

Table 1. Policy dimensions, assessment criteria, scores

SCORE	Policy dimensions and assessment criteria
	Total leave time
8	Minimum 6 months, maximum 1 year
4	More than 1 year up to 2 years
2	More than 2 years up to 3 years
1	Less than 6 months or more than 3 years
	Leave financial sustainability (maternity+parental)
8	Paid at 85-100 percent of previous earnings for min. 6 months
4	65-84 percent of previous earnings for min. 6 months
2	50-64 percent of previous earnings for min. 6 months
1	70-100 percent for 3 months or less, then means-tested flat-rate or unpaid parental
	Job security
8	Leave-users retain a contract and associated benefits to previous job or equivalent during parental leave
4	Job-secured leave shorter than earnings-related leave
2	Leave-users retain a contract, but leave does not guarantee a full set of rights for persons returning from leave
1	Job not protected
	Parental entitlement (excl. maternity and paternity)
8	Individual right of each parent, joint decision, change in arrangement possible and not limited
4	Individual right of each parent, joint decision, fixed arrangement
2	Fathers entitled to shorter portion of parental leave
1	Individual right of mothers
	Flexibility (parental and extended childcare leave)
8	Leave can be used in sections over a longer period (min. 6 years), different combinations possible
4	In sections over 3-to-4 years or a portion of leave can be reserved and used flexibly (in sections) before child's school age
2	In one block, limited gainful activity allowed with proportional reduction in benefits and leave time
1	Full-time familial care, no gainful activity allowed / Gainful activity allowed but familial care required (not in daycare)
	Father's non-transferable entitlement
8	Minimum one month at 100 percent of previous earnings
4	Two weeks at 100 percent following childbirth + extra days at lower payment spread over a longer period of time
2	Less than two weeks, at 80-100 percent
1	No individual provision or less than 80 percent
	Availability of childcare services
8	Allocation of places – access criteria Legally set access criteria, central capacity/demand planning (incl. crèches when ran separately)
4	Legal guidelines on access criteria (incl. crèches), providers allowed to add criteria when demand exceeds supply, no central capacity/demand planning
2	Conditional/various access to crèches, legally set nationwide access criteria to kindergartens, no central planning
1	Providers autonomous in setting access criteria, no central planning
8	Admission age No lower age limit or child can be admitted before the end of paid leave
4	Public childcare and paid leave are congruous
2	Time gap between paid leave and childcare services
1	Intra-country variation in admission age
8	Compatibility of service hours with working hours of parents Prescribed full-time with flexible provision to accommodate parents' care needs, around-the-year
4	Prescribed to cover typical day/week/year, limited flexibility
2	Prescribed to cover typical day/week, spells of shorter breaks allowed (limited alternative available)
1	Variant opening hours across municipalities
	Affordability
8	Parental fees Sliding-fee scale based on family income for both crèches and kindergartens
4	Sliding-fee scale based on criteria other than income for both crèches and kindergartens
2	Providers autonomous in setting rules for crèches, legal guidelines for kindergartens
1	Providers autonomous in setting rules, no legal guidelines/ceiling
	Quality
8	National co-ordination of service delivery Services joint responsibility of state and municipalities, legally-set operating standards
4	Services legal duty of municipalities (to establish and administer both crèches and kindergartens), regulated standards and rules of operation
2	Legal duty of municipalities (both crèches and kindergartens), providers autonomous in some elements of provision
1	Crèches at discretion of municipalities (legal right), kindergartens prescribed (legal duty), autonomy in provision

Figure 1. Degree of state-defamilialism, 2008 (in percent of maximum achievable score)

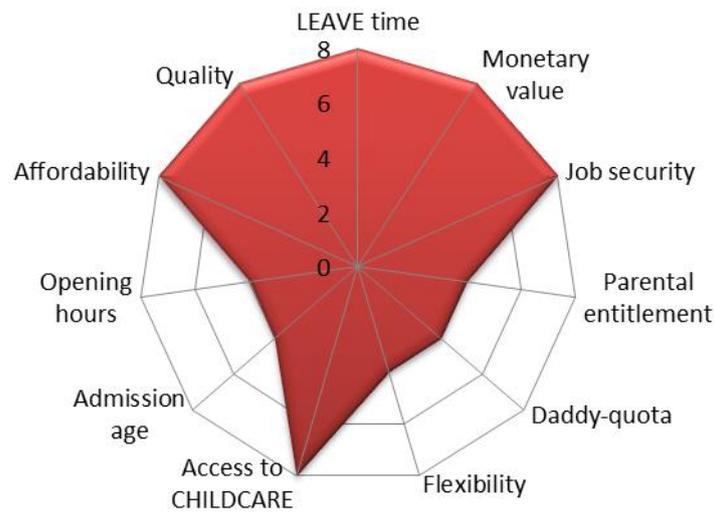


Data source: MISSOC, Eurydice, OECD, administrative sources.

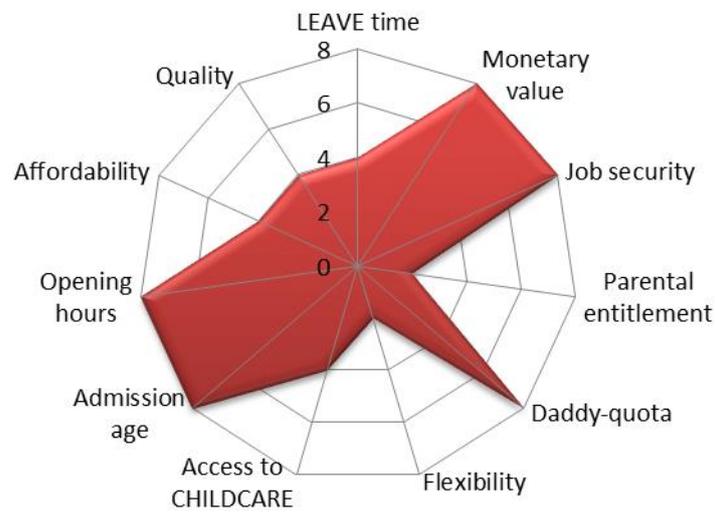
Figure 2. Childcare policies, 2008 (scores on a scale 1 to 8, max = 8), by type (1. Supported Defamilialism; 2. Explicit Familialism; 3. Implicit Familialism)

SUPPORTED DEFAMILIALISM

Slovenia

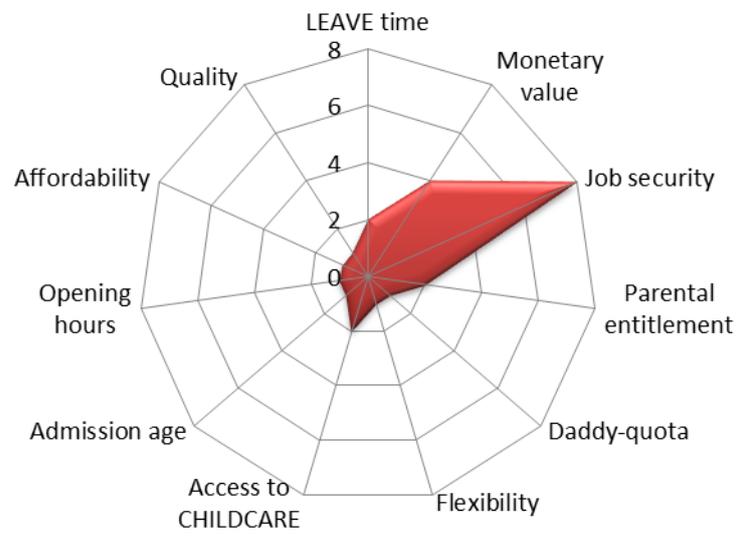


Lithuania

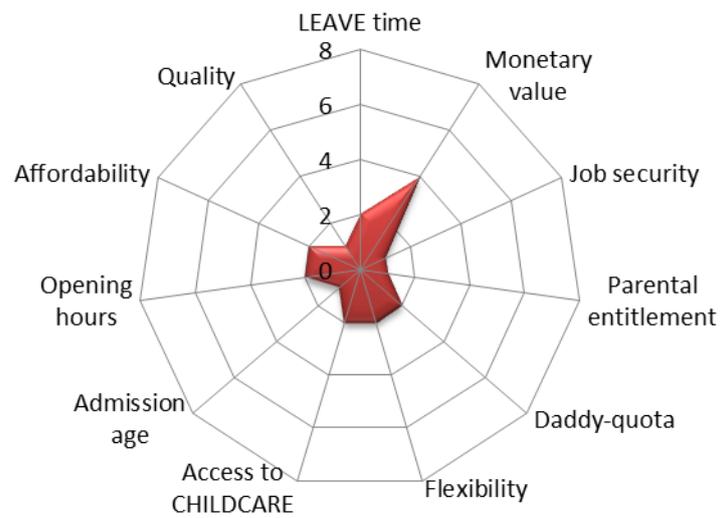


EXPLICIT FAMILIALISM

Czech R.



Hungary



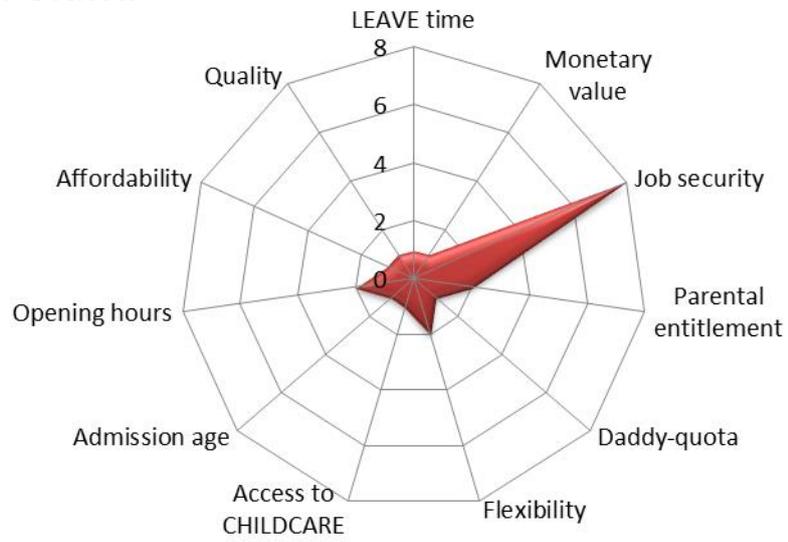
EXPLICIT FAMILIALISM

Estonia

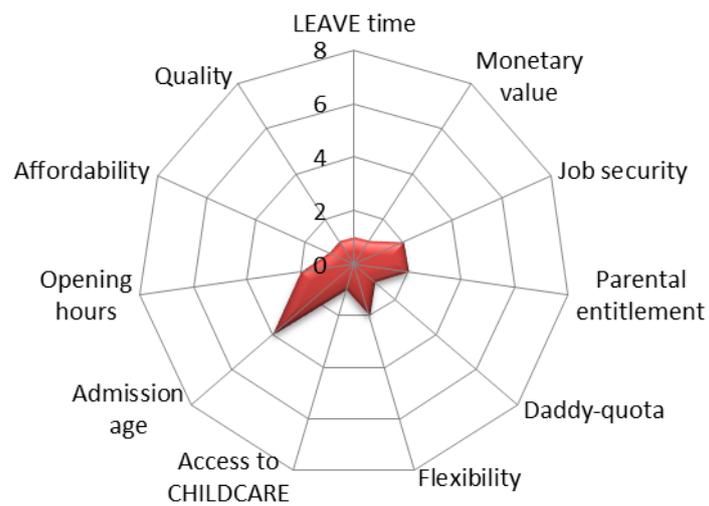


IMPLICIT FAMILIALISM

Poland



Slovakia



Latvia



References

- Argasinski, K. and Kozłowski, J. (2008) 'How can we model selectively neutral density dependence in evolutionary Games,' *Theoretical Population Biology* 73 (2): 250-256.
- Bacchi, C. (2009) *Analysing Policy: What's the problem represented to be?* French Forest: Pearson Australia.
- Beckenbach, E.F. and Bellman, R. (1961) *An Introduction to Inequalities*. Heidelberg: Springer Verlag.
- Booyens, F. (2002) 'An Overview and Evaluation of Composite Indices of Development,' *Social Indicators Research* 59 (2): 115-151.
- Bradshaw, J., Hoelscher, P. and Richardson, D. (2007) 'Comparing Child Well-Being in OECD Countries: Concepts and Methods,' *Innocenti Working Paper No 2006-03*. Florence: UNICEF Innocenti Research Centre.
- Bruning, G. and Plantenga, J. (1999) 'Parental leave and equal opportunities: experiences in eight European countries,' *Journal of European Social Policy* 9 (3): 195-210.
- Ciccia, R. and Verloo, M. (2012) 'Parental leave regulations and the persistence of the male breadwinner model: Using fuzzy-set ideal type analysis to assess gender equality in an enlarged Europe,' *Journal of European Social Policy*, 22 (5): 507-528.
- Daly, M. (2002) 'Care as a Good for Social Policy,' *Journal of Social Policy* 31 (2): 251-270.
- Eger, M. (2010) 'Even in Sweden: The Effect of Immigration on Support for Welfare State Spending,' *European Sociological Review* 26 (2): 203-217.
- Eliason, S.R., Stryker, R. and Tranby, E. (2008) 'The Welfare State, Family Policies and Women's Labor Force Participation: Combining Fuzzy-Set and Statistical Methods to Assess Causal Relations and Estimate Causal Effects', in L. Kenworthy and A. Hicks (eds) *Method and Substance in Macrocomparative Analysis*, pp. 135-95. Basingstoke and New York: Palgrave Macmillan.
- Esping-Andersen, G. (1990) *The three worlds of welfare capitalism*. Cambridge: Polity Press.
—— (2009) *The incomplete revolution. Adapting to women's new roles*. Cambridge: Polity Press.
- Eurydice (2009) *Early Childhood Education and Care in Europe: Tackling Social and Cultural Inequalities*. Brussels: EACEA and Eurydice.
- Fagan, C. and Hebson, G. (2005) *'Making work pay' debates from a gender perspective. A comparative review of some recent policy reforms in thirty European countries*. Brussels: European Commission.
- Ferrarini, T. (2006) *Families, States and Labour Markets: Institutions, Causes and Consequences of Family Policy in Post-War Welfare States*. Cheltenham: Edward Elgar Publishing.
- Fraser, N. (1994) 'After the Family Wage: Gender Equity and the Welfare State,' *Political Theory* 22 (4): 591-618.
- Gilbert, N. (2008) *A Mother's Work. How Feminism, the Market, and Policy Shape Family Life*. New Haven and London: Yale University Press.
- Gornick, J.C., Meyers, M.K. and Ross, K.E. (1997) 'Supporting the Employment of Mothers: Policy Variation Across Fourteen Welfare States,' *LIS Working Paper Series No. 139*. Luxembourg: LIS.
- Gornick, C. J. and Meyers, M.K. (2003) *Families that work. Policies for Reconciling Parenthood and Employment*. New York: Russell Sage Foundation.
- (2008) 'Creating Gender Egalitarian Societies: An Agenda for Reform'. *Politics & Society* 36 (3): 313-349.
- Gottfried, H. (2000) 'Compromising positions: emergent neo-Fordism and embedded gender contracts,' *British Journal of Sociology* 51 (2): 235-259.
- Haas, L. and Hwang, C.P. (2008) 'The Impact of Taking Parental Leave on Fathers' Participation in Childcare and Relationships with Children: Lessons from Sweden,' *Community, Work and Family* 11 (1): 85-104.
- Hantrais, L. (2004) *Family Policy Matters. Responding to family change in Europe*. Bristol: Policy Press.
- Hobson, B., Fahlén, S. and Takács, J. (2011) 'Agency and Capabilities to Achieve a Work-Life Balance: A Comparison of Sweden and Hungary,' *Social Politics* 18 (2): 168-198.
- Hudson, J. and Kuhner, S. (2009) 'Towards Productive Welfare? A Comparative Analysis of 23 OECD Countries,' *Journal of European Social Policy* 19 (1): 34-46.
- Javornik, J. (2010) *Exploring maternal employment in post-socialist countries. Understanding the implications of childcare policies*. PhD Thesis, University of Southampton.
- Javornik, J. (2012a) 'Rethinking comparative childcare policy analysis. Example of Central and Eastern Europe,' *Welfare Studies Working Paper Series No. 10/2012*, Department of Sociology, Umeå University: http://www.soc.umu.se/digitalAssets/103/103911_10_2012_javornik.pdf.

- Javornik, J. (2012b) 'State socialism: Dismantling the male-breadwinner family model in Central and Eastern Europe?' *Welfare Studies Working Paper Series No. 14/2012*, Department of Sociology, Umeå University: http://www.soc.umu.se/digitalAssets/111/111121_14_2012_javornik.pdf.
- Jaumotte, F. (2003) 'Female Labour Force Participation: Past Trends and Main Determinants in OECD Countries', *OECD Economics Department Working Papers No 376*, May. Paris: OECD.
- Jensen, C. (2008) 'Worlds of Welfare Services and Transfers,' *Journal of European Social Policy* 18 (2): 151-62.
- Kasza, G.J. (2002) 'The Illusion of Welfare 'Regimes',' *Journal of Social Policy* 31 (2): 271-87.
- Kershaw, P. (2010) 'The Just Commodification of Women, Equal Care Obligation for Men, and Autonomous Households: Gendering the Comparative Analysis of Welfare States in 20 OECD Countries,' Paper presented at the *8th ESPAnet Conference*, Budapest, 2-4 Sept.
- Kammerman, S. (2006) *A global history of early childhood education and care. EFA Global Monitoring Report 2007, Strong foundations: early childhood care and education*. UNESCO: <http://unesdoc.unesco.org/images/0014/001474/147470e.pdf>
- Knijn, T. and Kremer, M. (1997) 'Gender and the Caring Dimension of Welfare States: Toward Inclusive Citizenship,' *Social Politics* 4 (3): 328-361.
- Korpi, W. (2000) 'Faces of Inequality: Gender, Class, and Patterns of Inequalities in Different Types of Welfare States,' *Social Politics* 7 (2): 127-191.
- Kreyenfeld, M. and Hank, K. (2000) 'Does the Availability of Childcare Influence the Employment of Mothers? Findings from Western Germany,' *Population Research and Policy Review* 19 (4): 317-337.
- Lambert, P.A. (2008) 'The Comparative Political Economy of Parental Leave and Child Care: Evidence from Twenty OECD Countries,' *Social Politics* 15 (3): 315-344.
- Leitner, S. (2003) 'Varieties of Familialism. The caring function of the family in comparative perspective,' *European Societies* 5 (4): 353-375.
- Lewis, J. (1992) 'Gender and the Development of Welfare Regimes,' *Journal of European Social Policy* 2 (3): 159-173.
- (2001) 'The Decline of the Male Breadwinner Model: Implications for Work and Care,' *Social Politics* 8 (2): 152-169.
- Mandel, H. and Semyonov, M. (2005) 'Family Policies, Wage Structures, and Gender Gaps: Sources of Earnings Inequality in 20 Countries,' *American Sociological Review* 70 (6): 949-67.
- Misra, J., Moller, S. and Budig, M. (2007) 'Work-Family Policies and Poverty for Partnered and Single Women in Europe and North America,' *Gender and Society* 21 (6): 804-827.
- Misra, J., Budig, M. and Böckmann, I. (2010) 'Work-Family Policies and the Effects of Children on Women's Employment and Earnings,' *LIS Working Paper Series No. 543*. Luxembourg: LIS.
- North, D.C. (1990) *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- OECD (2007) *Babies and Bosses. Reconciling Work and Family Life. A Synthesis of Findings for OECD Countries*. Paris: OECD.
- OECD (2013) 'Public Spending on Childcare and Early Education: OECD Family Database', available at <http://www.oecd.org/els/soc/PF3.1%20Public%20spending%20on%20childcare%20and%20early%20education%20-%2020290713.pdf>.
- Orloff, A.S. (1993) 'Gender and the Social Rights of Citizenship: The Comparative Analysis of Gender Relations and Welfare States,' *American Sociological Review* 58 (3): 303-328.
- Pettit, B.J. and Hook, J. (2005) 'The Structure of Women's Employment in Comparative Perspective,' *Social Forces* 84 (2): 779-801.
- Plantenga, J. and Hansen, J. (1999) *Benchmarking Equal Opportunities in the European Union. Synthesis report based on eight European countries. Report for the Commission of the European Communities*. Utrecht: Utrecht University.
- Plantenga, J. and Remery, C. Eds. (2005) *Reconciliation of work and private life: A comparative review of thirty European countries*. Brussels: European Commission.
- Plantenga, J., Remery, C., Figueiredo, H. and Smith, M. (2009) 'Towards a European Union Gender Equality Index,' *Journal of European Social Policy* 19 (1): 19-33.
- Pylkkänen, E. and Smith, N. (2003) *Career Interruptions due to Parental Leave: A Comparative Study of Denmark and Sweden*. Paris: OECD.
- Ragin, C.C. (2009) Fuzzy Sets: Calibration Versus Measurement, available at: <http://www.u.arizona.edu/~cragin/fsQCA/download/Calibration.pdf> (accessed February 2014).

- Ray, R., Gornick, J.C. and Schmitt, J. (2010) 'Who Cares? Assessing Generosity and Gender Equality in Parental Leave Policy Designs in 21 Countries,' *Journal of European Social Policy* 20 (3): 196-216.
- Rostgaard, T. (2004) 'Family Support Policy in Central and Eastern Europe - A Decade and a Half of Transition,' *Early Childhood and Family Policy Series No 8*. Copenhagen: The Danish National Institute of Social Research.
- Ruhm, C.J. (1998) 'The Economic Consequences of Parental Leave Mandates: Lessons from Europe,' *The Quarterly Journal of Economics* 113 (1): 285-317.
- Rubery, J., Smith, M., Fagan, C. and Grimshaw, D. (1998) *Women and European Employment*. New York: Routledge.
- Sainsbury, D. (1996) *Gender, Equality, and Welfare States*. Cambridge: Cambridge University Press.
- Sainz, P. (1989) 'An index of social welfare,' In Brancho, F. (ed.) *Towards a New Way to Measure Development. Report on the International Meeting on More Effective Development Indicators*, p. 156-160.
- Saraceno, S. and Keck, W. (2008) 'The Institutional Framework of Intergenerational Family Obligations in Europe: A Conceptual and Methodological Overview', First WP1 Multilinks Deliverable, available at: http://www.multilinks-project.eu/wp-content/uploads/2009/04/Report_Saraceno_Keck_Nov081.pdf (accessed February 014).
- Schütz, H., Speckesser, S. and Schmid, G. (1998) *Benchmarking Labour Market Performance and Labour Market Policies: Theoretical Foundations and Applications. Discussion Paper FS I 98-205*. Berlin: Wissenschaftszentrum Berlin für Sozialforschung.
- Sementini, L., Ward, T., Rabemiafara, N. and Plantenga, J. (2004) *Development of a methodology for the collection of harmonised statistics on childcare*. Luxembourg: Eurostat.
- Smith, J.A. and Williams, R.D. (2007) 'Father-Friendly Legislation and Paternal Time across Western Europe,' *Journal of Comparative Policy Analysis* 9 (2): 175-192.
- Steiber, N. and Haas, B. (2009) 'Ideals or compromise? The attitude-behaviour relationship in mothers' employment,' *Socio-Economic Review* 7 (4): 639-668.
- Szelewa, D. and Polakowski, M.P. (2008) 'Who cares? Changing patterns of childcare in Central and Eastern Europe,' *Journal of European Social Policy* 18 (2): 115-131.
- Thévenon, O. (2011) 'Family Policies in OECD Countries: A Comparative Analysis,' *Population and Development Review* 37 (1): 57-87.
- Ura, K. (2008) 'Explanation of GNH Index', Paper Presented at the 4th International Conference on Gross National Happiness, Thimphu, Bhutan, available at <http://gnhusa.org/wp-content/uploads/2010/04/Karma-Ura-Explanation-of-GNHf.pdf> (accessed 1 February 2014).
- 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
- Wall, K., Pappamikaail, L., Leitao, M., Marinho, S. and Deven, F. (2009) *Family Policy in Council of Europe member states. Two expert reports commissioned by the Committee of Experts on Social Policy for Families and Children*. Strasbourg: Council of Europe.
- Weber, M. (1949) *The Methodology of the Social Sciences*. New York: Free Press.
- Wilson, E. (1977) *Women and the Welfare State*. London: Tavistock.

Notes

ⁱ Sementini et al. (2004) prepared a compendium of policy indicators and data that would more accurately measure policy delivery.

ⁱⁱ Welfare-state scholarship argues that gendered assumptions are also reflected in tax systems and care-related cash benefits. Their effects on female employment remain, however, inconclusive, with no clear pattern of association.

ⁱⁱⁱ Robustness tests of various scales were made. The chosen scale is the most robust and in line with the multiplicative approach because the logarithms are equidistant.

^{iv} Various methods were tested and the product score has been determined to be more accurate. To illustrate, suppose we have three countries and two policy components. One country gets 8 for length and 2 for flexibility. The second gets 2 for length and 8 for flexibility, and the third 5 and 5. The sum score yields the same figure (5) for all three. However, using the multiplicative approach, one gets 4 for the first and the second country, and 5 for the third, which is a more accurate score and better captures the volume of corresponding dimensions.

^v Also in Ciccia and Verloo (2012), but the study treats leave and services separately and uses different theory and indicators to operationalise services. Thus, drawing any conclusions would be erroneous.

^{vi} I lack space to adequately consider its applicability, but I used it to examine the association between maternal employment and policies in these countries between 2000 and 2007 and found a fairly strong positive correlation ($r = 0.76$).

^{vii} Slovakia incorrectly implemented the EU 2002/73/EC directive on equal treatment between women and men in the field of employment, whilst Hungary incorrectly transposed the EU parental leave directive (96/34/EC) and did not protect workers against dismissal nor give them with the right to return to the same or equivalent job (author 2010).